

**BOSCH**

Page 1193 - 1229

**metabo**
work. don't play.

Page 1231 - 1248



Page 1249 - 1251

**Makita**

Page 1252 - 1256

**Primat**

Core drilling

Page 1258 - 1259

**BDS**
MASCHINEN

Page 1259

**TRUMPF**

Page 1260 - 1263

**MAKRA**

Page 1264

**Drill Doctor**

Page 1264

**PFERD**

Page 1265

**FESTOOL**

Page 1266 - 1273





Nilfisk
ALTO
Why Compare?

Page 1274 - 1277



EVO
PRODUCTS

Page 1278 - 1279



ESTA

Page 1280 - 1281



BANDELIN

Page 1282 - 1283



NOVUS
STEINEL

Page 1284 - 1288



metabo
work. don't play.
Pumps

Page 1289



MANNESMANN
DEMAG

Page 1290 - 1296



IP Ingenioli Rand
Industrial Technologies

Page 1297



CP

Page 1298 - 1299



metabo
work. don't play.
Compressors

Page 1300 - 1301



BICKENBACH®

Page 1302 - 1316

Unique!

Bosch Li-Ion Technology:

+ 400% lifetime.



The innovative, professional blue Bosch cordless tools with 10.8 volt and 36 volt lithium-ion technology



BOSCH
Invented for life



ibemo Kazakhstan - 090301 Republic of Kazakhstan, West Kazakhstan Oblast, Aksai, Pramzone, BKKS office complex

*For all professional blue power tools when registered. Phone: +7 71133 93077, Fax: +7 71133 93074, E-Mail: info@ibemo-kz.com

80 200 006 Angle grinder GWS 660

- Super handy and powerful
- Spindle locking facility for easy disk change
- Particularly small grip handle for safe, one-handed work
- Cut-out carbon brushes
- Handle can be inserted on the left and right side



80 200 006

80 200 010 Angle grinder GWS 1000 + extra

- Robust angle grinder with constant electronics for constant speed and higher performance
- Spindle locking facility for easy disk change
- Safety switch
- good handling due to ergonomically adapted enclosure
- with SDS-Click quick-locking nut



80 200 010

80 200 018 Angle grinder GWS 2000-18 JH

- with stemmed handle
- Starting-current limitation with soft start
- Tricontrol safety switch
- flat gear head for grinding also in confined places
- Additional handle with vibration control
- Spindle locking facility for easy disk change



80 200 018

80 200 020 Angle grinder GWS 2000-23 JH

- with stemmed handle
- Starting-current limitation with soft start
- Tricontrol safety switch
- flat gear head for grinding also in confined places
- Additional handle with vibration control
- Spindle locking facility for easy disk change



80 200 020

		GWS 660	GWS 1000	GWS 2000-18 JH	GWS 2000-23 JH
Disk dia.	mm	115	125	180	230
Idle speed	min ⁻¹	11000	11000	8500	6500
Power consumption	Watt	660	1000	2000	2000
80 200...		006	010	018	020

80 200 Impact drill GSB 13 RE

- The handiest of its class
- Not larger than a work glove
- Two-sleeve quick-action drill chuck for fast tool change
- Right and left-hand rotation
- Electronics for exact spot drilling
- Speed preselection with setting wheel
- Softgrip for secure hold



80 200 031

80 200...	031
-----------	-----

80 200 Cordless drill/drivers

Robust 2-speed planetary gear with 15 torque steps plus 1 drill step, powerful 42 mm motor (36 mm motor for GSR 9.6 V) with optimized air guide, for extended life also at high load, robust new type of enclosure,

- Electric brake
- In carrying case
- 2 rechargeable batteries in scope of supply
- Quick charger AL 60 DV



80 200 040

		GSR 9.6 V	GSR 12 V	GSR 14.4 V
Nominal voltage		9.6 V / 1.5 Ah	12V / 2.0 Ah	14.4 V / 2.0 Ah
Idle speed	min ⁻¹	0-300 / 0-1000	0-400 / 0-1200	0-400 / 0-1200
Torque setting	Nm	1-8	1-8	1-8
Torque max. hard screwdriving	Nm	24	32	35
Chuck clamping range	mm	1-10	1-10	1-10
Drill dia. in wood / steel	mm	20 / 10	25 / 11	32 / 11
Screw dia.	mm	6	7	8
80 200...		040	045	050

80 201 Drills, 1-speed

- Control electronics for exact spot drilling
- Forward/reverse rotation
- Fully ball and roller bearing-mounted

...011:

- Particularly easy to handle due to compact design
- Practical belt clip
- Small width across corners of 27 mm

...122:

- Drill spindle with hexagon socket for direct insertion of screwdriver bits
- Practical belt clip
- Small width across corners of 29 mm
- Spindle collar diameter of 43 mm (European standard) - can be used in drill stands
- Auxiliary long, solid handle for safe grip
- Easy handling through 2-finger pushbutton

Scope of supply:**...011, ...122:**

- Quick-action drill chuck

...171:

- Key-type drill chuck 13 mm
- Auxiliary handle

	GBM 6 RE	GBM 10 RE	GBM 13 HRE
Power consumption	320 W	450 W	550 W
Weight	1.1 kg	1.4 kg	2.1 kg
Torque max. 1st gear	3.5 Nm	6.0 Nm	60 Nm
Torque max. 2nd gear	-	-	-
Torque max. 1st gear, drilling	4000 min ⁻¹	2200 min ⁻¹	550 min ⁻¹
Torque max. 2nd gear, drilling	-	-	-
Chuck, type	SSBF	SSBF	ZKBF
Drilling range			
Aluminum, 1st gear / 2nd gear	8 mm	13 mm	40 mm
Wood, 1st gear / 2nd gear	15 mm	25 mm	13 mm
Steel, 1st gear / 2nd gear	6.5 mm	10 mm	20 mm
80 201...	011	122	171



Twist drill bit sets
- see Page 23 onwards

**80 201 Drills, 2-speed**

- Speed preselection with setting wheel
- Switch is switched and locked with one finger
- Spindle collar diameter of 43 mm (European standard) - can be used in drill stands
- Fully ball and roller bearing-mounted
- Long life thanks to roller bearing-mounted motors and gears
- Right and left-hand rotation (**except ...283**)
- Control electronics for exact spot drilling

...160, 201, 211:

- Drill spindle with hexagon socket for direct insertion of screwdriver bits
- Small width across corners of 29 mm

...251:

- With spade handle for good grip
- Synchronized gear

...283:

- Star handle and pressure plate for optimum power transfer

Scope of supply:**...160, ...201:**

- Quick-action drill chuck

...201, ...211, ...251:

- Auxiliary handle

- Depth stop

...211:

- Key-type drill chuck 13 mm

...251:

- Key-type drill chuck 16 mm

...283:

- Taper drift

	GBM 10-2 RE	GBM 13-2 RE	GBM 13-2 RE	GBM 16-2 RE	GBM 23-2 E
Power consumption	500 W	550 W	550 W	1050 W	1150 W
Weight	1.75 kg	1.95 kg	1.95 kg	3.7 kg	4.8 kg
Torque max. 1st gear	9.5 Nm	11.5 Nm	11.5 Nm	50 Nm	11.5 Nm
Torque max. 2nd gear	5.0 Nm	6.0 Nm	6.0 Nm	22 Nm	50 Nm
Torque max. 1st gear, drilling	1150 min ⁻¹	1000 min ⁻¹	1000 min ⁻¹	540 min ⁻¹	280 min ⁻¹
Torque max. 2nd gear, drilling	2100 min ⁻¹	1900 min ⁻¹	1900 min ⁻¹	1260 min ⁻¹	640 min ⁻¹
Chuck, type	SSBF	SSBF	ZKBF	ZKBF	-
Drilling range					
Aluminum, 1st gear / 2nd gear	13 mm/8 mm	29 mm/12 mm	29 mm/12 mm	20 mm/13 mm	28 mm/18 mm
Wood, 1st gear / 2nd gear	25 mm/15 mm	32 mm/20 mm	32 mm/20 mm	40 mm/20 mm	50 mm/35 mm
Steel, 1st gear / 2nd gear	10 mm/6 mm	13 mm/8 mm	13 mm/8 mm	16 mm/8 mm	23 mm/13 mm
80 201...	160	201	211	251	283



80 203 Angle drill

- slim design for use in inaccessible spots
- Angle shape with slim straight motor
- Acceleration electronics and speed preselection with a setting wheel
- With right-left operation, it is also perfectly suitable for screwdriving
- Small width across corners of 23 mm
- Low head height, only 74 mm
- Low overall height thanks to lowered drill chuck
- Rugged bevel gears for long lifetime

Scope of supply:

- 1 key-type drill chuck fitted, 10 mm

Technical data

	GWB 10 RE
Rated power input	400 W
Drilling dia. in steel	10 mm
Drilling dia. in aluminum	12 mm
Drilling dia. in wood	22 mm
Rated speed	0-750 min ⁻¹
Chuck clamping range	1-10 mm
Width across corners	23 mm
Weight of machine	1.6 kg
80 203...	001



80 203 001

slim design

80 204 Stirring mechanisms

...009:

- Without stirrer basket
- 1-speed stirring mechanism for stirring thin and viscous materials
- For stirrer baskets up to 160 mm dia.
- For tough continuous use

...011:

- The sturdy tool for stirring
- Synchronized 2-speed gearing
- Optimum adaptation of the speed to the material that is to be stirred
- High power reserve with 1150 watts power input
- Universal toolholder 5/8"
- With drill chuck, can also be used as a drill
- Electronic Control means especially gentle plunging into the material to be stirred

Scope of supply for all models:

- Auxiliary handle

...009:

- Splash guard
- Adapter 55 mm

...011:

- Stirrer basket 140 mm dia. and 445 mm long
- Adapter 215 mm



...009



...011

...011
Comes complete with stirrer basket

	GRW 9	GRW 11 E
Rated power input	900 W	1150 W
Rated speed, 1st gear	400 min ⁻¹	0-280 min ⁻¹
Rated speed, 2nd gear	-	0-640 min ⁻¹
Weight of machine	3 kg	4.2 kg
Control electronics	no	yes
Stirrer baskets, dia. up to	160 mm	200 mm
80 204...	009	011

80 207 Stirrer baskets for stirring mechanisms

- Stirring tools with mixing action from the bottom up
- for ready-mixed mortar, concrete, mortar and screed
- M14 external thread
- suitable for stirring mechanisms GRW 9 (80 204 009) and GRW 11 E (80 204 011)



...051 to ...057



Basket dia. mm	80 207...		Overall length mm	Mixing quantity from / to kg
120	051		600	24 / 40
140	056		600	15 / 25
160	057		600	30 / 60



80 211 Impact drills, 1-speed and 2-speed

- Single-sleeve quick-change chuck with Auto-Lock
- Forward/reverse rotation
- Spindle collar diameter of 43 mm (European standard)
- Speed preselection with setting wheel
- Softgrip for secure hold

...002, ...012:

- Electronics for exact spot drilling

...032, ...042, ...063:

- For the hardest drilling and screwdriving work, core cutting, holesawing and stirring
- Constant electronics: keeps the speed constant, even under load
- Rugged metal gear housing for long lifetime
- Anti-rotation mechanical overload clutch for high level of work safety
- Over 30 Nm torque for extreme power
- Rotating brush plate for constant power in reverse and forward rotation
- New ball grommet for a minimum of cable breaks

Scope of supply for all models:

- Quick-action drill chuck
- Auxiliary handle
- Depth stop
- Carrying case



...002



...012



...032



...042



...063

Technical data

	GSB 16 RE	GSB 18-2 RE	GSB 20-2 RE	GSB 20-2 RET	GSB 22-2 RCE
Power consumption	650 W	750 W	800 W	1010 W	1200 W
Weight	1.65 kg	2.2 kg	2.5 kg	2.6 kg	2.8 kg
Torque max. 1st gear/2nd gear	5.5 Nm	15.0 / 5.2 Nm	33.0 / 13.0 Nm	33.0 / 13.0 Nm	33.0 / 13.0 Nm
Rated speed, clockwise rotation 1st gear/2nd gear	1600 min ⁻¹	1000 min ⁻¹ /3000 min ⁻¹	1100 min ⁻¹ /3000 min ⁻¹	1000 min ⁻¹ / 3000 min ⁻¹	1000 min ⁻¹ / 2800 min ⁻¹
Impact rate at rated speed 1st gear/2nd gear	25600 min ⁻¹	12000 min ⁻¹ /3520 min ⁻¹	17600 min ⁻¹ /31000 min ⁻¹	17600 min ⁻¹ / 48000 min ⁻¹	16000 min ⁻¹ / 48000 min ⁻¹
Drill spindle connecting thread	1/2" - 20 UNF	1/2" - 20 UNF	1/2" - 20 UNF	1/2" - 20 UNF	1/2" - 20 UNF
Chuck, type	SSBF	SSBF	SSBF	SSBF	SSBF
Chuck capacity min. / max.	1.5 mm / 13 mm	1.5 mm / 13 mm	1.5 mm / 13 mm	1.5 mm / 13 mm	1.5 mm / 13 mm
Drilling range					
Concrete, 1st gear / 2nd gear	16 mm	18 mm / 13 mm	20 mm / 13 mm	20 mm / 13 mm	22 mm / 14 mm
Masonry, 1st gear / 2nd gear	18 mm	20 mm / 15 mm	22 mm / 16 mm	22 mm / 16 mm	24 mm / 16 mm
Wood, 1st gear / 2nd gear	30 mm	40 mm / 25 mm	40 mm / 25 mm	40 mm / 25 mm	40 mm / 25 mm
Steel, 1st gear / 2nd gear	13 mm	13 mm / 8 mm	13 mm / 8 mm	16 mm / 8 mm	16 mm / 10 mm
80 211...	002	012	032	042	063



For quick tool changes with
one hand!

80 221 Rotary hammers (SDS plus)



- Superior drilling and chiseling performance
- Overload clutch
- Rotating brush plate (constant power in reverse and forward rotation)
- Impact stop for drilling in steel and wood
- Softgrip for a secure hold
- Ball grommet for a minimum of cable breaks
- Control electronics: Acceleration function for sensitive spot drilling
- All round swiveling auxiliary handle with adjustable depth stop

...005:

- Slim and compact design
- Length: 316 mm, height: 191 mm

...026:

- Auxiliary handle with Softgrip for a secure hold while drilling

...023, ...028, ...030, ...041:

- Extremely fast changing between SDS-plus and quick-change chuck without tool
- Spindle collar dia. of 50 mm for increased ruggedness
- Rotation stop for chiseling

...030:

- Particularly long driving teeth on the SDS-plus toolholder
- Ideal lubrication of the toolholder by the integral lubricant deposit in the chuck
- Rigid gear and rugged mechanics for optimum force transfer
- Effective dust protection by dust protection cap
- Service cover for simple change of carbon brushes and cable

...041:

- With components specially designed for heavy-duty applications
- High single impact force
- Vario-Lock for variable fixing of the chisel in 36 positions

Scope of supply for all models:

- Auxiliary handle
- Depth stop
- Carrying case

...028, ...030 and...041:

- SDS-plus quick-change chuck

...028, ...030:

- Quick-action drill chuck

Chisels with SDS-plus adapter
see Page 966 onwards



...005



...026



...028



...030



...041



Technical data

	GBH 2-18 RE	GBH 2-23 RE	GBH 2-26 DRE	GBH 2-26 DFR	GBH 3-28 FE	GBH 4 DFE
Recommended drilling range	4 - 10 mm	4 - 12 mm	8 - 16 mm	8 - 16 mm	8 - 18 mm	8 - 24 mm
Max. drilling dia. in concrete	18 mm	23 mm	26 mm	26 mm	4 - 28 mm	24 mm
With with core cutters in masonry	-	68 mm	68 mm	68 mm	68 mm	80 mm
Metal	13 mm	13 mm	13 mm	13 mm	10 mm	13 mm
Wood	30 mm	30 mm	30 mm	30 mm	30 mm	30 mm
Rated power input	550 W	650 W	800 W	800 W	720 W	750 W
Single impact force	1.7 J	2.5 J	3.0 J	3.0 J	3.3 J	3.5 J
Weight	1.9 kg	2.3 kg	2.7 kg	2.9 kg	3.4 kg	3.9 kg
80 221...	005	026	023	028	030	041



80 223 Rotary hammer (SDS Max)

- Overload clutch, cut-out carbon brushes
- Variable auxiliary handle, easy handling also for left-handers
- Long lifetime even in extremely hard operation
- Low-vibration hammer mechanism
- Protection against cable breaks with newly developed cable joint ball
- Constant-Electronic with setting wheel for preselectable speed, impact rate or impact energy

...004:

- Automatic "turbo" activation for chiseling for 20 % enhanced impact force
- Relative setting wheel for optimized performance
- 2-stage vibration damping system
- Lockable switch pawl for fatigue-free continuous work

...010:

- Optimum user friendliness through individually controllable speed
- Lockable switch pawl at chisel operation

...045:

- Optimized dust protection in toolholder
- Variable chisel fitting in 12 angle positions
- Service display indicates due change of carbon brushes in time

Scope of supply for all models:

- Carrying case
- Auxiliary handle
- Machine cloth
- Grease tube

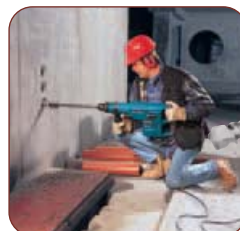


...004

Chisels with SDS-Max adapter
see Page 966 onwards



...010



...045

	GBH 5-40 DE	GBH 7-46 DE	GBH 11 DE
Rated power input	1100 W	1250 W	1500 W
Impact energy	2 - 9 J	2 - 12 J	5 - 18 J
Impact energy (chisels)	2 - 10 J	2 - 14 J	5 - 18 J
Impact rate at rated speed	1700 - 3300 min ⁻¹	1200 - 2800 min ⁻¹	1100 - 2250 min ⁻¹
Weight	6.2 kg	7.5 kg	11.1 kg
Drilling diameter in concrete with SDS-Max twist drill bits	16 - 40 mm	12 - 45 mm	12 - 52 mm
Drilling diameter in concrete with SDS-Max core cutters	40 - 90 mm	40 - 125 mm	40 - 150 mm
Drilling dia. in concrete with breakthrough drill bits	45 - 55 mm	45 - 80 mm	45 - 80 mm
Chiseling performance in concrete of medium hardness, approx.	145 kg/h	180 kg/h	225 kg/h
80 223...	004	010	045

80 225 Demolition hammers

- Long lifetime even in extremely hard operation
- Cut-out carbon brushes
- Also suitable for left-handers
- High removal rate thanks to powerful motor
- Low-vibration in operation and no-load
- Low feed pressure
- Protection against cable breaks with newly developed cable joint ball
- Constant-Electronic, Vario-Lock and service display, standby display

...001:

- Excellent handling thanks to its low weight of just 3.5 kg
- Service cover for easy and fast changing of the carbon brushes

...003:

- Relative setting wheel for optimized performance (Bosch patent)
- Lockable switch pawl for fatigue-free continuous chiseling work

...011:

- Variable chisel fitting in 12 angle positions
- Foam handle
- Wide sliding switch
- High-volume carrying case

Scope of supply for all models:

- Carrying case
- Auxiliary handle
- Machine cloth
- Grease tube

...001:

- Special tile chisel
- Pointed chisel (400 mm)

...003:

- Pointed chisel (400 mm)

...011:

- Flat chisel (25 x 400 mm)



...001



...003



...011

	GSH 3 E	GSH 5 E	GSH 11 E
Rated power input	650 W	1100 W	1500 W
Single impact force	1-4.3 J	2-12 J	6-25 J
Toolholder	SDS-Plus	SDS-max	SDS-max
Basic chisel assortment	Pointed chisel, tile chisel	Point chisel	Flat chisel
Weight of machine	3.5 kg	5.5 kg	10.1 kg
80 225...	001	003	011



80 225 Demolition hammers

- Extreme power for 13 tons removal daily
- Highest removal rate thanks to 45 J single impact force and 1750 watt motor power
- Extremely long lifetime due to robust design and use of high-quality materials
- Vibration Control for reduction of harmful vibrations and, therefore, longer operating time and greater convenience
- Unique: the GSH 16 can be easily and conveniently transported on rollers in the trolley that is supplied as standard
- Excellent handling even with two hands thanks to the large handle. The carrying handle offers an alternative grip position
- The on/off switch is perfectly positioned, which prevents the tool from being switched off unintentionally

...128:

- With clamp for fast clamping of the chisels

Scope of supply for all models:

- Pointed chisel, 400 mm (self-sharpening)
- Grease tube
- Machine cloth
- Trolley
- Carrying handle

Technical data

		GSH 16-28	GSH 16-30
Rated power input	W	1,750	1,750
Impact rate	min ⁻¹	1,300	1,300
Impact energy	J	45	45
Weight of machine	kg	18	16
Toolholder internal hexagon		28 mm	30 mm
80 225...		128	130

Trolley supplied as standard



61 204 Chisels for Bosch breakers and demolition hammers

- For high removal rates in natural stone, masonry and concrete
- High-quality special steel
- Low-wear surface
- Maximum working strength, long tool times

...501 to ...519:

- 28 mm hexagonal reception
- Suitable for BOSCH breaker GSH 16-28 (80 225 128)

...601 to ...611:

- 30 mm hexagonal reception
- Suitable for BOSCH breaker GSH 16-30 (80 225 130)

...501 and ...601:

- With star-shaped, self-sharpening blade

Designation	61 204...		Working length mm	Blade width mm
28 mm hexagonal reception				
Pointed chisel	501		400 (star-shaped)	-
Pointed chisel	503		400 (standard)	-
Pointed chisel	505		520	-
Flat chisel	507		400	36
Flat chisel	509		520	36
Tile chisel	511		400	80
Asphalt cutter	513		500	125
Spade chisel	515		400	135
Earth driving rod	517		300	-
Toolholder for tamping plates	519		390	-
30 mm hexagonal reception				
Pointed chisel	601		400 (star-shaped)	-
Flat chisel	603		400	35
Tile chisel	605		450	75
Asphalt cutter	607		450	125
Spade chisel	609		450	135
Toolholder for tamping plates	611		400	-
Tamping plate 150 x 150 mm	701		Requires the toolholder ...519 or ...611	-
Tamping plate 200 x 200 mm	703		Requires the toolholder ...519 or ...611	-



34 398 Laser level BL 2L

- self-leveling
- suitable for all leveling work
- long working range due to large splay angle (horizontal 120°, vertical 140°)
- horizontal and vertical lines can be individually switched on
- clear, bright laser lines for precise transfer of the vertical and horizontal lines
- leveling control with flashing lines
- can also be used for manual tilt operation
- automatically switches off
- easy to use as all functions are controlled using one button
- with aligning disk for simple diagonal laying and plumb transfer
- for stationary operation fits on all standard commercial tripods with 1/4" threaded mounting
- working range min. 10 m (depending on the light conditions)
- leveling accuracy 0.3 mm/m
- leveling range $\pm 4^\circ$
- leveling time < 4 sec
- power supply 3 x 1.5 V LR6 (AA batteries)
- operating period approx. 12h (with cross line mode)
- weight 450 g

Scope of supply:

with aligning disk, bag and batteries

**BOSCH**

with automatic leveling



34 398 002



Housing mm	34 398...	
118 x 89	002	



34 522 Laser rangefinder DLE 50

- The smallest laser rangefinder in the world
- Size: 100 x 58 x 32 mm
- Fits in a shirt pocket
- Precise measurement results for fast and precise working
- Measuring range indoors can be achieved without aids
- Tripod mounting
- Integrated measuring pin for corner and groove measurements
- Pythagoras calculations
- Switchover button for volume or indirect measurement

Scope of supply:

- Protective bag
- Holding strap
- 4 x 1.5 V (AAA) batteries



100 mm

Illustrated with actual size

34 522 001



Measure button

Switchover button for area, volume or indirect measurement

Memory addition

Memory subtraction

Delete button



On - Off button

Switchover button for continuous and length measurement

Reference location selection: whether to measure from the front edge, tripod connection, rear edge of measuring pin

Memory recall

Continuous pointer mode



Feeler mandrel: For corner measurements and small voids and intermediate spaces (roller shutter guide tracks, drill holes)

Measuring range	34 522...		Measuring accuracy typ. / max. mm	Measuring time min. / max. s	Weight g
m					
0.05 - 50	001		1.5 / 5	0.5 / 4	170



34 524 Laser rangefinder

- Simple and precise measuring of lengths, areas and volume
- Range up to 150 m
- Precise to within a few millimeters
- Large number of practical functions
- Easy, self-explanatory use with clear display
- The universal endpiece can be used to take measurements from surfaces, from edges and out of corners
- Clamp on vial for easy, horizontal alignment
- 1/4" tripod mounting
- ...060:
- Bluetooth technology
- Easy installation of the included data transfer software

Scope of supply for all models:

- Protective bag
- Universal endpiece
- Compact endpiece
- Vial
- 4 x 1.5 V batteries
- ...060:
- Software CD



34 524 006



34 524 060

with data transfer option

Measuring range m	34 524...		Measuring accuracy mm
0.3 - 150	006		+/- 2 (0.3 - 30m) +/- 3
0.3 - 150	060		+/- 2 (0.3 - 30m) +/- 3

34 601 DMF 10 Zoom metal detector

- **Maximum safety when drilling**
- Zoom function for even more precise localization, therefore minimum incorrect drilling
- Not only detects metal but also wooden substructures as well as live and disconnected cables
- Size: 204 x 83 x 30 mm
- Shows voltage via a high-resolution 5 segment display
- Clear drilling recommendation by way of a red/green LED
- Power supply: 1 x 9-V-6LR61
- Easy marking of the drilling point using integrated marker pen
- Really easy to use with automatic calibration



34 601 001

Scope of supply:

- Protective bag
- 2 marker pens
- Batteries
- Instructions for use

Steel measuring depth max. mm	34 601...		Copper detection depth max. mm	Size mm	Weight g
100	001		80	204 x 83 x 30	240

34 602 Universal Detector D-tect 100

- Wallscanner D-tect 100
- Maximum safety when drilling
- localizes all iron and non-ferrous metals, electric cables, wood and even plastic
- Thanks to its unique technology, operates with maximum reliability
- Up to a maximum depth of 100 mm, e.g. reinforcement bars, copper pipes and plastic water pipes are precisely shown on the display with their respective allowable drilling depth
- identical results for repeat measurements
- Information on the allowable drilling depth of all localized objects
- Clear and easy to understand display
- Easy use due to logical assistance via the display
- Robust and stable design for use on the construction site

Also localizes
wood and plastic

34 602 100

Scope of supply:

- Protective bag
- 4 x 1.5 V batteries

Measured depth, max. mm	34 602...		Size mm	Weight g
100	100		277 x 98 x 98	800

80 226 Industrial all-purpose cleaner



- Easy transportation and loading due to the particularly compact design
- Rugged castors for easy transport
- Increased filter lifetime due to water filling stop
- Soft start for overload protection when switched on

...002:

- The compact, on-site dust extractor
- Permanent suction power with Plus-clean
- Remote automatic switching
- Complete emptying of the container

...003:

- The all-purpose clearer with large container volume
- Optimized wet/dry extractor
- Permanent suction power with automatic Plus-clean
- Remote automatic switching
- Accessory compartment: Accessories directly on the equipment

...004:

- The ideal special extractor for wood
- For dust-free work
- Certified wood vacuum cleaner, dust class M, also suitable for extraction of liquids
- Permanent suction power with Plus-clean
- Air flow monitoring system: acoustic and optical alarm
- Remote automatic switching
- Antistatic equipment (incl. hose)
- Accessory compartment: Accessories directly on the equipment

Scope of supply for all models:

- Hose, 3 m long, 35 mm diameter (for ...004: 5 m long, antistatic)
- Coarse dirt nozzle, 250 mm long
- Suction regulator handle
- Paper bag
- 2 extraction pipes, each 0.5 m long, 35 mm diameter
- Multipurpose nozzle
- Crevice nozzle, 250 mm long

...002, ...003:

- Polyester filter

...004:

- 2 cellulose filters

extensive range of accessories
available on request



...003



...004

	GAS 25	GAS 50	GAS 50M
Power consumption	1200 W	1200 W	1200 W
Weight	10 kg	16 kg	16 kg
Capacity	25 l	50 l	50 l
Container volume net water	16 l	43 l	43 l
Container volume net dust	20 l	45 l	45 l
Dust bag volume, net	9 l	21 l	21 l
Max. airflow (measured at blower)	61 l/sec	61 l/sec	61 l/sec
Max. ventilating pressure (measured at blower)	248 mbar	248 mbar	248 mbar
Filter surface	4300 cm ²	8600 cm ²	8600 cm ²
80 226...	002	003	004

80 231 Angle grinders up to 1000 Watt

- The handy tool with additional protection
- Distortion-resistant protective guard - quickly and easily adjustable, provides reliable protection
- Powerful 800 W Champion motor
- Direct cooling for high overload capability and long lifetime
- Good handling thanks to slim housing
- Suitable for SDS quick-locking nut
- Gear head can be rotated in 90° steps
- Handle can be inserted on the left and right side

Scope of supply for all models:

- Protective guard
- Auxiliary handle
- Back flange
- Clamping nut
- Two-hole wrench

Cut-off, grinding and roughing disks
see Page 698 onwards



...101



...103



...105

Technical data

	GWS 8-115	GWS 8-125	GWS 10-125
Rated power input	800 W	800 W	1000 W
Idle speed	11000 1/min	11000 1/min	11000 1/min
Disk dia.	115 mm	125 mm	125 mm
Grinding spindle thread	M14	M14	M14
Power output	500 W	500 W	630 W
Weight	1.9 kg	1.9 kg	2.1 kg
80 231...	101	103	105

80 231 Angle grinders over 1000 Watt

- The powerful tool with KickBack stop
- KickBack stop: detects when the tool is jammed and shuts it down immediately
- Vibration control auxiliary handle
- Restart protection
- Distortion-resistant protective guard - quickly and easily adjustable
- Gear head can be rotated in 90° steps
- Suitable for SDS quick-locking nut
- Handle can be inserted on the left and right side
- Good handling thanks to slim housing
- Overload protection, soft start and starting current limitation

...203, ...207:

- 6-speed preselection

Scope of supply for all models:

- Protective guard
- Vibration control auxiliary handle
- Back flange
- Clamping nut
- Two-hole wrench



VIBRATION
CONTROL



...203



...205



...211

Technical data

	11-125 CI	11-125 CIE	14-125 CI	14-125 CIE	14-125 CIT	14-150 CI
Rated power input	1100W	1100 W	1400 W	1400 W	1400 W	1400 W
Idle speed	11000 min ⁻¹	2800-11000 min ⁻¹	11000 min ⁻¹	2800-11000 min ⁻¹	9300 min ⁻¹	9300 min ⁻¹
Disk dia.	125 mm	125 mm	125 mm	125 mm	125 mm	150 mm
Grinding spindle thread	M14	M14	M14	M14	M14	M14
Power output	660	660	820	820	820	820
Weight	2.0 kg	2.0 kg	2.2 kg	2.2 kg	2.2 kg	2.3 kg
80 231...	201	203	205	207	209	211

80 232 Angle grinders, with ergonomic handle **BOSCH**

- Ultimate performance with perfect handling
- Good handling through ergonomic handle with Softgrip and power-to-weight ratio for continuous use and overhead work
- KickBack stop: detects when the tool is jammed and shuts it down immediately
- Distortion-resistant protective guard - quickly and easily adjustable, provides reliable protection
- Vibration-Control handle reducing vibrations by up to 70% (as per EN 50144) for work without tiring.
- Constant Electronic for constant speed even under load
- Overload protection, soft start and starting current limitation
- Gear head can be rotated in 90° steps
- Handle can be inserted on the left and right side
- Safety switch for immediate shutting down on letting the machine go
- ...003 and ...005:
- 6-step speed preselection for different materials
- ...005:
- With very high torque and speed under load for toughest applications

Scope of supply for all models:

- Protective guard
- Vibration Control auxiliary handle
- Back flange
- Clamping nut
- Two-hole wrench
- ...003 and ...005:
- SDS quick-locking nut
- ...005:
- Carrying case



...001



...003



...005

Technical data

		GWS 11-125 CIH	GWS 15-125 CIEH	GWS 15-125 CIEH
Rated power input	W	1,100	1,500	1,500
Idle speed	min ⁻¹	11,000	2,800-11,000	2,800—9,300
Disk dia.	mm	125	125	125
Weight	kg	1.7	1.9	1.9
80 232...		001	003	005

VIBRATION CONTROL

Patented vibration damping system, reduces oscillations and vibrations!



with Vibration Control



without Vibration Control

80 233 Angle grinders over 2000 Watt

- Starting current limitation and soft start
- Double sealed ball bearings
- Armored coils protect the motor against sharp grinding dust
- Tri-Control safety switch
- Individual bar code for easy tool identification
- The safety guard quick adjustment is particularly easy to use
- Vibration Control main and auxiliary handles

...050, ...080:

- Revolving gear head enables optimized adaptation to every work situation

- Bosch SDS quick-locking nut available as an accessory

...090, ...100, ...110, ...120:

- Bosch SDS quick-locking nut and spindle locking facility
- Rotatable bow handle for optimum handling

...140

- disk stops in less than 2.5 seconds thanks to the patented electric brake

Scope of supply for all models:

- Quick-adjustment protective guard
- Back flange
- Clamping nut
- Two-hole wrench
- Vibration control auxiliary handle

...090, ...100, ...110, ...120: ...140:

- SDS quick-locking nut



...050



...100



...140

Mit Bremse!

	GWS 21-180 JHV	GWS 21-230 JHV	GWS 24-180 JBVS	GWS 24-230 JBVS	GWS 26-180 JBVS	GWS 26-230 JBVS	GWS 24-230 JBX
Disk dia.	180 mm	230 mm	180 mm	230mm	180 mm	230 mm	230 mm
No-load speed	8500 min ⁻¹	6500 min ⁻¹	8500 min ⁻¹	6500 min ⁻¹	8500 min ⁻¹	6500 min ⁻¹	6500 min ⁻¹
Power consumption	2100 W	2100 W	2400 W	2400 W	2600 W	2600 W	2400 W
Vibration Control main and auxiliary handles	yes	yes	yes	yes	yes	yes	only auxiliary handle
Weight	4.6 kg	4.6 kg	5.6 kg	5.6 kg	5.6 kg	5.6 kg	5.3 kg
Main handle	Stemmed handle	Stemmed handle	Bow handle	Bow handle	Bow handle	Bow handle	Bow handle
rotatable main handle	no	no	yes	yes	yes	yes	no
80 233...	050	080	090	100	110	120	140

80 234 Polisher

- Powerful motor with a massive 1200 W
- Control Electronic for optimum adaptation of the speed to all applications
- With a low weight of just 3.5 kg
- Handy grip angled to suit the application
- Flat gear head
- Third securing thread for auxiliary handle, Tri-Control safety switch
- Gear housing can be adjusted by 90° in four directions
- Run-out support secured against twisting
- Resin-armored coils
- Good handling, also for left-handers

Scope of supply:

- Auxiliary handle
- Protective cap
- Screw



80 234 011

	GPO 12 E
Rated power input	1200 W
Rubber sanding plate, dia.	180 mm
Polishing sponges, dia.	160 mm
Cup wheels, dia.	100 mm
Surface brushes, dia.	175 mm
No-load speed	750 - 3000 min ⁻¹
Grinding spindle thread	M 14
Weight of machine	3.5 kg
80 234...	011

Polishing materials
see Page 729 onwards

80 238 Metal-cutting grinders

- Powerful 2,400 W metal-cutting grinder
- Cuts pipe diameters up to 125 mm
- Angled cuts up to 45° possible
- Soft start for controlled machine start-up
- Overload protection for long lifetime
- Spindle lock for easy cutting disk changes
- Integrated carrying grip for easy transport

Scope of supply:

- Grinding disk, 350 mm dia., grain size 36, 25,4 mm inner dia.

Technical data

		GCO 14-1
Rated power input	W	2,400
Voltage	V	230
max. angled cuts		up to 45°
No-load speed	min ⁻¹	3,900
Saw blade dia.	mm	355
Saw blade bore size	mm	25.4
Weight	kg	18
Depth x length x height	mm	530 x 360 x 730
Cutting capacity, rectangle	mm	175 x 105
Cutting capacity, square	mm	118 x 118
Cutting capacity, L-profile	mm	135 x 135
80 238...		014



Grinding disks
see Page 696 onwards



80 238 014

80 235 Straight grinders

- For extremely fine work but also for coarse deburring work
- Protected location of switch prevents inadvertent activation
- Cooling-air openings are not covered by the hand
- Good handling, also for left-handers
- With control electronics for smooth acceleration
- Rugged gear housing

...031:

- Suitable for all grinder tools with shank diameter of 6, 8, 10 mm and 1/4"

...041:

- With SDS quick-locking nut for rapid disk changes without tools
- Tri-Control safety switch

Scope of supply:

...003, ...013, ...023:

- Collet 6 mm

...031:

- Collet 8 mm

...041:

- Protective guard
- Allen key
- Clamping flange, 65 mm dia.
- Round nut
- Two-hole wrench
- SDS quick-locking nut for conical disks



Twist drill bit sets
- see Page 719 onwards



...003



...013



...031



...041

Technical data

	GGS 27 C	GGS 27 LC	GGS 7 C	GGS 16	GGS 6 S
Rated power input	600 W	600 W	600 W	900 W	1150 W
Mounted grinding points DIN 69170 up to	25 mm	25 mm	45 mm	50 mm	-
Conical grinding disks, dia. up to	-	-	-	-	125 mm
Knotted round brushes, dia. up to	-	-	-	-	125 mm
No-load speed	12000 - 27000 min ⁻¹	12000 - 27000 min ⁻¹	3100 - 7000 min ⁻¹	16000 min ⁻¹	6800 min ⁻¹
Toolholder	Collet up to 8 mm dia.	Collet up to 8 mm dia.	Collet up to 8 mm dia.	Collet up to 10 mm dia.	20 mm dia. spindle M14
Spindle collar dia.	43 mm	35 mm	35 mm	-	-
Weight of machine	1.4 kg	1.6 kg	1.7 kg	3 kg	3.9 kg
80 235...	003	013	023	031	041



80 241 Screwdrivers / Impact wrenches

- Switchable for forward/reverse rotation
- 1/4" toolholder with ball catch
- With quiet and particularly exact shut-off clutch
- With control electronics
- Locking button for continuous operation
- Standardized toolholder for use with commercially available push-in tools
- Magnetic universal holder for secure hold of the screw

...031, ...041:

- Torque easily adjustable from the outside
- One turn for the whole torque range
- Upright drive end at switched on machine

Scope of supply for all models:

- Belt clip
- Bit holder 1/4", 75 mm
- ...012, ...022:**
- Magnetic universal holder
- Depth stop
- Screwdriver bit, Phillips no 2



Bits see Page 882



...012



...022



...041



...031

Technical data

	GSR 6-25 TE	GSR 6-45 TE	GSR 8-6 KE	GSR 8-16 KE
Rated power input	701 W	701 W	600 W	600 W
Drilling screw dia. up to	6 mm	6 mm	-	6.3 mm
Screw dia. up to	-	-	8 mm	-
Speed	0 - 2500 min ⁻¹	0 - 4500 min ⁻¹	0 - 650 min ⁻¹	0 - 1600 min ⁻¹
Fixed torque	-	-	5-25 Nm	5-25 Nm
Toolholder, hexagon socket	1/4"	1/4"	1/4"	1/4"
Weight of machine	1.45 kg	1.35 kg	2.2 kg	2.2 kg
80 241...	012	022	031	041

80 243 Impact wrenches

- V-groove impact mechanism with low recoil torque and long lifetime
- High impact performance with low weight
- Forward/reverse rotation for tightening and loosening
- Torsion bars (special accessory) guarantee adherence to desired torque
- Easy-to-change tools

...001:

- For wheel fitting on cars, scaffolding and shelf construction, in the workshop and in service centers

...011, ...021:

- For heavy screw joints on trucks, construction machinery, in commercial vehicle construction, in the heavy industries and petrochemical industry
- Auxiliary handle with backing pad that can be fitted in two positions
- Hanging holes for securing spring motion

Scope of supply:**...011, ... 021:**

- Auxiliary handle
- Hanging hook

Impact wrench bits
See Page 840 onwards

...001



...011



...021

	GDS 18 E	GDS 24	GDS 30
Rated power input	500 W	800 W	920 W
for screws up to	M 6 - M 18	M 24	M 30
Rated speed	500 - 1300 min ⁻¹	950 min ⁻¹	860 min ⁻¹
Toolholder, square	1/2"	3/4"	1"
Fixed torque	70-250 Nm	600 Nm	1000 Nm
Weight of machine	3.3 kg	5.7 kg	7.3 kg
80 243...	001	011	021



80 251 Metal shears



Outstanding handling of curve-cutting, safety switch, rugged design for continuous use, optimum view of cutting line, cut-out carbon brushes, easy handling also for left-handers

...003, ...011:

- Very short, handy unit with the lowest grip circumference in its class
- Highest cutting speed at minimum effort
- Sliding switch adapted to grip and covered
- Tight curve radius
- Knob grip for comfortable and safe guidance

...021, ...031:

- Comfortable handling through bow handle
- Particularly large switch actuator in wide bow handle opening allows operation with gloves
- Economic reversible blade
- Particularly suitable for trimming sheet metals
- Shearing blade appropriately adjustable for the material involved - easy sharpening possible

Scope of supply for all models:

Knife blades (for ...021 and ...031: Top/bottom knife), Allen key

...011:

Setting gage

...021 and ...031:

Feeler gage, grinding gauge, tommy bar, fork wrench

...031:

Adjusting pin, grease gun, auxiliary handle

Technical data

	GSC 160	GSC 2.8	GSC 3.5	GSC 4.5
Rated power input	500 W	500 W	900 W	1010 W
Max. cut thickness for steel up to 400 N/mm ²	1.6 mm	2.8 mm	3.5 mm	4.5 mm
Max. cut thickness for steel up to 600 N/mm ²	1.2 mm	2.2 mm	2.9 mm	3.6 mm
Max. cut thickness for steel up to 800 N/mm ²	0.7 mm	1.9 mm	2.5 mm	3.1 mm
Max. cut thickness for aluminum up to 200 N/mm ²	2.2 mm	3.5 mm	4 mm	5 mm
Stroke rate at no load	5000 min ⁻¹	2400 min ⁻¹	1770 min ⁻¹	1250 min ⁻¹
Weight of machine	1.8 kg	2.7 kg	4.7 kg	6.9 kg
80 251...	003	011	021	031



...003



...011



...021



...031

80 253 Nibblers



...011:

- Planetary gear - therefore slim, narrow design
- Swiveling die plate
- Easy-to-change cutting tools
- Lockable die plate for straight cuts
- Working to scribe mark and template easily possible
- For interior cut-outs

...023:

- Particularly suitable for torsion-free cutting of alloyed steels and stainless sheet steel
- Die plate holder adjustable to sheet thickness: result is vibration-free work
- Die plate replaceable, punch regrindable
- Long tool life of punch and die plate yields high cutting performance
- Working to scribe mark and template easily possible
- Cut-out carbon brushes
- Good handling, also for left-handers

Scope of supply for all models:

Punch, die plate, Allen key

...023:

Auxiliary handle, holder

Technical data

	GNA 2.0	GNA 3.5
Rated power input	500 W	620 W
Max. cut thickness for steel up to 400 N/mm ²	2 mm	3.5 mm
Max. cut thickness for steel up to 600 N/mm ²	1.4 mm	2.4 mm
Max. cut thickness for steel up to 800 N/mm ²	1 mm	1.6 mm
Max. cut thickness for aluminum up to 200 N/mm ²	2.5 mm	4 mm
Cutting track width	6 mm	6 mm
Stroke rate at no load	2400 min ⁻¹	1000 min ⁻¹
Weight of machine	2 kg	3.5 kg
80 253...	011	023



...011



...023



80 255 Tappers

- Control Electronic for precise drilling, with locking button and setting wheel
- Speed preselection for sensitive application of the tapper
- Slim and secure grip for fatigue-free and safe working
- Two-jaw chuck with sprung universal joint prevents tapper from breaking
- Depth stop for cutting blind threaded holes
- Also suitable for left-handers

Scope of supply:

- Two-jaw chuck



80 255 001

Technical data

	GGW 10 E
Rated power input	500 W
For thread dia.	4 - 10 mm
for stud bolts, dia. up to	M 12
Rated speed, forward	0-350 min ⁻¹
Rated speed, reverse	0-600 min ⁻¹
Power output	270 W
Toolholder	Two-jaw chuck with 1/2" - 20 UNF
Spindle collar dia.	43 mm
Weight of machine	2.3 kg
80 255...	001

**MANNESMANN
DEMAG**

Partner for the professionals

The complete power spectrum



Grinding
Hammering
Deburring
Drilling
Cutting
Assembly



80 261 Jigsaws



- Tool-free self-adjustment of guide jaws
- Mass balancing for extremely low vibrations and maximum quiet running
- SDS one-hand saw blade change
- SDS sole plate adjustment without tools up to 45 degrees
- Attachable plastic shoe
- Sawdust blower device ON/OFF enables a clear view of the scribe mark line
- Aluminum housing for optimum gear suspension

...130, ...132:

- At the push of a button the "Precision-Control" guide jaw adjusts itself automatically to the varying saw blade thicknesses for precise angle cuts and guidance

Scope of supply for all models:

- Carrying case
- 3 Saw blades
- 1 Splinter guard
- Gliding overshoe



...134



...132



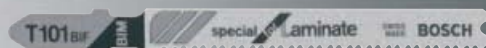
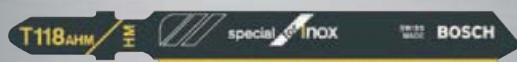
...130



...136

Technical data

		GST 135 CE	GST 135 BCE	GST 120 E	GST 120 BE
Precision Control		yes	yes	no	no
Cutting depth in wood	mm	135	135	120	120
Cutting depth in aluminum	mm	20	20	20	20
Cutting depth in non-alloyed steel	mm	10	10	10	10
Rated power input	Watt	720	720	650	650
Weight	kg	2.6	2.7	2.6	2.7
Constant Electronic*		yes	yes	no	no
Stroke-rate preselection**		yes	yes	yes	yes
Switch with accelerator function***		no	yes	no	yes
Oblique cuts (left/right)		0-45	0-45	0-45	0-45
Tool-free sole plate adjustment		yes	yes	yes	yes
Pendulum stroke action levels		4	4	4	4
80 261...		132	130	136	134



Saw blades for jigsaws
see Page 684 onwards

80 263 Power hand saws



- Universal application for sawing wood, plasterboard, aerated concrete and plastic
- Also ideal for plunge cuts
- Stable, distortion-free chain bar
- SDS system for comfortable changing of saw blades without tools
- Auxiliary handle can be adjusted and shifted to the side for sawing close to the edge
- Switch-on lock
- Extraction channel for effective external dust extraction
- Also suitable for left-handers

...006:

- Control and Constant-Electronic for continuously variable speed preselection and constant speed under load
- Aluminum base plate

Scope of supply for all models:

Saw blade set for wood and plastic, dust extraction adapter

...006:

- Saw blade set for aerated concrete and plasterboard



Technical data

	GFZ 14-35 A	GFZ 16-35 AC
Rated power input	1400 W	1600 W
Length of chain bar	350 mm	350 mm
Stroke	50 mm	50 mm
No-load stroke rate	2600 min ⁻¹	850-2500 min ⁻¹
Weight of machine	5.2 kg	5.2 kg
80 263...	001	006

80 263 Replacement saw blades for power hand saws



- Suitable for Bosch power hand saws 80 263...



...101



...103

Use	80 263...	Overall length mm
Wood	101	350
Aerated concrete/ Railroad ties	103	350

80 263 Saber saw



Saber saw blade
see Page 687

- Electronically controlled, continuously variable stroke rate control for material-oriented working
- Metal hook for conveniently hanging up the tool between work steps, e.g. on scaffolding
- Rubber-coated housing for a secure grip

...301:

- Compact design and 360° rotatable front housing for convenient working, even in hard-to-reach areas
- Bosch SDS System for convenient and fast saw blade changing
- Swivel-mounted stop for safe support when sawing
- The blade can be turned 180° and inserted into the blade holder for overhead work

...303:

- Patented Bosch SDS System for convenient and fast one-hand saw blade changing
- Brute™ Drive system: patented drive system for long operation, even under extreme load
- Stop can be adjusted without tools for precise cutting depth setting and a longer lifetime of the saw blade
- Cable system with ball joint for strain relief, ensuring improved freedom of movement

Scope of supply for all models:

Saw blade for wood, saw blade for metal, carrying case



...301



...303

Technical data

		GSA 900 E	GSA 1200 E
Rated power input	W	900	1,200
No-load stroke rate	min ⁻¹	0 - 2,700	0 - 2,800
Stroke length	mm	28	19
Max. cutting depth in wood	mm	250	250
Max. cutting depth in metal	mm	20	20
80 263...		301	303



80 263 Chainsaw



- 2,100 Watt motor for high torque
- Constant Electronic for uniform sawing progress under load
- Tool-free change of chain and chain tensioning (Bosch SDS)
- Compact design with optimized unit balance and handle ergonomics
- Motor overload protection and soft start for long life
- Kick-back brake with < 0.1 sec. and run-down brake with < 1.0 sec. brake time
- Quality saber and chain for long and therefore economic life

Scope of supply for all models:

- Transport protection

...021:

- Double Guard saber 35 cm
- Chain 35 cm

...026:

- Double Guard saber 40 cm
- Chain 40 cm



...021



...026

SDS-Click
Tool-free change of chain



Technical data

	GKE 35 BC	GKE 40 BCE
Rated power input	2100 W	2100 W
Length of chain bar	350 mm	400 mm
Chain speed	12 m/s	12 m/s
Chain pitch	3/8"	3/8"
Cable length	2.5 m	4 m
Weight of machine	4.6 kg	4.8 kg
80 263...	021	026

80 265 Hand-held circular saws

- Compact tool design at low weight
- Powerful motor for high torque
- Rugged design thanks to punched aluminum base plate for long lifetime
- Turbo blower for dust-free view of the scribe mark line
- Optimized wood chip deflector for better view of the work surface
- Continuously variable cutting depth setting via quick-clamping lever
- Integrated rail guide in the base plate
- Switch-on lock can be operated on both sides
- Spindle locking facility for convenient and fast saw blade changing
- External dust extraction via adapter for low level of dust when working

...011, ...026:

- Constant-Electronic, for continuous speed preselection, constant speed under load, soft start and temperature-dependent overload protection.

Scope of supply for all models:

- 1 Allen key
- 1 Parallel guide

...006, ...011:

- 1 TC circular saw blade (160 mm dia.)

...021, ...026:

- 1 TC circular saw blade (190 mm dia.)



...021



...011

Technical data

		GKS 160	GKS 55	GKS 55 CE	GKS 65	GKS 65 CE
Power consumption	W	1050	1200	1350	1600	1800
Cutting depth (90°)		54	55	55	65	65
Cutting depth (45°)		38	38	38	48	48
Saw blade dia.	mm	160	160	160	190	190
Saw blade bore size	mm	20	20	20	30	30
Weight	kg	3.6	3.7	3.6	4.8	4.9
80 265...		002	006	011	021	026



Circular saw blades
see Page 680 onwards

80 271 Random orbit sanders



- for sanding metal, wood, paint and spackled surfaces
- with Constant Electronic
- Speed preselection
- Sanding plate brake
- Velcro-type fastening
- Aluminum bearing flange
- integrated and external dust extraction

Sheets of sandpaper
see Page 734 onwards

...002:

- Just one click: switch from fine sanding to coarse sanding or polishing
- Five times more material removal in turbo operation (coarse sanding)
- Smallest grip circumference on the market, most compact design and low weight
- Excellent, quiet running behavior and five times longer lifetime than conventional sanding disks

Scope of supply for all models:

- Auxiliary handle
- Allen key
- 1 sheet of sandpaper (K120)

...011, ...021:

- Micro filter box



...002



...011



...021



Technical data

	GEX 150 Turbo	GEX 150 AC	GEX 125 AC
Rated power input	550 W	340 W	340 W
Rated no-load speed	3100 - 6650 min ⁻¹	4500 - 12000 min ⁻¹	4500 - 12000 min ⁻¹
Sanding plate dia.	150 mm	150 mm	125 mm
Sanding sheet / disk attachment	Velcro-type fastening	Velcro-type fastening	Velcro-type fastening
Orbital stroke rate of sanding plate	6200 - 13300 min ⁻¹	9000 - 24000 min ⁻¹	9000 - 24000 min ⁻¹
Weight of machine	2.4 kg	2.1 kg	2.0 kg
80 271...	002	011	021

80 272 Orbital sander

- Quiet and low-vibration
- Bosch micro-filter system
- High sanding performance
- Also suitable for left-handers
- Perfect paper fit ensures maximum surface quality
- Ergonomic design

...001:

- Automatic tensioning of the roll paper prevents creasing and tearing

...019, ...023:

- Frontal flush sanding thanks to removable auxiliary handle

Scope of supply for all models:

- Carrying case

- Allen key

...001, ...015:

- Micro filter

- Perforated plate

- 1 sheet of sandpaper 120 Red: Wood top, Velcro system, 6 holes

- 1 sheet of sandpaper 120 Red: Wood top, tensioned, 6 holes

...015, ...019, ...023:

- Micro-filter box, large

- 1 sheet of sandpaper (K 120)

- Auxiliary handle

**Sheets of sandpaper
see Page 734 onwards**



...001



...015



...019



...023

Technical data

	GSS 140	GSS 23 AE	GSS 230 AE	GSS 280 AE IK
Rated power input	180 W	190 W	300 W	330 W
No-load speed	12000 min ⁻¹	7000 - 12000 min ⁻¹	5500 - 11000 min ⁻¹	5500 - 11000 min ⁻¹
No-load orbital stroke rate	24000 min ⁻¹	22000 min ⁻¹	22000 min ⁻¹	22000 min ⁻¹
Oscillating circuit dia.	1.6 mm	2.0 mm	2.4 mm	2.4 mm
Sanding sheet with Velcro-type fastening	115 x 107 mm	92 x 182 mm	93 x 185 mm	115 x 230 mm
Control electronics	no	no	yes	yes
Dust extraction	no	yes	yes	yes
Weight of machine	1.4 kg	2.0 kg	2.3 kg	2.6 kg
80 272...	001	015	019	023



80 273 Belt sanders



- Extremely handy for removing, surface sanding, smoothing and cleaning
- Rugged toothed belt and metal toothed belt wheels for long tool life
- Connection for dust extraction with dust extraction bag and vacuum cleaner
- Fine deflection roller adjustment for exact belt running
- Control electronics with speed preselection for work suited to the material
- Stable quick-clamping lever for easy belt changes

...003:

- Aluminum rollers for heavy-duty use
- Optimized sanding results due to graphite-coated sanding plate
- Removable auxiliary handle for sanding flush to edges

...005:

- Dustproof needle bearings in front roller for long lifetime
- Heat-resistant metal flap at dust inlet for sanding metal
- With variable sanding belt length (610 mm and 620 mm)
- Swiveling auxiliary handle for convenient sanding flush to edges
- Sanding flush to edge at the side is possible
- Can be used both as bench-mounted machine and with a sanding frame

Scope of supply:

...003:

- 1 fabric sanding belt
- 1 dust extraction bag
- 1 graphite plate
- 1 carrying case
- 1 parallel / angle guide
- 1 sub-frame

...005:

- 1 fabric sanding belt K60 (100 x 620 mm)
- 1 dust extraction bag

	GBS 75 AE Set	GBS 100 AE
Rated power input	750 W	1200 W
Sanding surface, width	75 mm	100 mm
Belt length	533 mm	620 mm
Belt speed	200-330 m/min	250-450 m/min
Control electronics	yes	yes
Weight of machine	3.4 kg	6.2 kg
80 273...	003	005



...003

Fabric sanding belt
see Page 737 onwards



...005



80 274 Planers



- Comfortable working due to chip clearance to left or right, as desired
- The highest surface quality due to ultra-sharp blades and constant speed
- 3 V-grooves for easy and flexible chamfering
- Parking rest
- Switch-on lock for left-handers and right-handers
- Guide handle with softgrip
- Fastest and least expensive blade changes due to durable Woodrazor blades

...016:

- Longest lifetime due to precise aluminum bearing seat and thermodynamic motor protection
- Easy, precise and clearly legible depth of cut setting
- Can also be used as bench-mounted tool with sub-frame
- With planing blade and key depot

Scope of supply for all models:

- Carrying case
- 1 extra Woodrazor reversible blade
- 90° parallel guide

...007:

- Dust bag

...016:

- Rebating depth guide



...007



...016



	GHO 26-82	GHO 40-82 C
Power consumption	710 W	850 W
Power output	400 W	450 W
Weight	2.80 kg	3.2 kg
Max. speed	16500 min ⁻¹	13500 min ⁻¹
Planing width	82 mm	82 mm
Adjustable chip thickness	0 - 2.6 mm	0 - 4 mm
Adjustable rebating depth	0 - 9 mm	0 - 24 mm
80 274...	007	016



80 275 Routers



- Speed preselection and soft start for optimum adjustment of the cutting speed even for complex materials
- Exact centering of the template guide to router bit for precise working with templates
- Fast and fine adjustment of routing depth using setting wheels
- Long, free-moving router cage guide in die-cast housing: plunging without jamming
- Dust-protected ball bearings with metal bearing seat for long lifetime
- Template guide bayonet lock for tool-free changes
- Constant-Electronic for constant cutting speed under load

...007:

- With genuine cutting depth fine adjustment over a 1/10 mm scale

...020:

- Multifunction router
- Combination of plunge-cutting and copy router
- SDS quick-change system
- Absolute precision as copy router
- Plunge-cut unit with softgrip
- Copy unit with wooden handles that are positioned very near to the workpiece

...027:

- Parallel guide with 1/10-mm fine adjustment made of die-cast aluminum
- Softgrip, spindle locking facility, transparent dust extraction adapter
- Rubber bellows for router column protection

Scope of supply for all models:

- Parallel guide with fine adjustment
- Dust extraction adapter
- Fork wrench

...007, ...015:

- Template guide 17 mm
- 8 mm collet with sleeve nut
- 8 mm centering pin

...020:

- Plunge-cut unit (59 mm stroke) with copy unit
- Collets, 8 mm, 12 mm
- 2 fork wrenches
- Template guides 17 mm and 30 mm with centering pin

...027:

- Template guide 30 mm
- 12 mm collet with sleeve nut
- 12 mm centering pin



	GOF 900 CE	GOF 1300 CE	GMF 1400 CE	GOF 2000 GE
Rated power input	900 W	1300 W	1400 W	1700 W
No-load speed	12 - 24000 min ⁻¹	12 - 24000 min ⁻¹	8 - 24000 min ⁻¹	8 - 23000 min ⁻¹
Toolholder	6 - 8 mm	6 - 12.7 mm	8 - 12 mm	6 - 12.7 mm
Maximum router cage stroke	50 mm	58 mm	-	65 mm
Weight of machine	3.5 kg	3.7 kg	3.6/4.1 kg	6.0 kg
80 275...	007	015	020	027

80 280 Laminate trimmer



- Perfect handling thanks to particularly compact design and ergonomic grip area with softgrip
- Combined rough and fine depth adjustment for extremely high precision and top-class work results
- Wide range of accessories in the carrying case: versatility and flexibility for all kinds of routing work
- Powerful 600-watt motor for wide range of applications
- Spindle locking facility and self-releasing collets for fast router bit changes
- Finger support pockets for additional stability, especially when working on edges
- Compact and robust design thanks to rugged and durable aluminum housing

Scope of supply:

Carrying case, parallel guide, guide support, collet with 6 mm sleeve nut, collet with 8 mm sleeve nut, fork wrench 17 mm

	GKF 600
Rated power input	600 W
No-load speed	33000 min ⁻¹
Collets	6/8 mm
Weight	1.5 kg
80 280...	007



80 280 007

80 281 Hot glue gun

- With electronically controlled temperature
- Mechanical feed
- Cable-free working possible
- Replaceable nozzles
- LED display for mains connection
- Suitable for left-handers
- For versatile use, e.g. installation, repairs, mounting, attaching, jointing and sealing

Scope of supply:

- Removable cable 3.5 m
- Universal nozzle
- Extra-long nozzle
- Wide-slot nozzle
- 8 glue sticks, 200 mm
- Carrying case

	GKP 200 CE
Gluing capacity	30 g/min
Number of heating elements	2 pcs.
Heat-up time	4 min
Glue stick dia.	11 mm
Glue stick length	200 mm
Weight	370 g
80 281...	001



80 281 001

80 282 Glue sticks

- Hotmelt adhesive for simple and versatile application
- For repair, locking in position, mounting, sealing, jointing, etc.
- Suitable for BOSCH hot glue gun **80 281 001**
- Can also be used with all standard hot glue guns

Application	80 282...		Color	Dia. mm	Length mm
Seals, PVC, leather ceramics, fabric, glass Plastics,	011		transparent	11	200
Seals, carpet, Metal013	013		black	11	200
Electrical work, PVC, Cable clamps, carpet	015		gray	11	200
Wood, cardboard, packaging Seals, metal, edge veneer	017		yellow	11	200



...011

...013

...015

...017



80 283 Heat guns

...101

- The universal tool for removing paints and varnishes, for forming, welding and shrinking with hot air. Also suitable for soldering, welding and tin-plating work
- Continuously variable temperature control with setting wheel
- Removable heat protection for work in narrow places
- Surfaces for bench-mounted use without danger of the tool falling over.
- Comprehensive special accessories
- Also suitable for left-handers

...111:

- 4 main applications can be stored permanently, so that airflow and temperature are at the correct setting instantly
- Airflow and temperature control in steps of ten for precise working
- Heating automatically switches off and cools when overheating, for long lifetime
- LCD display
- Cold setting: Heating element cools down within approx. 1 minute by setting
- Removable coarse dirt filters for cleaning
- Ergonomic design/softgrip

Scope of supply:

...111:

- Surface nozzle 50 mm
- Glass protection nozzle 75 mm
- Carrying case



...111



...101

...111
with temperature indicator

	GHG 600 CE	GHG 660 LCD
Power consumption	2000 Watt	2300 Watt
Temperature range	100-600 °C	50 - 650 °C
Air flow	350-550 l/min	250 - 500 l/min
Cold-air stage	-	50 °C
Continuously variable temperature control	yes	yes
Air flow control	continuously variable	continuously variable
Weight	700 g	970 g
80 283...	101	111





Lithium ion technology: Cordless powerhouses with a completely new dimension

A large step for cordless tools, a enormous leap for you: Thanks to lithium ion technology it is finally possible to generate, without cables, power which is in no way inferior to that of mains-powered tools. You can master every challenge with apparently limitless power and maximum freedom of movement.

- **No memory effect**

The rechargeable battery can be charged at any time, regardless of the battery's charge, without damaging the cells

- **Electronic Cell Protection (ECP)**

Protects against overloading, overheating and exhaustive discharge and therefore ensures a long life for the battery

- **No power drop**

Full battery power, from the first to the last screw or hole

- **Low self-discharge**

A fully charged battery is completely ready for use, even after months of not being used

- **Hyper charge**

The 36 volt rechargeable battery is already 80% charged after 25 min



80 287 Cordless drill driver

- The smallest commercial cordless screwdriver
- Size only 166 x 167 mm
- Full power of a standard screwdriver with only 50% of the size
- Countersinks screws up to 6 mm diameter
- Manages 130 screws with one battery charge
- No memory effect and no self-discharge, thanks to lithium ion technology
- Full battery power through to the last screw
- Hypercharge charges the battery to 70% in 15 min and to 100% in 30 min
- Electronic battery protection due to overloading, overheating and exhaustive discharge protection
- 10.8 V Li-Ion spare rechargeable battery
- Torque ring with 10+1 settings

Scope of supply:

- Lithium ion rechargeable batteries
- AL 1130 CV quick charger
- Toolbag

GSR 10.8 V		
Voltage	V	10.8
max. torque (soft)	Nm	7
max. torque (hard)	Nm	18
Charging time in min.		30
Weight incl. Rechargeable batteries	kg	0.8
80 287...		010



For drill bits with hexagon toolholder connection and see page 1092 onwards (for wood) and page 69 (for metal)



80 289 Cordless impact driver

- Extreme power with low weight and compact design
- High speed for fast drilling and driving screws into metal and wood
- Safe working without kick-back due to high-performance impact mechanism
- Motor brake for precise work
- Bright LED light for good visibility even on dark work surfaces
- Gear box housing made of metal for maximum precision and long life
- Bosch Electronic Cell Protection (ECP): Protects the battery against overload, overheating and exhaustive discharge
- the battery can be recharged at any time regardless of its charge

Scope of supply:

- Quick charger (30 min. charging time) AL 1130 CV
- 2 x 1.3 Ah Lithium ion rechargeable batteries
- Soft bag

GDR 10.8 V-Li	
Battery capacity	1.3 Ah
Battery voltage	10.8 V
Idle speed	0 - 1800 min ⁻¹
Charging time	30 min
Max. torque	100 Nm
Toolholder	1.4" hexagon socket
Screw Ø	M4 - M12
Weight	1.00 kg
80 289...	010



80 289 010



80 288 GWI 10.8 V Li-Ion cordless angle screwdriver



- With 90° pivoting head for working in the most confined spaces and angles.
- Elastic housing material, fully functional even after falling from a height of 3 metres.
- Lockable 1/4" hexagon socket universal bit holder.
- Variable speed switch for sensitive screw driving of self-tapping screws.
- Head can be adjusted in 5 positions (only 9.5 cm long in 90° position).
- 7 torque settings + drill setting.
- Electric brake prevents overruns.

Scope of supply:

- 2 Li-Ion rechargeable batteries 10.8 V 1.3 Ah
- AL 1130 CV charger
- Storage/transport bag

including charger and two rechargeable batteries

	GW I 10.8 V
Max. torque hard/soft	5/13 Nm
Max. screw Ø	5 x 50 mm
Max. drill Ø in wood/steel	10/8 mm
Idle speed	585 rpm
Weight incl. battery	1.1 kg
80 288...	010



80 288 010

80 296 GBH 36 V-LI cordless rotary hammer drill



- As strong as a mains-powered drill
- SDS-plus toolholder
- Thanks to the new pneumatic hammer mechanism (3 J) drills as fast as the best 2 kg mains-operated hammer drill
- Diverse uses: Easily drills holes up to 26 mm and with the integrated chisel function can even chisel a cable duct
- Drills up to 150 holes with one battery charge due to 36-V-Li-Ion high-performance battery pack (6 x 40 mm in C 20/25 concrete)

...035

- Interchangeable drill chuck (SDS plus -> SSBF)

Scope of supply:

- AL 3640 CV quick charger
- 2 x 2.0 Ah Li-Ion rechargeable battery
- Additional handle
- Depth stop
- Carrying case

...035

- Quick-action drill chuck

	GBH 36 V-LI	GBH 36 VF-LI
Drill Ø in concrete:	mm 4 - 26	4 - 26
Drill Ø in steel:	mm 4 - 13	4 - 13
Drill Ø in wood:	mm 4 - 30	4 - 30
Rated power input:	W 600	600
Impact rate at rated speed:	1/min 0 - 4,260	0 - 4,260
Rated speed:	1/min 0 - 960	0 - 960
Power output:	W 430	430
Single impact force:	J 3.0	3.0
Weight incl. battery:	kg 4.3	4.3
Spindle collar:	mm 50	50
Battery capacity:	Ah 2	2
80 296...	030	035



...030



...035:
with interchangeable drill chuck
SDS plus -> SSBF



80 292 GSR 36 V-LI cordless drill / driver

- Maximum tractive power and staying power
- Enormous power: Drives in even 12-mm screws without drop in speed
- Mobile powerhouse: Up to 30% higher work progress than a 24-V drill / driver of the same weight
- Maximum robustness: Thanks to "Dura Shield" housing is fully functional even after being dropped onto concrete from a height of 2 m
- With 15 torque levels

...025

- Compact design, particularly lightweight

Scope of supply:

- AL 3640 CV quick charger
- 2 x 2.0 Ah Li-Ion rechargeable battery
- Quick-action drill chuck
- Additional handle
- Carrying case

...025

- 2 x 1.3 Ah

		GSR 36 V-LI Compact	GSR 36 V-LI
Max. torque:	Nm	80	80
Idle speed, 1st gear:	1/min	400	400
Idle speed, 2nd gear:	1/min	1,400	1,400
Drill chuck clamping capacity:	mm	1.5 / 13	1.5 / 13
Drill spindle thread:	"	1/2	1/2
Battery capacity:	Ah	1.3	2
Weight incl. battery:	kg	2.5	3.00
Charging time:	h	0.5	0.75
Drill Ø in wood:	mm	50	50
Drill Ø in steel:	mm	13	16
Screw Ø:	mm	10	12
80 292...		025	030



...030

For bits, please refer to page 882 onwards

**80 293 GSB 36 V-LI cordless combination drill**

- Powerful multi-functional tool for hammer drilling, drilling and screw driving
- High-performance impact mechanism and high speed for fast drill progress in masonry
- Enormous power: Drives in even 12-mm screws without drop in speed
- Maximum robustness: Thanks to "Dura Shield" housing is fully functional even after being dropped onto concrete from a height of 2 m
- With 15 torque levels

...025

- Compact design, particularly lightweight

Scope of supply:

- AL 3640 CV quick charger
- 2 x 2.0 Ah Li-Ion rechargeable battery
- Quick-action drill chuck
- Additional handle
- Carrying case

...025

- 2 x 1.3 Ah

		GSB 36 V-LI Compact	GSB 36 V-LI
Max. torque:	Nm	80	80
Idle speed, 1st gear:	1/min	450	450
Idle speed, 2nd gear:	1/min	1,500	1,500
max impact rate:	1/min	18,000	18,000
Drill chuck clamping capacity:	mm	1.5 / 13	1.5 / 13
Drill spindle thread:	"	1/2	1/2
Battery capacity:	Ah	1.3	2
Weight incl. battery:	kg	2.6	3.20
Charging time:	h	0.5	0.75
Drill Ø in wood:	mm	50	50
Drill Ø in steel:	mm	13	16
Screw Ø:	mm	10	12
80 293...		025	030



...030

WDEX Twist drill bits
- see Page 23 onwards

80 301 GSA 36 V-Li cordless sabre saw

- SDS system toolless saw blade change
- 2 gear switch for wood and metal
- Sealed lift rod
- Sole plate adjustment
- Hang-up hook
- Soft grip

Scope of supply:

- 2 x 1.3 Ah Li-Ion rechargeable battery 36V
- AL 3640 CV 45 min charger

	GSA 36 V-Li
Battery voltage	36 V
Capacity	2.0 Ah
Stroke length	28 mm
Charging time	30 min
Idle speed	300 rpm
Weight	4.2 kg
80 301...	001



80 301 001

80 303 GKS 36 V-Li cordless circular saw

- Best sawing performance within the 36 volt range
- Compact design and low weight
- Robust construction for difficult working conditions
- Compact design
- Optimised swarf clearance
- Switch-on lock can be operated from both sides
- Spindle lock for fast and convenient saw blade change

Scope of supply:

- 2 x 1.3 Ah Li-Ion rechargeable battery 36V
- AL 3640 CV 45 min charger

	GSA 36 V-Li
Battery voltage	36 V
Capacity	1.3 Ah
Idle speed	4000 rpm
Saw blade Ø	165 mm
Saw blade bore diameter	20 mm
Weight	4.2 kg
80 303...	001



80 303 001



For circular saw blades, please refer to page 680 onwards

80 292 Professional heavy duty cordless drill/driver



- Large torques thanks to high-performance Bosch motor
- Long life and ideal torque transmission due to 2 gear planetary gearbox
- Thanks to "Dura Shield" housing is fully functional even after being dropped onto concrete from a height of 3 m
- 15 torque levels and drill setting
- Carbon brushes can be changed from the outside
- Single sleeve quick-action drill chuck with auto-lock and click acoustics
- Precise finishing of small screws thanks to worldwide first ever progressive torque adjustment
- Ergonomic middle handle and switch with soft grip
- Right/left rotation
- Switch-on lock
- Electric brake prevents overruns

Scope of supply for all models:

- Carrying case
- Quick-action drill chuck
- ...006:
 - AL 1450 DV quick charger
 - 2 x 2.4 Ah NiCd rechargeable batteries
- ...008:
 - AL 30 DV 1450 charger
 - 2 x 2.6 Ah NiMH rechargeable batteries O-Pack
- ...015:
 - AL 2450 DV quick charger
 - 2 x 2.6 Ah NiMH rechargeable batteries
 - Additional handle



...006



...008



...015



For bits, please refer to page 882 onwards

	GSR 12 VE-2	GSR 14.4 VE-2	GSR 18 VE-2
Torque, max. hard screw case	67 Nm	72 Nm	82 Nm
Speed, max. 1st gear, drilling	430 min ⁻¹	450 min ⁻¹	470 min ⁻¹
Speed, max. 2nd gear	1650 min ⁻¹	1720 min ⁻¹	1800 min ⁻¹
Quick action drill chuck width	13 mm	13 mm	13 mm
Battery voltage	12 V	14.4 V	18 V
Battery capacity	2.6 Ah	2.6 Ah	2.6 Ah
Weight (with battery), approx.	2.3 kg	2.5 kg	2.6 kg
80 292...	006	008	015

80 293 Heavy duty cordless combination drill and driver



- High-performance impact mechanism and high speed for fast drill progress in masonry
- Large torques thanks to high-performance Bosch motor
- Thanks to "Dura Shield" housing is fully functional even after being dropped onto concrete from a height of 3 m
- Long life and ideal torque transmission due to optimised 2 gear planetary gearbox
- Carbon brushes can be changed from the outside
- Precise finishing of small screws thanks to worldwide first ever progressive torque adjustment
- Ergonomic due to soft grip of sensitive electronic switch and narrow middle handle
- Single sleeve quick-action drill chuck with auto-lock and click acoustics

Scope of supply for all models:

- Carrying case
- AL 30 DV 1450 charger
- 2 x 2.6 Ah NiMH rechargeable batteries O-Pack
- Quick-action drill chuck
- ...130:
 - Additional handle
 - AL 2450 DV charger



...100



...110

	GSB 12 VE-2	GSB 14.4 VE-2	GSB 18 VE-2
Torque, max. hard screw case	60 Nm	65 Nm	70 Nm
Speed, max. 1st gear, drilling	500 min ⁻¹	500 min ⁻¹	500 min ⁻¹
Speed, max. 2nd gear, drilling	1750 min ⁻¹	1700 min ⁻¹	1800 min ⁻¹
max impact rate	21000 min ⁻¹	21000 min ⁻¹	21000 min ⁻¹
Torque adjustment range min. / max.	1.5 Nm / 9 Nm	1.5 Nm / 9 Nm	1.5 Nm / 9 Nm
Quick action drill chuck width	13 mm	13 mm	13 mm
Battery voltage	12 V	14.4 V	18 V
Battery capacity	2.6 Ah	2.6 Ah	2.6 Ah
Weight (with battery), approx.	2.4 kg	2.5 kg	2.7 kg
Screw Ø, max.	8 mm	8 mm	10 mm
Drill Ø, max in wood5	30 mm	32 mm	35 mm
Drill Ø, max in steel	13 mm	13 mm	13 mm
Drill Ø, max in concrete	10 mm	12 mm	14 mm
80 293...	100	110	130



80 290 Cordless impact driver



- Strong performance: high torque and high impact force for optimum performance
- High efficiency: Battery technology extends the life of the rechargeable batteries by 50%,
- Greater comfort: Compact and ergonomic shape, very good performance to weight ratio
- Gear box housing made of metal for maximum precision and long life
- Safe working without kick-back
- Adjustable light with 3 settings ensures optimum visibility even in dark places

Scope of supply for all models:

- Belt clip
- Hand strap
- Rubber ring
- Carrying case
- AL 30 DV 1450 charger

...010:

- 2 x 2.6 Ah NiMH 14.0 V rechargeable batteries

...030:

- 2 x 2.6 Ah NiMH 18.0 V rechargeable batteries



80 290 030



	GDR 14.4 V	GDR 18 V
Toolholder	1/4" hexagon socket	1/4"
max torque hard screw driving case	135 Nm	155 Nm
No load speed 1st gear	0 / 2,800 min ⁻¹	0 / 2,800 min ⁻¹
Rated impact rate	3,200 min ⁻¹	3,200 min ⁻¹
Screw Ø	M6 - M16	M6 - M16
Battery capacity	2.6 Ah	2.6 Ah
Charging time	0.5 h	0.5h
Weight incl. rechargeable battery	1.8 kg	2.2 kg
80 290...	010	030

80 295 Cordless impact wrench



- Compact design
- Extremely high torque with little kick-back
- Ergonomic handle with Soft-Grip
- Long life and precision due to metallic gearbox housing
- Carbon brushes can be changed from the outside
- Integrated tool lighting

Scope of supply for all models:

- Carrying case
- AL 30 DV 1450 charger

...010:

- 2 x 2.6 Ah NiMH 14.0 V rechargeable batteries

...030:

- 2 x 2.6 Ah NiMH 18.0 V rechargeable batteries

For impact wrench inserts,
please refer to page 840 onwards.



...010

...030

	GDS 14.4 V	GDS 18 V
Battery voltage V:	14.4 V	18 V
Torque Nm:	200	220
Toolholder:	1/2" external square	1/2" external square
Screw Ø max:	M16	M20
No load speed 1/min:	0-2,800	0-2,800
Rated impact rate 1/min:	0-3,200	0-3,200
Weight kg:	1.85	2.2
80 295...	010	030

80 298 Cordless torch

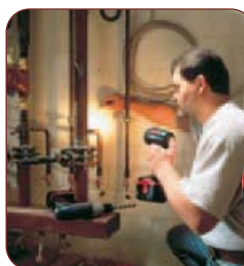


- Strong lighting power, long running time
- Bright, focusable light beam
- Middle handle, soft grip and optimum handle shape for best handling
- Compatible with the other Max-Power tools from Bosch
- Moveable head (90° forwards and upwards) for variable use
- Practical and manoeuvrable

Rechargeable battery and charger not included in scope of supply

Scope of supply for all models:

- Spare bulb



...031

...036

	GLI 14.4	GLI 18
Battery voltage	14.4 V	18 V
Operating time min	200 min	200 min
Weight with battery	1 kg	1.5 kg
80 298...	031	036

80 296 Cordless rotary hammer, 24 V

- Handy and compact
- Low weight and compact design for comfortable working
- SDS-plus system for quick change of the drill bit
- More than 120 holes in concrete, 6x40 mm, with one battery charge
- Optimised hammer mechanism and special Bosch high-performance motor for even the toughest tasks
- Electrical motor brake
- Right/left-hand rotation sliding switch with switch-on lock
- With chisel attachment MV 200 is also suitable for chiselling
- Battery compatible with other 24-V Max-Power battery tools from Bosch

...007:

- With interchangeable drill chuck: rapid change between SDS-plus and quick-action drill chuck

Scope of supply for all models:

- AL 2450 DV quick charger
- 2 x 2.6 Ah NiMH rechargeable batteries
- Additional handle
- Depth stop
- Carrying case

...007:

- Quick action drill chuck with adapter
- Interchangeable SDS-plus drill chuck



...001



...007

	GBH 24 V	GBH 24 VF
Impact rate at rated speed of	0 min ⁻¹ - 4400 min ⁻¹	0 min ⁻¹ - 4400 min ⁻¹
Machine weight with battery	3.8 kg	3.9 kg
Rated speed	0 min ⁻¹ - 1000 min ⁻¹	0 min ⁻¹ - 1000 min ⁻¹
Spindle collar	42 mm	42 mm
Capacity	2.6 Ah	2.6 Ah
Battery voltage	24 V	24 V
Drill Ø in concrete with SDS-plus flute drill bits	4 - 20 mm	4 - 20 mm
Drill Ø in steel with SDS-plus flute drill bits	0 - 10 mm	4 - 10 mm
Drill Ø in wood with SDS-plus flute drill bits	0 - 20 mm	4 - 20 mm
80 296...	001	007

80 298 GST cordless jigsaw

- Bosch SDS for quick, easy saw blade change
- Particularly low vibrations
- Powerful 48-mm Bosch motor
- "Acceleration" function, ideal for plunge cuts
- Soft grip and air blast function
- Particularly robust and stable due to magnesium gear housing and aluminium sole plate

Scope of supply:

- AL 30 DV 1450 charger
- 1 x 2.6 Ah NiMH rechargeable battery, O-Pack
- 3 T 144 DP saw blades
- 1 splinter guard
- Allen key
- Guide rail adapter
- Carrying case



...001



...007

For jigsaw blades, please
refer to page 684 onwards

	GST 14.4 V	GST 18 V
Battery voltage	14.4 V	18 V
Cutting depth in wood	65 mm	68 mm
Cutting depth in metal	10 mm	11 mm
Idling stroke rate	2100 min ⁻¹	2100 min ⁻¹
Stroke height	26 mm	26 mm
Slanted cuts	0 - 45°	0 - 45°
Capacity	2.6 Ah	2.6 Ah
Machine weight incl. battery (approx.)	2.9 kg	3.2 kg
80 298...	001	007

80 330 Replacement rechargeable batteries for Bosch tools **BOSCH**

Voltage Volt	Capacity Ah	80 330...		Cell type
Flat shape batteries				
9.6	2.6	024		Nickel metal hydride
12.0	2.0	026		Nickel cadmium
12.0	2.0	027		Nickel metal hydride
14.4	2.0	029		Nickel metal hydride
Plug-in batteries				
24.0	1.7	040		Nickel cadmium
24.0	3.0	042		Nickel cadmium
O-Pack batteries				
9.6	1.5	050		Nickel cadmium
12.0	1.5	052		Nickel cadmium
12.0	2.4	054		Nickel cadmium
14.4	1.5	055		Nickel cadmium
14.4	2.0	056		Nickel cadmium
14.4	2.4	057		Nickel cadmium
18.0	2.6	061		Nickel metal hydride
24.0	2.0	058		Nickel cadmium
24.0	2.4	060		Nickel cadmium
12.0	2.6	070		Nickel metal hydride
14.4	2.6	071		Nickel metal hydride
24.0	2.6	072		Nickel metal hydride
10.8	1.0	079		Lithium ion
36.0	2.6	081		Lithium ion
36.0	1.3	083		"Compact" lithium ion



...024 to ...029



...040 to ...042



...079 to ...083



...050 to ...072

80 331 Battery chargers **BOSCH**

- for Ni-Cad, Ni-MH and Li-Ion
- Input voltage: 230 V



...003



...007



...009

Name	80 331...		Weight kg	Type
AL 60 DV 1419	003		1.2	30 min quick charger 230 V / 7.2-14.4 V Charging current 1.9 A
AL 30 DV 1450	005		0.6	1h quick charger 230 V / 7.2-14.4 V Charging current 5.0 A
AL 15 FC 2498	007		1.2	Quick charger for GBH 24 VRE with adapter for all Bosch 7.2-24 V rechargeable batteries
AL 3640 CV	009		1.5	30 min quick charger 230 V for all 36 V rechargeable batteries

80 335 GML 24V "Radio Charger" battery charger **BOSCH**

- Charger for all BOSCH 12 to 24 V L O-Pack batteries (NiCd & NiMH)
- Mains or battery operated AM / FM stereo digital radio
- 2 mains socket outlets for power packs
- 12 V car socket outlet
- Auxiliary input: Connection feature for external CD or MP3 player
- robust roll bars - functional even after 2 m fall
- BOSCH Sound (bass booster)
- LCD display: Time, radio broadcaster, battery and charge condition indicator
- Rewinder for 3 m long mains cable
- Radio runs for 8 h on one 24 V (2.4 Ah) battery at average loudness

...030

- with integrated CD/MP3 player



Now with remote control!



80 335...

...030: also with CD/MP3 player!

Type	80 335...		Weight kg	Size cm
GML 24 V	024		8.2	32.2x32.2x32.2
GML 24V-CD	030		8.5	32.2x32.2x32.2



80 360 Table saw

- The powerful saw with large cutting capacity
- Powerful 1,800 W motor for even the toughest applications
- Cutting heights up to 79 mm can be realised
- Cutting capacities up to 635 mm to the right and 330 mm to the left of the saw blade can be realised
- Large work table 641 X 737 mm with large cutting capacity
- Spindle lock for easy saw blade change
- Safe storage of saw blade and assembly tool in the saw blade storage compartment
- Patented "Square Lock" parallel stop for the most precise saw cuts
- Angle stop can be integrated in the machine's base frame

Scope of supply:

- Saw blade
- Push stick
- Circular saw blade storage compartment

		GTS 10
Power input	W	1800
Idle speed	min ⁻¹	3650
Sawblade Ø	mm	254
Saw blade bore diameter	mm	30
Tilt adjustment		45°L
Depth x Length x Height	cm	73 x 78 x 34
Platform size	mm	641 x 737
max. cutting capacity on the right	mm	635
max. cutting capacity on the left	mm	330
Weight	kg	34
80 360...		003



80 360 003

**80 360 Baseframes**

- For GTS 10 table saw
- Collapsible

Size mm	80 360...	
735 x 833 x 160	101	



80 360 101

80 365 Sliding compound mitre saw

- Powerful 1,800 W motor for even the toughest applications
- Up to 305 mm max. cutting width
- 87 mm max. cutting height for diverse uses
- 52° left-hand/62° right-hand mitre angle for all kinds of different angle cuts
- Spindle lock for easy saw blade change
- Swivelling saw head for inclined cuts up to 47° left
- Table and stop made of high-quality aluminium die casting
- Models which can be swivelled on both sides available on request.

Scope of supply:

- Saw blade
- Quick action clamp
- Dust bag
- Insert plate
- Extractor adapter



...001



...003

		GCM 8 S	GCM 10 S
Power input	W	1400	1800
Idle speed	min ⁻¹	5000	4700
Sawblade Ø	mm	216	254
Saw blade bore diameter	mm	30	30
Mitre adjustment		50°L / 58°R	52°L / 62°R
Tilt adjustment		48°L	47°L
Depth x Length x Height	cm	61 x 45 x 50	78 x 68 x 54
Weight	kg	15.0	21.5
80 365...		001	003



80 365 Compound mitre saw

- Powerful 1,800 W motor for even the toughest applications
- Swivelling saw head for inclined cuts 47° left
- Spindle lock for easy saw blade change
- Integrated handle for easy transport

...005:

- Max. cutting height up to 89 mm, cutting width 144 mm
- Mitre angle can be set up to 48° left and 49° right

...007:

- Max. cutting height up to 104 mm, cutting width up to 196 mm
- Mitre angle can be set up to 52° left and 52° right

Scope of supply for all models:

- Saw blade
- Quick action clamp
- Dust bag
- Insert plate

...007:

- Extractor adapter

Replacement blades, please
refer to page 680 onwards

		GCM 10	GCM 12
Power input	W	1800	1800
Idle speed	min ⁻¹	4500	4300
Sawblade Ø	mm	254	305
Saw blade bore diameter	mm	30	30
Mitre adjustment		48°L / 49°R	52°L / 52°R
Tilt adjustment		47°L	47°L
Depth x Length x Height	cm	62 x 56 x 58	72 x 67 x 64
Weight	kg	15	20.5
80 365...		005	007



80 369 Work bench/leg stand

- Suitable for compound mitre saws **80 365 005** and **...007**
- Suitable for sliding compound mitre saws **80 365 003**
- Bench length up to 3.7 m (with extensions)
- Workpiece support with roller and stop for optimum support of long workpieces
- Adjustable height leg stand for stable and secure position
- Quick and easy setup
- Machine holder set with safety lock for fast and safe installation of the machine
- Handle for easy and convenient transport
- Robust and stable construction, up to 250 kg load capacity

Scope of supply:

- Machine holder set
- Workpiece support

		GTA 3700
Length of work bench		
without extension:	mm	1540
with extension:	mm	3700
Weight		
with accessories	kg	22
without accessories:	kg	17
Workbench height:	mm	810
80 369...		003



80 369 003





Wodex[®]

Chip removal &
cutting and
Clamping technology

80 400 Electronic rotary drills

- Small, handy bench machine
- Robust double shell housing
- Ergonomically shaped housing with large trigger button
- Variospeed (V) electronics
- Forward - reverse running
- Auto-stop carbon brushes
- Long-life motor
- Spindle with hexagon recess for screwdriver bits

Scope of supply for all models:

- Futuro Plus quick action drill chuck

WODEX Twist drill bits
- see Page 23 onwards

metabo
work. don't play.



Type		B E 4006	B E 560	B E 4010
Drill Ø in				
Steel	mm	6	10	10
Soft wood	mm	12	20	20
No-load speed	min ⁻¹	0-4000	0-2800	0-2850
Rated input power	W	400	560	400
Torque	Nm	3	5	12
Speed at rated load	min ⁻¹	2400	1700	1800
Drilling spindle thread		1/2"-20 UNF	1/2"-20 UNF	1/2"-20 UNF
Drill chuck clamping capacity	mm	1.5-10	1-10	1.5-10
Drill spindle with hexagon recess	mm	6.35	6.35	6.35
Machine weight	kg	1.2	1.7	1.7
80 400...		001	004	012

80 404 Electronic rotary drills

- Die cast aluminium gear housing
- Ergonomically shaped housing
- Auto-stop carbon brushes
- Forward - reverse running
- Geared chuck
- Variospeed (V) electronics
- Spindle with hexagon recess for screwdriver bits
- Two speed gear unit

...004, ...020:

- Thumbwheel for preselection of the speed

...020:

- Carbon wear indicator

Scope of supply:

...001, ...004, ...018, ...020

- Geared chuck
- Chuck key
- Additional handle

...001:

- Metabox

...012:

- Drift key in side handle

...018:

- Drill depth stop

metabo
work. don't play.



Type		BE Partner Edition	BE 710	B7532/4	BDE 1100	BE 1020
Drill Ø in						
Steel	mm	16	13/8	32/26	16/10	16/8
Soft wood	mm	40	40/25	52/35	40/25	40/25
No-load speed	min ⁻¹	0-550	0-1000/0-3000	220/260/350/420	0-640/0-1200	0-900/0-2600
Rated input power	W	620	710	1050	1100	1020
Torque	Nm	35	16/6	160/120/100/70	55/22	28/10
Speed at rated load	min ⁻¹	330	560/1700	115/160/190/260	430/800	90/2600
Drilling spindle thread		1/2"-20 UNF	1/2"-20 UNF	1/2"-20 UNF	5/8"-16 UN	1/2"-20 UNF
Drill chuck clamping capacity	mm	1.5-13	1.5-13	up to 20	3-16	1.5-13
Drilling spindle with hexagon recess	6.35 mm		-	MK 3	-	-
Machine weight	kg	2.1	2.2	7.5	3.8	2.3
80 404...		001	004	012	018	020

80 407 Electronic hammer drills

- Variospeed (V) electronics for stepless changing of the speed
- Thumbwheel for preselection of the speed
- Compact, lightweight machine with pot-shape design for continuous use
- Die cast aluminium gear housing for optimum heat dissipation and stability
- User-friendly guide of the machine exhaust in every working situation
- Right/left rotation
- Metabo hammer drilling resistant, quick action (keyless) Futuro Plus drill chuck for quick tool change
- Spindle with hexagon recess for screwdriver bits
- Ergonomically shaped housing for optimum handling
- Additional handling with drilling depth stop

...020:

- Selectable pulse operation for exact screw driving and convenient spot drilling

Scope of supply for both models:

- Futuro Plus quick action keyless drill chuck
- Additional handle
- Drill depth stop
- Plastic case

metabo
 work. don't play.


Type		SBE 610	SBE 610 Impuls
Torque	Nm	5	5
Drill Ø in			
Concrete	mm	12	12
Steel	mm	10	10
Soft wood	mm	20	20
No-load speed	min ⁻¹	0-3100	0-3100
Power input	W	610	610
max impact rate	min ⁻¹	62000	62000
Drilling spindle thread		1/2"	1/2"
Drill chuck capacity	mm	1.5-13	1.5-13
Weight	kg	1.7	1.7
80 407...		015	020

80 410 Electronic two-speed hammer drills

- Thumbwheel for preselection of the speed
- Die cast aluminium gear housing
- Clockwise - anti-clockwise rotation
- Optimum cooling of the machine through axial/radial fan
- Two speed gear unit
- Powerful Metabo impact mechanism
- Robust Metabo Marathon motor
- Metabo S-automatic safety clutch
- M spindle with hexagon recess for screwdriver bits
- Metabo winding guard
- Ergonomically shaped housing for optimum handling
- Auto-stop carbon brushes

...002:

- Variospeed (V) electronics

...010:

- Selectable pulse operation
- Vario-Constamatic (VC) full wave electronics

...022:

- Vario-Tacho-Constamatic (VTC) full wave electronics
- Overload protection
- Restart inhibitor
- Carbon wear indicator

Scope of supply for all models:

- Futuro Plus quick action keyless drill chuck
- Long additional handle
- Drill depth stop
- Plastic case
- ...003:**
- Metabox

metabo
 work. don't play.

 WODEX Twist drill bits
 - see Page 23 onwards


Type		SBE 660	SBE Partner Edition	SBE 850 Impuls	SBE 1010 Plus
Drill Ø in					
Concrete	mm	16	20	20	20
Steel	mm	13/8	13/8	13/8	13/8
Soft wood	mm	30/20	40/25	40/25	40/25
No-load speed	min ⁻¹	0-1000/0-3000	0-1000/0-3000	0-1000/0-3000	0-900/0-2600
Rated input power	W	660	750	850	1010
Torque	Nm	16/6	18/6	22/9	28/10
max impact rate	min ⁻¹	57000	57000	57000	57000
Drilling spindle thread		1/2"-20 UNF	1/2"-20 UNF	1/2"-20 UNF	1/2"-20 UNF
Drill chuck clamping capacity	mm	1-13	1-13	1-13	1-13
Machine weight	kg	2.1	2.3	2.4	2.4
80 410...		002	003	010	022

80 425 Cordless drill/screwdriver

- Variospeed (V) electronics
- 20 level adjustable torque, plus drilling level
- Clockwise and anti-clockwise rotation
- Quick stop
- Quick action keyless chuck for convenient one-handed tool change
- T handle for optimum centre of gravity balancing
- Fatigue-free working due to perfect ergonomics
- Rubberised handle
- 3 level planetary metal gears
- Gentle gear change
- Integrated collector fan to prevent overheating damage
- Bit storage for two bits
- Maximum system flexibility through freely selectable combination of chargers and battery packs
- Fast and easy changing of the battery packs

Scope of supply for all models:

- 2 battery packs
- "AIR COOLED" AC 30 quick charger
- Plastic case

...113:

- Metabox



Type		BSZ 12	BSZ Partner Edition	BSZ 14.4	BSZ 18	BSZ 12 pulse
Battery pack voltage	V	12	12	14.4	18	12
Battery pack capacity	Ah	2	2	2	2	3
max. torque, soft	Nm	22	22	24	28	22
max. torque, hard	Nm	52	52	55	62	52
Drill diameter in:						
Steel	mm	10 / 5	10/5	12 / 5	12 / 6	10 / 5
Wood	mm	25 / 20	25/20	30 / 22	30 / 22	25 / 20
No-load speeds	min ⁻¹	0-400 / 0-1350	0-400 / 0-1350	0-400 / 0-1400	0-450 / 0-1450	0- 400 / 0-1350
Drilling spindle thread		1/2" - 20 UNF	1/2" - 20 UNF	1/2" - 20 UNF	1/2" - 20 UNF	1/2" - 20 UNF
Weight (with battery pack)	kg	2.0	2.0	2.1	2.2	2.0
Batteries supplied		2 x NiCd, 2.0 Ah	2 x NiCd, 2.0 Ah	2 x NiCd, 2.0 Ah	2 x NiCd, 2.0 Ah	2 x NiMH, 3.0 Ah
80 425...		112	113	114	118	312

80 426 PowerMaxx Li Pro cordless drill / screwdriver, 7.2 volt

- Variospeed (V) electronics
- 20 level adjustable torque, plus drilling level
- Clockwise and anti-clockwise rotation
- Quick stop for rapid screw driving in sequence
- Spindle with hexagon recess for screwdriver bits
- Pistol handle for optimum force transfer
- Perfect ergonomics
- Rubberised handle
- 3 level planetary metal gears
- Stable die cast gear housing
- Charger (charging time approx. 1 h)

Accessories supplied:

- Futuro Plus quick action drill chuck
- Screw-type angle attachment
- 2 Li-Ion rechargeable battery packs (7.2 V 2.2 Ah)
- LC 60 charger
- Plastic case
- Bit assortment (20 piece)



Type		PowerMaxx
Capacity	Ah	2.2
max. torque, hard	Nm	16
Drill Ø in		
Steel	mm	3
Wood	mm	6.5
Drilling spindle thread		1/2" - 20 UNF
Chuck capacity	mm	0.5 - 6.5
Weight (with battery pack)	kg	0.73
80 426...		101



Li-Power - More power with substantially lower weight, that is **Li-Power**. A **Li-Power rechargeable battery** supplies 40% more specific energy than NiCd batteries. At the same time it is around 40% lighter than rechargeable battery systems to date. A battery pack with 18 volt voltage and a capacity of 2.2 Ah weighs approx. 700 g - a "normal" NiCd or NiMH battery pack weighs more than a kilo-

gram! Yet **Li-Power** can do even more: Due to the low self-discharge, an **Li-Power battery** is immediately ready to use with full power even after lengthy storage. When the battery is recharged, neither the memory effect nor the lazy battery effect occurs. And unlike NiMH batteries, **Li-Power batteries** work without problems from -20 °C to +50 °C.

80 428 Li-Power cordless drill / screwdriver

- Variospeed (V) electronics.
- 20 level adjustable torque, plus drilling level.
- Clockwise and anti-clockwise rotation.
- Quick stop.
- Metabo "Quick" for convenient, one-handed tool change.
- T handle for optimum centre of gravity balancing.
- Fatigue-free working due to perfect ergonomics.
- Rubberised handle.
- 3 level planetary metal gears.
- Gentle gear change.
- Integrated collector fan to prevent overheating damage.
- Bit storage for two bits.
- Maximum system flexibility through freely selectable combination of chargers and battery packs.
- Fast and easy changing of the battery packs.
- Li-Ion battery packs for up to 40% more power and up to 40% less weight.

...006, ...009, ...012:

- Selectable pulse operation for exact screw driving and convenient spot drilling

Scope of supply:

...003, ...009:

- "AIR COOLED" AC 30 Plus quick charger

...006, ...012:

- "AIR COOLED" ACS 15 Plus super quick charger

...003, ...006:

- 2 Li-Ion rechargeable battery packs (12 V/2.2 Ah)

...009:

- 2 Li-Ion rechargeable battery packs (14.4 V/2.2 Ah)

...012:

- 2 Li-Ion rechargeable battery packs (18 V/2.2 Ah)



Similar design to
BSZ 14.4 Impuls



+
...009
with Metabox



...003



...006

WODEX Twist drill bits
- see Page 23 onwards

Type		BSZ 12	BSZ 12 Impuls	BSZ 14.4 Impuls Partner-Edition	BSZ 18 Impuls
Battery pack voltage	V	12	12	14.4	18
Battery pack capacity	Ah	2.2	2.2	2.2	2.2
max. torque, soft	Nm	22	22	24	28
Pulse torque	Nm	-	26	28	32
max. torque, hard	Nm	52	52	55	62
Drill diameter in:					
Steel	mm	10 / 5	10/5	12 / 5	12 / 6
Wood	mm	25 / 20	25/20	30 / 22	30 / 22
No-load speeds	U7 min ⁻¹	0-400 / 0-1350	0-400 / 0-1350	0-400 / 0-1400	0-450 / 0-1450
Drilling spindle thread		1/2" - 20 UNF	1/2" - 20 UNF	1/2" - 20 UNF	1/2" - 20 UNF
Drill chuck capacity	mm	1.5 - 13	1.5 - 13	1.5 - 13	1.5 - 13
Weight (with battery pack)	kg	1.7	1.7	1.8	1.9
80 428...		003	006	009	012



80 433 Cordless lamp

- Compact and handy for diverse use
- Comfortable handling due to its ergonomic shape
- With long-life halogen bulb
- Focusable light beam for precise illumination
- Rotating lamp head can be locked in 6 positions
- Suitable for all current Metabo battery packs from 9.6-18 volt

Supplied without battery pack and without charger

metabo
work. don't play.

For details of other lamps & torches,
please refer to page 1025 onwards

Type	ULA 9.6 - 18	
max. illumination duration:		
9.6 V	h	3.5
12 V	h	4.7
14.4 V	h	5.7
18 V	h	6.5
Weight with battery pack	kg	0.4
80 433...		002



...002

80 439 Cordless impact driver

- Compact cordless screwdriver for work needing powerful tools
- Low kick-back operation with extremely high torque
- T handle for optimum centre of gravity balancing
- Rubberised handle
- Variospeed (V) electronics
- Convenient clockwise/anti-clockwise switchover for one-hand operation
- Die cast aluminium gear housing
- Bit storage
- Maximum system flexibility through freely selectable combination of chargers and battery packs
- Fast and easy changing of the battery packs
- "AIR COOLED" battery packs can be charged up to 2000 times
- With "AIR COOLED" AC 30 quick charger, charging time approx. 30 minutes

Scope of supply:

- 2 Ni-Cd rechargeable battery packs (12 V/2.0 Ah)
- "AIR COOLED" AC 30 quick charger
- Plastic case

Type	SSP 12	
Battery voltage	V	12
No-load speed	min ⁻¹	0 - 2500
max impact rate	min ⁻¹	3000
max. tightening torque	Nm	100
Bit retainer		1/4" hexagon recess
Weight	kg	1.7
80 439...		012



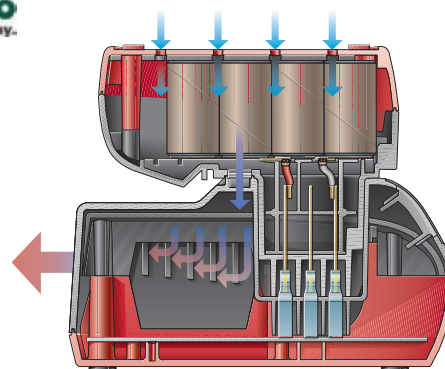
...012



For suitable bits, please
refer to page 882 onwards

Metabo AIR-COOLED technology

Rechargeable batteries heat up while they are running and while they are being recharged. This heat slows down the recharging and shortens their life. The new, patented air-cooled charging technology is based on air cooling of the battery pack during the charging process. The battery packs are gently cooled to the required charging temperature and are then constantly kept to the optimum temperature during the charging process. As a result the charging process is 30% faster and the life of the battery is increased. You save valuable work time and money.



80 442 Replacement rechargeable batteries for Metabo tools

...001 to ...033 Nickel cadmium type

...151 to ...155 Lithium ion type

suitable for the cordless tools listed in this catalogue.



Voltage Volt	Capacity Ah	80 442...	Cell type
9.6	1.4	001	Nickel cadmium
9.6	2.0	003	Nickel cadmium
12.0	1.4	011	Nickel cadmium
12.0	2.0	013	Nickel cadmium
12.0	3.0	020	Nickel metal hydride
14.4	1.4	021	Nickel cadmium
14.4	2.0	023	Nickel cadmium
18.0	1.4	031	Nickel cadmium
18.0	2.4	033	Nickel cadmium
12.0	2.2	151	Lithium ion
14.4	2.2	153	Lithium ion
18.0	2.2	155	Lithium ion



...001 to ...033



...151 to ...155

80 443 Chargers for Metabo batteries

- for charging all old and new Metabo NiCd, NiMH and Li battery packs from 4.8 V - 18 V
- the adapter **80 443 101** is required for charging old batteries
- charging process monitored by micro controller
- battery diagnosis
- "air-cooled" function

...011:

- **AC 30 Plus** quick, universal charger
- Charging time approx. 30 minutes
- battery packs can be charged up to 2,000 times

...013:

- **ACS 15 Plus** super quick charger
- Charging time approx. 15 minutes
- battery packs can be charged up to 3,000 times



...011



...013

Name	80 443...	Charging current A	Power output W
AC 30 Plus	011	2.5	68
ACS 15 Plus	013	5.0	125

80 443 Adapter connector for charger

- For inserting old battery packs (from 1981) in the new "air-cooled chargers"
- Suitable for: **80 443 011** and **80 443 013**



...101

80 443...	
101	

80 445 Angle grinders, one hand

- Robust Metabo Marathon motor
- Die cast aluminium gear housing
- Metabo S-automatic safety clutch
- Spindle lock
- Metabo "Quick" tool change (except ...002)
- Additional VibraTech handle for vibration damping
- Toolless adjustment of the protective cover
- Ergonomic shape for low-fatigue rough grinding
- Metabo winding guard
- Auto-stop carbon brushes

...012:

- Vario-Constamatic (VC) full wave electronics
- Thumbwheel for preselection of the speed
- Electronic soft start

...022:

- High torque
- Overload protection
- Restart inhibitor

Scope of supply for all models:

- Protective cover
- Supporting flange
- "Quick" clamping nut
- Side handle

...022:

- Metabox



metabo
work. don't play.



...004



...002



...008



...022
with Metabox



Type		W 6-115	W 7-115 Quick	W 7-125 Quick	WQ 125-SP	WE 9-125 Quick	WE Partner Edition
Grinding disc Ø	mm	115	115	125	125	125	125
No-load speed	min ⁻¹	11000	10000	10000	10000	3000-10000	10500
Rated input power	W	650	750	750	1010	1010	1400
Torque	Nm	2.0	2.2	2.2	3.0	2.5	3.3
Speed at rated load	min ⁻¹	6300	6500	6500	6500	7500	10500
Spindle thread		M14	M14	M14	M14	M14	M14
Machine weight	kg	1.5	1.8	1.8	1.8	1.8	1.9
80 445...		002	004	008	010	012	022

80 447 Angle polisher set

- Polisher for continuous professional use
- Extremely high torque
- Ergonomic front cap for optimum guiding of the machine
- Small and handy like a small angle grinder
- Die cast aluminium gear housing
- Vario-Tacho-Constamatic (VTC) full wave electronics
- Thumbwheel for preselection of the speed
- Overload protection
- Restart inhibitor
- Spindle lock
- Auto-stop carbon brushes

Scope of supply:

- Lambskin polishing disc
- Foam polishing disc, rough
- Grinding disc
- Hand guard,
- Side handle,
- Spanner

For polishing materials,
please refer to page 729 onwards

metabo
work. don't play.



...003



Type		PE 12-175 Set
Torque	Nm	10
For backing pads up to max.	mm	175
No-load speed	rpm	70-2200
Rated power input	W	1200
Power output	W	680
Speed at rated load	min ⁻¹	2200
Spindle thread		M14
Weight without mains cable	kg	2.4
80 447...		003



80 462 Burnishing machine

- For burnishing, finishing and reconditioning stainless steel, non-ferrous metals and other materials
- Precise guiding of the machine due to support roller
- Spindle lock for easy tool change
- Robust Metabo Marathon motor for extra long life
- Vario-Tacho-Constamatic (VTC) full wave electronics for stepless changing of the speed. The speed automatically remains constant under stress.
- Thumbwheel for preselection of the speed
- Electronic soft start
- Overload protection by way of electronic monitoring of the winding temperature. Light signal if an overload is starting to develop.
- Restart inhibitor: prevents unintentional starting of the machine
- Metabo winding guard for protecting the motor against abrasive effects
- Auto-stop carbon brushes
- Die cast aluminium gear housing
- Standard holder for accessories - M14 or mounting arbor
- Diverse possible applications due to the extensive range of accessories

Scope of supply:

- 3 spacer rings
- Expansion roller
- P80 set of sanding belt bushes
- P280 fleece wheel
- P80 flap wheel
- P180 fleece wheel with aluminium oxide abrasive paper
- Sheet steel carry case

Type		SE 12-115 Set
Power	kW	720
Speed	rpm	900-2810
Abrasive wheel diameter	mm	100-115
Abrasive wheel width	mm	50-100
Weight	kg	3
80 462...		003

metabo
work. don't play.



For lamellar flap sanding & grinding rolls, please refer to page 725 onwards



80 464 Handheld circular saws

- Metabo S-automatic safety clutch • Spindle lock
- All-round closed guide plate for secure support
- Clearly visible cutting indicator for sawing after initial cut
- Lock against unintentional switching on of the machine
- Angle setting of the sawing blade relative to the guide plate can be readjusted
- Precise angle bevel cuts up to 45° (...036: up to 60°)
- Lubricating system for long gear life
- Optimum sawing dust ejection • External dust extraction outlet
- Overload protection • Auto-stop carbon brushes

...030:

- Vario-Tacho-Constamatic (VTC) full wave electronics
- Thumbwheel for preselection of the speed
- Electronic soft start

Scope of supply for all models:

- Parallel stop
- Hexagon key

...015

- Sintered carbide thin circular saw blade (10 teeth)

...025, ...030

- Sintered carbide thin circular saw blade (14 teeth)

...025:

- Metabox

...036

- Sintered carbide circular saw blade (24 teeth)

metabo
work. don't play.



+ ...025
with Metabox



Type	KS 54 SP	KS Partner Edition	KSE 68 Plus	KS 85
max. cutting depth				
at sawing blade position 90° mm	54	66	68	85
at sawing blade position 45° mm	38	47	48	62
Sawblade Ø mm	160	190	190	230
No-load speed min ⁻¹	6000	4200	2000-4200	5100
Rated input power W	1010	1400	1600	1800
Torque Nm	4	9	11	10
Speed at rated load min ⁻¹	5000	3200	4200	3800
Machine weight kg	3.4	5.5	5.6	7.3
80 464...	015	025	030	036

80 465 Electronic router

- Stable 2 column guide
- Robust plastic sheathed die cast aluminium bearing flange
- Hardened and ground interchangeable collet chuck
- Spindle lock for easy router tool change
- Vario-Constamatic (VC) full wave electronics
- Auto-stop carbon brushes
- Sole plate made of die cast aluminium with coating for easy sliding
- Thumbwheel for preselection of the speed
- Switch the machine On and Off without letting go of the handle
- Very suitable for routing heat-sensitive materials and plastics
- External dust extraction outlet
- Can also be used in conjunction with a guide rail

...002:

- Bayonet fixing of the motor section in the router attachment
- Motor section suitable for driving flexible shafts

...004:

- Dial indicator for fine adjustment of the routing depth with 0.1 mm accuracy
- Three stage stop for preselection of up to 3 different routing depths
- Overload protection

Scope of supply for all models:

- Extractor connection
- Spanner

...002:

- Parallel stop

...004:

- Dial indicator for fine adjustment
- Parallel stop with fine adjustment

metabo
work. don't play.



Type		OFE 738	OFE 1229 Signal
Max. stroke height	mm	50	50
No-load speed	min ⁻¹	10,000 - 27,000	5,000 - 25,500
Rated power input	W	710	1,200
Power output	W	430	780
Speed at rated load	min ⁻¹	19,500	25,500
Collet bore of the collet chuck	mm	8	8
Weight	kg	3.0	3.4
80 465...		002	004

80 468 Planers

- Sintered carbide planer blade
- Easy blade changing due to cartridge system
- steplessly adjustable planing depth and rebate depth
- V groove in front part of the planer base for easy chamfering
- External dust extraction outlet
- Flat milled planer base made of die cast aluminium
- Spring mounted bar on the base of the planer for stopping the machine

...010:

- Chip ejection to the left or right

...020:

- Handy and compact
- Constamatic () full wave electronics for uniform planing results
- Reduced speed for reducing the no-load noise
- Guide stop for inclined planing can be tilted up to 45°
- Rotatable chip ejection connectors

Scope of supply for all models:

- Reversible sintered carbide planer blade
- Guide stop
- Hexagon key

...010:

- Rebate depth stop
- Extractor connection

...020:

- Tilttable guide stop
- Chip sack
- Sheet steel carry case

metabo
work. don't play.



Type		Ho 0882	Ho E 0983 Set
Planing width	mm	82	82
Adjustable planing depth	mm	0-3	0-3
Largest rebate depth	mm	23	20
No-load speed	min ⁻¹	12000	12000
Rated input power	W	800	900
Speed at rated load	min ⁻¹	8200	11000
Length of the planer base	mm	290	250
Machine weight	kg	3.3	3.1
80 468...		010	020

80 472 Electronic jigsaws

- Robust gear and motor design
- Fast and easy saw blade change
- Low-lying saw blade support roller
- Quick locking of the guide plate for inclined cuts
- Optimum handling due to ergonomic design
- Adjustable pendulum stroke
- Blower for free view of the cutting line
- Auto-stop carbon brushes
- Chip break guard in the guide plate
- External dust extraction outlet
- Handle (...023: with knob handle)
- Vario-Constamatic (VC) full wave electronics
- Grip guard can be slid upwards
- Thumbwheel for preselection of the number of strokes
- Metabo "Quick" saw blade change (except ...005)

...023, ...035:

- Die cast aluminium gear housing

Scope of supply for all models:

- Safety glass
- Grip protection
- Chip break guard plate
- Hexagon key
- Jigsaw blade

...015, ...023:

- Plug-on guard plate with small chip break guard plate

...023, ...035:

- Extraction nozzle


metabo
work. don't play.

For jigsaw blades, please
refer to page 684 onwards


...005



...015


...023
with Metabox


...035

Type		STE 70	STE 80 Quick	STE Partner Edition	STEB 135 Plus
Largest material thickness in					
Wood	mm	70	80	135	105
Non-ferrous metals	mm	20	25	35	30
Sheet steel	mm	6	8	10	10
Idling stroke rate	min ⁻¹	1000-3000	1000-3000	1000-3000	1000-3000
Rated input power	W	570	610	720	710
Torque	Nm	5	5.5	7	7
Pendulum stroke		4 levels	4 levels	5 levels	5 levels
Machine weight kg		2.2	2.3	2.5	2.6
80 472...		005	015	023	035

80 475 Electronic reciprocating / electronic orbital sabre saw

- For sawing in wood, plastics, gypsum boards, metals
- Universal use thanks to the large range of saw blades
- Powerful, robust motor
- Auto-stop carbon brushes

...005:

- Stop knob for continuous rating
- Die cast aluminium saw blade guide with plastic handle shells
- Axially adjustable stop for limiting the cutting length
- Vario-Constamatic (VC) full wave electronics
- Thumbwheel for preselection of the number of strokes
- 4 stage orbital blade movement

...020:

- Sheathed die cast aluminium gear housing
- Selectable pendulum stroke
- Variospeed (V) electronics
- Electronic soft start
- Saw blade can be rotated through 180°
- Metabo "Quick" saw blade change
- Toolless adjustable depth stop

Scope of supply for all models:

- Plastic case

...005:

- Flexible HAS saw blade
- Hexagon key

...020:

- 3 saw blades

metabo
work. don't play.

...005


Sabre saw blades, please
refer to page 687 onwards


...020

Type		PSE 0525	PSE 1200
Idling stroke rate	min ⁻¹	500-2500	0-2600
Rated input power	W	500	1200
Torque	Nm	7	15
Saw blade stroke	mm	25	28
Machine weight	kg	2.8	4.0
80 475...		005	020

80 484 Electronic disc sander



- Universal use for grinding flat and curved surfaces
- Also suitable for louver sanding and sanding varnished surfaces
- Rotation and additional oscillating movement of the backing pad for optimum finish
- Variospeed (V) electronics
- Thumbwheel for preselection of the speed
- No scratches on placing the running machine on the surface to be sanded
- Removable additional handle
- Dust-protected ball bearings
- Own extractor
- Dust bag holder with dust retention flap
- External dust extraction outlet
- Backing pad with Velcro fastening

...020:

- "Duo" oscillating circuit adjustment for finishing or more cut
- Robust bearing housing made of die cast aluminium
- Vibration damping, non-slip rubber support on the machine housing and handle

Scope of supply for all models:

- Backing pad with Velcro fastening
- 3 cling-fit sanding sheets (perforated)
- Removable additional handle
- Dust bag (paper)
- Dust bag holder
- Hexagon key

...020:

- Metabox



+
...020
+ Metabox



...012



...018

Type		SX E 425	SX E 425 XL	SX E Partner Edition
Rated input power	W	400	400	400
Ø of the backing pad	mm	125	146	150
No load speed	min ⁻¹	5000-12000	5000-12000	4000-10000
Speed at rated load	min ⁻¹	8000	8000	8000
Oscillating circuit Ø	mm	5	5	3/6 mm (reversible)
Machine weight	kg	2.2	2.2	2.7
80 484...		012	018	020

80 484 Accessories for electronic disc sander



	80 484...	
Backing plate for cling fit sanding sheets with 6 or 8 holes	094	



...094

80 487 Sanders/Electronic orbital sanders

- 4 high-quality oscillating buffer and dust-protected quality ball bearings
- High stock removal rates
- Particularly low vibrations
- Sturdy bearing flange made of die cast aluminium
- Robust die cast aluminium oscillating plate
- Uniform sanding pattern due to high-quality base plate
- Auto-stop carbon brushes

metabo
work. don't play.



...006

...012, ...015:

- Quick grip clamping with rubberised pressure pad
- Variospeed (V) electronics
- Thumbwheel for preselection of the orbital frequency
- Own extractor
- Dust bag holder with dust retention flap

Scope of supply for all models:

- 3 cling-fit sanding sheets (perforated)

...012, ...015:

- Removable additional handle
- Dust bag (paper)
- Dust bag holder

...015:

- Metabox



...012



...015
with Metabox



For replacement sanding sheets,
please refer to page 734 onwards

Type		Sr 20-23	Sr E 357	Sr E Partner Edition
Rated input power	W	210	350	350
Base plate	mm	92 x 183	92 x 190	112 x 236
No load orbital frequency	min ⁻¹	21700	12000-22000	12000-22000
Rated load orbital frequency	mm ⁻¹	16000	15000	15000
Oscillating circuit Ø	mm	2.5	2.5	2.5
Machine weight	kg	1.8	2.6	2.8
80 487...		006	012	015

80 490 Electronic belt sander

- Powerful and loadable motor with high reserve capacity
- Quick and easy sanding belt change
- Very good sanding finish due to extremely precise belt path
- Excellent sanding results and comfortable working
- Metabo S-automatic safety clutch
- Variospeed (V) electronics
- Thumbwheel for preselection of the belt speed
- Auto-stop carbon brushes
- Additional handle for optimum guide of the machine
- Own extractor
- Suitable for stationary use

metabo
work. don't play.



...010

Scope of supply:

- Dust bag
- 1 sanding belt P 100
- 2 sanding belt underlays
- Additional handle
- Extraction adapter
- Feet for stationary use

For replacement sanding belts,
please refer to page 737 onwards



Type		Ba E 1075
Rated input power	W	1000
Sanding/grinding width	mm	75
Sanding belt support surface	mm	75 x 125
No load belt speed	m/min	200-380
Torque	Nm	7
Rated load belt speed	m/min	320
Machine weight	kg	3.8
80 490...		010



80 495 Hot air guns

- For dust-free removal of old paint and varnish coats from metal and wood
- For drying fresh paint or varnish coats and filling compound
- For thawing frozen water pipes, etc.
- For shrinking cable ends
- For repair welds to tents, boats and for many other similar jobs
- Long life due to easy to clean air filter
- Powerful motor with optimum tool cooling
- Three blower levels
- Optimum handling due to ergonomic design
- Safe stationary working due to large, non-slip base

...016

- Three heating levels

...020, ...023:

- Stepless electronically controlled temperature regulation

...023:

- LCD temperature display of the selected and actually achieved temperature

metabo
work. don't play.



...016



...020



with LCD temperature display

Type		H 1600	HE 2000	HE 2300 Control
Air flow rate	l/min	250/350/500	250/270/500	250/270/500
Air temperature	°C	50/350/550	50-600	50-650
Rated input power	W	1600	2000	2300
Weight	kg	0.7	0.75	0.75
80 495...		016	020	023

80 495 Accessories for hot air guns

metabo
work. don't play.



...101 - ...103



...105



...107 - ...109



...111



...113

Name	80 495...	Purpose
Flat spray nozzle 50 mm	101	Drying; removing old paint coats
Flat spray nozzle 75 mm	103	Removing old paint coats on larger surfaces
Glass protection nozzle	105	Removal of old paint coats from window frames
Slit nozzle	107	Overlap welding of PVC tarpaulins and films
Cutting nozzle	109	straight and curved cuts in rigid foams (e.g. polystyrene)
Reducing nozzle Ø 9 mm	111	suitable for precise spot heating
Welding nozzle	113	the reducing nozzle 80 495 111 is required for attaching the welding nozzle

80 512 Multi-purpose vacuum cleaner

- Ideal for mobile use
- Suitable for vacuuming dust and solids as well as non-flammable liquids
- Optimum noise damping
- Optimum utilisation of the container volume due to compact design
- High-performance motor with separate cooling circuit
- Robust and washable pleated filter
- Automatic cut-out, which interrupts the suction current when vacuuming liquids as soon as the maximum level of the container has been reached
- Shockproof plastic container
- Stable
- Movable on attached wheels and castors
- Cable winding feature
- Practical accessories storage and shelf

...006, ...007:

- Integrated socket outlet with automatic start
- Suction hose with swivel joint

...007:

- Two pleated filters suitable for dust class M, Permeability < 0.5 %
- Fully automatic electromagnetic vibrator
- Automatic after run for complete emptying of the suction hose

Scope of supply for all models:

- 2 suction tubes
- Crevice nozzle
- Multi-purpose nozzle for universal use
- Suction hose, Ø 35 mm, 2.25 m long (...002: 1.75m long)

...006:

- Suction nozzle (120 mm wide)
- Tube holder

...007:

- Suction hose (Ø 35 mm, 2.5 m long)
- Handle connector
- Universal nozzle
- Paper filter bag

metabo
work. don't play.



Type		AS 1200	ASA 1202	ASR 2025
Volumetric flow rate	m³/h	120	120	120
Vacuum	hPa (mbar)	140	140	248
Rated input power	W	1000, max. 1200	1000, max. 1200	1000, max. 1200
Container volume	l	20	32	25
Suction hose Ø	mm	35	35	35
Suction hose length	m	1.75	2.5	2.5
Weight	kg	5	7	11
80 512...		002	006	007

80 512 Accessories for all-purpose vacuum cleaner

metabo
work. don't play.

	80 512...	
Paper filter bag , packs of 5 bags		
For AS 1200	020	
For ASA 1202	022	
For ASR 2025	023	
Floor tool , 370 mm wide Also suitable for vacuuming liquids	028	
Universal brush , Brush ring 120 x 40 mm	030	
Upholstery brush , Brush ring 60 x 40 mm	032	
Crevice tool , 200 mm long	034	
To which can be attached:		
Radiator vacuum brush	036	
Adapter , Ø 35/58 mm For connecting the suction hoses with connector Ø 35 mm to a vacuum connector Ø 58 mm	042	

Further accessories available on request



80 514 Hedge trimmers

- Safety two-handed operation and patented mechanical quick braking (blade stops in 0.05 sec)
- Cable strain relief
- Safety lower blade to reduce the risk of injuries
- Clean cut due to blade teeth optimally ground on both sides at an angle of 30°
- Particularly sharp due to diamond-ground blade teeth
- Large hand guard
- Trigger guard with twig feed
- Metabo S-automatic safety clutch
- Quite running and very good ergonomics

...026, ...028:

- Up to 50 % more range due to patented Metabo handle system
- Low fatigue work due to ergonomically shaped bar handle and optimum centre of gravity position
- User-friendly guide of the machine exhaust in every working situation

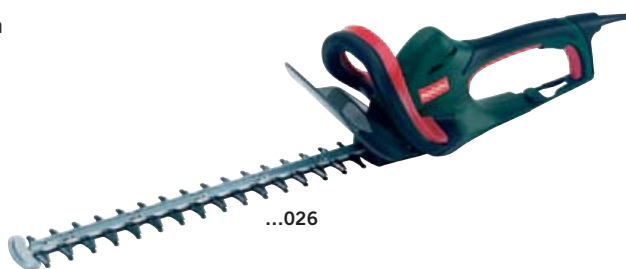
...028:

- Metabo "Quick": patented, toolless quick change of the cutter bar
- Particularly high cutting performance due to the two-speed step down gear

Scope of supply for all models:

- Trigger guard
- Storage container

metabo
work. don't play.



...026



...028

Type		Hs 45	Hs 55	Hs 8555	Hs 8665 Quick
Thickness to be cut	mm	20	20	20	26
Blade length	mm	450	550	550	650
Number of cuts at no load	min ⁻¹	3100	3100	3000	2600
Rated power input	W	450	450	550	650
Weight	kg	3.4	3.6	4.2	4.7
80 514...		022	024	026	028

80 517 Log cutting saw with wheel set

- Suitable for the thickest trunks
- Optimum safe working
- Stable welded construction - therefore no corrosion and suitable for rough continuous use

Scope of supply:

- Wheelset

...060:

- Circular saw blade with hook "wolf's" (raked peg tooth with land) teeth form (56 teeth)

...075:

- Sintered carbide circular alternating teeth blade (42 teeth)

metabo
work. don't play.



...060



...075

Type		BW 600	BW 750
Size L x B x H	mm	1225 x 795 x 1050	760 x 620 x 960
Sawblade Ø	mm	600	700
Cutting Ø	mm	210	240
with reversing tool	mm	320	350
Working height	mm	900	780
Balance surface left	mm	540	500
Balance surface right	mm	155	200
Cutting speed	m/s	45.5	55
Power input	kW	4.2	7.4
80 517...		060	075

80 519 Log splitters

...050:

- With mobile stand
- Two-step adjustable stroke and additionally adjustable piston length
- Guide plates directly at the splitting point
- Optimally protected two-hand safety circuit

...060, ...061, ...080:

- Table can be adjusted in 3 levels
- Hinged hoop guard
- Closed lower housing section
- Safe and easy handling due to 2 lever safety circuit
- Hardened splitting wedge
- Large recessed safety handles
- Wheelset for easy transport
- Ergonomically arranged On / Off switch

...050, ...060:

- For single-phase alternating current

...061, ...080:

- For three-phase alternating current

metabo
work. don't play.



Type		HS 5000 W	HS 6001 W	HS 6001 D	HS 8000 D
Splitting force	t	5	6	6	8
Split length	mm	520	1040	1040	1085
Stroke height	mm	320	480	480	475
Feed	cm/s	4.5	4	5	7.3
Return	cm/s	9.5	14	14	23.7
Dimensions L x B x H	mm	1200 x 260 x 485	860 x 930 x 1040	860 x 930 x 1040	730 x 520 x 1120
Power input	kW	2.2	3	3.5	4
Weight	kg	50	122	125	126
80 519...		050	060	061	080

80 529 Band saws

- Large throat for workpieces up to 380 mm wide with simultaneously compact machine dimensions
- Stable, highly ribbed die cast aluminium housing
- Grey cast iron base feet for high stability and quiet running, with levelling feature and installation holes for base frame
- Stable sawing table made of die cast aluminium, can be rotated for inclined cuts from -2° to 45°
- Asynchronous motor, robust, durable and low-noise
- Quick change from band saw to disc sander without resetting and new tool, ideal for regrinding
- Sanding disc bench can be tilted up to 45°
- Fast sanding paper chain due to surface with Velcro fastening
- Optional cutting of radii with circle cutting attachment

metabo
work. don't play.



Type		BAS 380 W	BAS 317
Platform/support size	mm	400 x 460	548 x 400
Working height without base frame/stand	mm	360	510
Throat/through width	mm	380	305
Max. cutting height	mm	160	165
Saw table can swivel angle	°	-2 to 45	-2 to 45
Cutting speed	m/min	910	370/800
Motor output	kW	0.74	0.9
Mains voltage	V	230	230
Weight	kg	45	70.5
80 529...		001	008

80 533 Chip and dust extraction systems

- For connecting to all woodworking machines
- Healthy air at the workplace: clean air - clean work
- High extraction performance
- Mobile use, easy to connection
- Suction hose connection Ø 100 mm
- Large range of accessories
- Mobile; stable baseframe stand with supported chip collection bag
- For single-phase alternating current



...003:

- BIA-tested dust filter of utilisation category G

Scope of supply for all models:

- Suction hose 100 x 2500 mm



...003



...001

Type		SPA 1101	SPA 1702 W
Machine size L x B x H	mm	820 x 450 x 1950	882 x 562 x 1671
Mobile		yes	yes
Vacuum	Pa	1300	1730
Nominal volumetric flow rate	m³/h	842	1010
Filter surface area	m²	2	1.1
Suction hose connection Ø	mm	100	100
Size of the collection bag	l	60	90
Weight	kg	25	24
Mains voltage	V	230	230
Motor output P1	kW	0.37	0.75
80 533...		001	003

80 535 Table saws

...001:

- Table saw/mitre saw
- Sawing of squared timbers, boards, panels and wood-like materials in the workshop and on the construction site
- A chip extractor system or wet/dry vacuum cleaner can be connected to the chip extraction equipment provided as a standard
- Universal stop for straight cuts, can also be used as sliding table
- Stepless tilt adjustment of the saw blade
- Robust, powder coated sheet steel construction and zinc plated tabletop
- For single phase alternating current

...003, ...005:

- Flush-mounted circular saws
- The mobile professional saw with the functions and advantages of a crosscut and mitre saw, a flush-mounted circular saw and a table saw
- Mobile due to low weight
- Powerful universal motor and speed control through Metabo VC electronics
- Can be used on all sides of the machine table
- Stepless tiltable and adjustable height saw blade
- Integrated, collapsible baseframe with level compensation for safe, stable installation
- Eight ball bearing supported flush-mounted smooth and easy running slides
- Side section made of solid sheet steel
- For single phase alternating current

metabo
 work. don't play.


...001



...005

Scope of supply:

- 2 x HM saw blades
- Collapsible baseframe
- Universal stop
- Splitting wedge
- Chip extraction connections
- Bevel gauge
- Angle
- Measuring tape
- Metabox



...003

Type		TKHS 315 C	UK 290	UK Partner Edition
Size	mm	550 x 800	760 x 585 x 910	760 x 585 x 910
Cutting speed	m/s	50	52	52
Sawblade Ø	mm	315 x 30	220 x 30	220 x 30
Power input	kW	2	1.8	2.2
Weight	kg	55	25	35.9
80 535...		001	003	005

FEIN is a core drilling system for metal in which everything is precisely coordinated with each other: from the machine through its speeds and cutting speeds through to the core drills made of sintered carbide and HSS material. With the quick change Quick IN system, tool changing for core drilling can be achieved in seconds. The magnetic feet are dimensioned so that the machines can be installed and used in the smallest confined space.

84 520 Mobile core drilling unit

...032, ...050 and ...052:

- QuickIN quick change system for fast, keyless tool change.
- Optimum handling due to compact construction and low weight.
- Robust and precise double dove-tail guide.
- Stepless stroke range setting for fast and safe tool changes, without the need to remove the core drill unit from the workpiece.
- Electronic overload cut-out if the drilling pressure is too high for protection of the motor and the tool used.
- MagnetMonitor system ensures the magnetic coils have a long service life.
- Integrated cooling lubricant supply for clean cutting and long tool life.

...065:

- MK3 shank as universal mounting for solid, non-core drilling too.
- Integrated cooling lubricant supply for clean cutting and long tool life.
- Two-speed gears for selection of the correct cutting speed.
- Also suitable for lap bores.
- Robust and precise double dove-tail guide with extra large stroke range.
- MagnetMonitor system ensures the magnetic coils have a long service life.
- Electronic overload cut-out if the drilling pressure is too high for protection of the motor and the tool used.
- Optimum handling due to ergonomic design.
- Fine adjustment for precise alignment if magnetic foot is switched on.

Scope of supply for all models:

- 1 storage box
- 1 cooling lubricant pump
- 1 lashing strap
- 1 swarf hook
- 1 QuickIN adapter for M18 x 6 P 1.5
- 2 centring pins

...032:

- 1 ring gear drill chuck up to 10 mm

...050, ...065:

- 1 ring gear drill chuck up to 13 mm

...052:

- 1 coolant tank
- 1 drift key
- 1 FEIN high-performance cutting oil spray

...065:

- 1 drift key



Quick IN



84 520 032



84 520 050

FEIN core drills, please refer to page 61 onwards



84 520 052



84 520 065

	KBM 32 Q	KBM 50 Q X	KBM 52 U	KBM 65 QF
Rated input power	700 W	1200 W	1200 W	1460 W
Full load speed 1st gear/2nd gear	440 1/min	260/520 1/min	260/520 1/min	-
SLOW switching stage	-	-	-	125/255 1/min
FAST switching stage	-	-	-	250/510 1/min
Weight	10 kg	12 kg	13.7 kg	21 kg
Drill Ø, steel, max	-	-	-	-
Core drill bits	12-32 mm	12-50 mm	12-50 mm	12-65 mm
Spiral drill (with drill chuck)	13 mm	20 (16) mm	23 (16) mm	13 mm
Spiral drill with MK 3	-	-	-	23 mm
Tap	M 12	M 16	M 16	M 20
Reamer Ø	-	-	-	23 mm
max drilling depth	50 mm	50 mm	50 mm	-
Machine chuck/adapter	-	-	MK 3	MK 3
Magnetic holding power	9000 N	11000 N	11000 N	12000 N
Height (drill jigs)	373 mm	368 mm	368 mm	536 mm
Stroke	135 mm	135 mm	135 mm	178 mm
Total stroke range	260 mm	310 mm	310 mm	408 mm
Magnetic foot dimensions	160 x 80 mm	180 x 90 mm	180 x 90 mm	184 x 92 mm
84 520...	032	050	052	065



84 579 MultiMaster

- New generation
- The universal system for interior fitout and renovation
- Due to the oscillating movement and the particularly practical accessories, the FEIN MULTIMASTER is an unbeatably versatile and precise special tool
- Perfect for all professional interior finishing, renovation and repair work.
- SoftGrip inlay: Optimum grip for safe, fatigue-free working.

Scope of supply:

...010 MultiMaster Start:

- 1 FEIN MULTIMASTER FMM 250
- 1 sanding pad, without perforations
- 5 of each sanding sheet grain 60, 80, 120, 180, without perforations
- 1 Universal E-CUT saw blade
- 1 rigid stopping knife
- 1 key and mounting bolts



84 579 010

...020 MultiMaster Select:

- 1 FEIN MULTIMASTER FMM 250Q with QuickIN quick action system
- Complete accessories as for ...010, plus
- 1 carbide tipped segment saw blade
- 1 HSS saw blade



84 579 020

...030 MultiMaster Top:

- 1 FEIN MULTIMASTER FMM 250Q with QuickIN quick action system
- Complete accessories as for ...020, plus
- 1 sanding pad, perforated
- 5 of each sanding sheet grain 60, 80, 120, 180, perforated
- 1 dust extraction device
- 1 carbide rasp, perforated
- 1 Profile sanding set



84 579 030



	MultiMaster Start	MultiMaster Select	MultiMaster Top
Power input	250 W	250 W	250 W
Oscillations	11000-21000 1/min	11000-21000 1/min	11000-21000 1/min
Cable length	5 m	5 m	5 m
Sanding pad, corner to corner	80 mm	80 mm	80 mm
Tool mounting	Standard	QuickIN	QuickIN
84 579...	010	020	030

84 581 FEIN MultiMaster accessories



Name	84 581...	
HSS saw blades, Ø = 63 mm, Pack = 1	001	
HSS saw blades, Ø = 80 mm, Pack = 1	003	
HSS segment saw blade, Ø = 80 mm	005	
HSS saw blade, cropped, Ø = 80 mm	006	
HSS saw blade, wood	008	
ideal for long, straight cuts, 100 mm Ø		
E-Cut standard saw blade, Cutting width 35mm, 50 mm long With straight-set teeth	010	
E-Cut standard saw blade, Cutting width 65mm, 50 mm long With straight-set teeth	015	
E-Cut precision saw blade, Cutting width 35 mm, 50 mm long With double-row teeth	018	
E-Cut precision saw blade, Cutting width 65 mm, 50 mm long With double-row teeth	020	
E-Cut universal saw blade, Cutting width 29 mm, 60 mm long With bi-metal teeth	022	
Sanding pad set, pack of 2, without perforations	040	

84 581 Abrasive sheets

Without perforations, with quick Velcro fastening, for universal use on virtually all materials such as wood, metal, GRP, plastic, paint/varnish, filler, soldering, leather, etc., all synthetic resin bonded, high removal rate, corundum.

Grit mm	84 581...		
36	050		50
40	051		50
60	052		50
80	053		50
100	054		50
120	055		50
150	056		50
180	057		50
220	058		50
240	059		50
280	060		50
320	061		50
400	062		50

84 581...	Name	
070	HM rasp, carbide tipped	
080	Rigid stopping knife	
081	Flexible stopping knife, pack of 2	
083	Diamond saw blade, also suitable for cutting slots/chasing in plaster, bricks, pumice and honeycombed bricks as well as in aerated concrete for electrical installations. Ø = 63 mm	
084	Diamond segment saw blade, due to cropping can also be used flat on surface. Ø = 63 mm, cutting width 2.0 mm.	
090	Mounting bolt set for all FEIN MultiMaster accessories. Pack of 2	

84 584 Profile sanding set for MultiMaster

- for fine sanding work in confined places, in grooves and on profiles
- high removal rate
- faster and easier profile and sanding sheet change

Scope of supply:

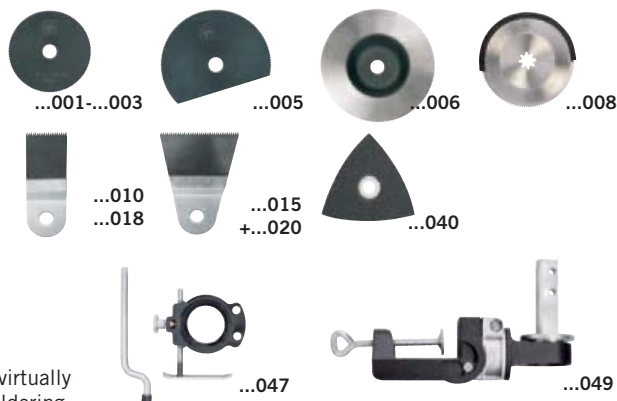
- 1 holder and 6 different profile inserts:
- 1 x V shape for 90° angles
- 1x trapezoidal shape for tongue and groove joints
- 1 x for straight profiles
- 1 x convex shape (large)
- 1 x concave and 1 x convex shape (small)
- 5 sanding sheets each grain 80, 120 and 180



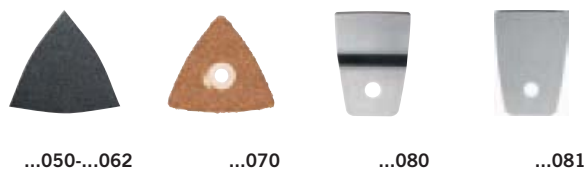
84 584 001

84 584...	001
-----------	-----

Name	84 581...	
Intermediate ring, for accessories with star mounting. Up to 40% better torque transfer thanks to keyed connection	045	
Depth stop suitable for all E-Cut saw blades and HSS saw blade for wood	047	
Table and drill stand bracket MultiMaster can be clamped onto a table or workbench	049	



Type	84 581...	
Sanding sheet set without perforations, with Velcro quick fastening, Grain 60, 80, 120, 180 and 240	101	



84 584 Sanding paper for profile sanding set

- suitable for profile sanding set 84 584 001
- for universal use on virtually all materials such as wood, metal, GRP, plastic, paint/varnish, filler, soldering, leather, etc.
- high removal rate

Grit mm	84 584...		
80	080		25
120	120		25
180	180		25



84 610 Cordless electronic drill driver, 2 and 3 speed


NiMH

NiMH type

- more staying power with same size and same weight
- environmentally friendly due to dispensing with toxic heavy metals
- trendsetting
- reliable due to perfected cell technology
- resistant to cold - full power even at low temperatures

...010, ...014, ...016:

- With quick drill/ screwdriver mode changeover switch
- Motor designed with separate, replaceable anchor
- Reliable power transmission due to gear with metal gear wheel
- With quick action drill chuck
- Torque setting can be adjusted in 16 levels

...018:

- New developed 3 speed driver for the highest standards
- Only 300 rotations per minute in 1st gear for the most difficult screw driving work
- 4 step planetary gear with metal gear wheel for optimum power transmission
- Specially developed quick action drill chuck made of lightweight plastic with high clamping forces
- With MXT technology: Use of rare earth magnets enables extreme stresses and extends the life of the tool

Scope of supply for all models:

- Transport case
- Charger
- PH2 bit

...010, ...014, ...016:

- 2 x rechargeable batteries (Ni-MH, 2.6 Ah)

...018:

- 2 x rechargeable batteries (Ni-MH, 3.0 Ah)



...010 - ...016



...018



all models with
two batteries + charger
in the case



Type		6317DWDE	6337DWDE	6347DWDE	6319DWFE
Battery voltage	V	12.0	14.4	18.0	12.0
Battery capacity	Ah	2.6	2.6	2.6	3.0
No load speed 1st gear	min ⁻¹	0-350	0-400	0-400	0-300
No load speed 2nd gear	min ⁻¹	0-1300	0-1300	0-1300	0-550
No load speed 3rd gear	min ⁻¹	-	-	-	0-1600
Drilling performance in steel	mm	13	13	13	13
Drilling performance in wood	mm	26	32	35	45
Max. torque					
soft screw driving	Nm	25	30	35	31
hard screw driving	Nm	60	65	80	65
Weight	kg	2.0	2.1	2.4	2.2
84 610...		010	014	016	018





The new lithium ion rechargeable batteries from Makita

Top engineering which is at the forefront and runs even longer. Use of lithium ion batteries marks the peak performance of current rechargeable battery technology for electrical tools independent of the mains. The design of lithium ion batteries and the materials used enable weight savings of 40% compared to Ni-Mh batteries. And at the same time the performance increases sharply. Up to 180% more working volume (capacity x charge cycles) are achieved. Lithium ion batteries maintain the voltage for long periods and are also not damaged by incomplete charging. The power reducing, harmful memory effect does not occur. Armoured power: The modern inner life of the new generation of rechargeable batteries takes place in extraordinarily robust housings. The design has to a large extent been revised. When block batteries are pushed into the machine's handle, 8 contacts take effect and ensure optimum current transfer. And even if you drop one it will withstand the fall with sovereign ease.

84 615 Cordless drill driver, 2 and 3 speed

- with lithium ion technology
- New 4-pole motor without torque loss and low power consumption
- Handle with integrated rubber pad for secure hold and comfortable working
- Short type
- With strong LED light for optimum lighting of the tool tip
- electronically controlled speed
- Forward / reverse rotation
- 16 torque settings

Scope of supply for all models:

- Transport case with small parts compartments (without contents)
- Charger
- 2 batteries 3.0 Ah (Li-Ion)



...003

WODEX Twist drill bits, please refer to Page 23 onwards

Type		BDF450SFE	BDF451SFE
No load speed 1st gear	min ⁻¹	0-400	0-300
No load speed 2nd gear	min ⁻¹	0-1400	0-600
No load speed 3rd gear	min ⁻¹	-	0-1700
Max. torque, hard	Nm	25	40
Max. torque, soft	Nm	41	80
Drilling performance in steel	mm	13	13
Drilling performance in wood	mm	27	65
Drill chucks	mm	1-13	1-13
Battery voltage	V	18	18
Battery capacity	Ah	3.0	3.0
Weight	kg	1.7	2.1
84 615...		003	005



...005

84 617 Cordless combination hammer drill, 2 and 3 speed

- with lithium ion technology
- New 4-pole motor without torque loss and low power consumption
- Handle with integrated rubber pad for secure hold and comfortable working
- Short type
- With strong LED light for optimum lighting of the tool tip
- electronically controlled speed
- Forward / reverse rotation
- 16 torque settings

Scope of supply for all models:

- Transport case with small parts compartments (without contents)
- Charger
- 2 batteries 3.0 Ah (Li-Ion)



...003

Type		BHP450SFE	BHP451SFE
Idle speed, 1st gear	min ⁻¹	0-400	0-300
Idle speed, 2nd gear	min ⁻¹	0-1400	0-600
Idle speed, 3rd gear	min ⁻¹	-	0-1700
No load blows per minute 1st gear	min ⁻¹	0-6000	0-4500
No load blows per minute 2nd gear	min ⁻¹	0-21000	0-9000
No load blows per minute 3rd gear	min ⁻¹	-	0-25500
Max. torque, hard	Nm	25	40
Max. torque, soft	Nm	41	80
Drilling performance in steel	mm	13	13
Drilling performance in wood	mm	27	50
Drilling performance in masonry	mm	13	16
Drill chucks	mm	1-13	1-30
Battery voltage	V	18	18
Battery capacity	Ah	3.0	3.0
Weight	kg	1.8	2.2
84 617...		003	005



...005



84 630 Cordless angle drill kit

- This tool shows its strengths in hard to access corners
- Variable speed switch integrated in handle
- Right/left rotation
- With electronic and overload protection
- Electrical motor brake prevents overturning screws
- Width across corners 115 mm up to tip of drill chuck
- High torque due to low speed and optimum gear transmission

Scope of supply:

- Transport case
- 1x rechargeable battery NiMH 2.6 AH
- Charger
- Quick-action drill chuck

Type		DA312DWD
Battery voltage	V	12
Battery capacity	Ah	2.6
No-load speed	min ⁻¹	0-800
Max. torque	Nm	5.0
Drilling performance in steel	mm	10
Drilling performance in wood	mm	12
Chuck capacity	mm	0.8-10
Weight	kg	1.4
84 630...		009

**NiMH**

...009

For bits, please see
page 882 onwards**84 605 2 speed cordless electronic drill driver**

- NiCad type
- Handy tool with very short design
- Mechanical 2 speed planetary gear with metal gear wheels for optimum power transmission
- Electronics for sensitive drilling and screw driving
- Adjustable 16 torque settings plus drilling level
- Handle with integrated rubber pad for secure hold and comfortable working

Scope of supply:

- Charger
- 2 rechargeable batteries
- Transport case

Type		6260DWE	6270DWAE	6280DWAE
Battery voltage	V	9.6	12.0	14.4
Battery capacity	Ah	1.3	2.0	2.0
No load speed 1st gear	min ⁻¹	0 - 350	0 - 350	0 - 350
No load speed 2nd gear	min ⁻¹	0 - 1200	0 - 1200	0 - 1200
Drilling performance in steel	mm	10	10	10
Drilling performance in wood	mm	21	25	25
Max. torque				
soft screw driving	Nm	14	18	20
hard screw driving	Nm	24	30	36
Weight	kg	1.4	1.5	1.6
84 605...		009	012	014

WODEX Twist drill bits, please
refer to Page 23 onwards

...009 - ...014

**84 660 Jigsaw**

- Easy, toolless saw blade change due to clip
- Very high cutting speed
- With electronically controllable number of strokes
- Constant electronics for uniform number of strokes even under load
- 4 level pendulum stroke adjustment
- no more twisting during curve cuts
- external extraction can be connected

Scope of supply:

- Transport case, • Saw blade set, • Extraction nozzle

		4341CTK
Power consumption	W	720
No load strokes per minute	min ⁻¹	800-2800
Stroke height	mm	26
Pendulum stroke		4 levels
Cutting performance		
in wood	mm	135
in aluminium	mm	20
in soft steel	mm	10
Weight	kg	2.4
84 660...		072

For jigsaw blades, please
refer to page 684 onwards

84 660 072



84 607 Cordless impact driver

- Short and lightweight impact driver with 14.4 volt drive
- Impact mechanism housing made of particularly lightweight magnesium alloy
- Makita high performance motor with carbon brushes which can be changed from the outside
- Handle with integrated rubber pad for secure hold and comfortable working
- Forward/reverse rotation changeover switch conveniently positioned in handle
- With electronically controllable speed
- With strong LED light for optimum lighting of the work area

Scope of supply:

- Transport case
- 2 rechargeable batteries (Ni-MH, 2.6 Ah)
- Charger

Type		6918FDWDE
No-load speed	min ⁻¹	0-2300
No load impacts per minute	min ⁻¹	0-3000
Max. tightening torque	Nm	120
Tool holder external square		1/2"
Machine screws		M4-M8
Nuts		M5-M12
Battery voltage	V	12
Weight	kg	1.6
84 607...		003

Makita

Ni-MH



...003

For impact wrench inserts,
please see page 840 onwards

84 651 Replacement batteries

- for Makita cordless tools

...096 to ...114: Ni-Cad

...312 to ...318: Ni-MH

...322: Li ion

Makita

Name	84 651...		Voltage V	Capacity Ah
Ni-Cad				
Flat battery 9000	096		9.6	1.3
Block battery 9120	109		9.6	1.3
Block battery 1222	112		12.0	2.0
Block battery 1422	114		14.4	2.0
Ni-MH				
Block battery 1234	312		12.0	2.6
Block battery 1434	314		14.4	2.6
Block battery 1834	318		18.0	2.6
Li ion				
Block battery 1830	322		18.0	3.0

Further batteries available on request



...312 - ...318



...096 - ...114



...322

84 651 Battery charger

...401:

for all Makita rechargeable batteries up to 14.4 V (NiCad and Ni-MH)

...501:

for all Makita rechargeable batteries up to 18 V (Li ion)

- Microprocessor controlled charging
- Integrated fan

Name	84 651...		Voltage V
DC 1414	401		7.2 - 14.4
DC 24SC	501		14.4 - 18.0



...401



...501

84 670 Electronic filing sanders

- Long sliding block for flat sanding
- Stepless electronically controlled belt speed
- Can be connected to external extractor for low dust working
- ...001:
- Belt speed can be steplessly controlled by electronics, therefore also suitable for wood
- Problem free sanding in difficult to access places due to narrow bracket arm and removable swivel handle

...005:

- Belt only 9 mm wide
- Can be used anywhere where glass, metal, ceramic or similar is sanded

Scope of supply:

...001:

- Swivel handle
- Sanding belt set

...005:

- Extraction nozzle
- 2 x sanding belt 533 x 9 mm grain 60

Type		9031	9032
Power consumption	W	550	500
Belt speed	m/min	200-1000	300-1700
Belt width	mm	30	9
Band length	mm	533	533
Extraction nozzle inner Ø	mm	24	17
Weight	kg	2.1	1.5
84 670...		001	005



For replacement sanding belts, please see page 737 onwards



...001



...005

84 710 Electronic reciprocating saws

- Toolless saw blade change
- Handle with integrated rubber pad for secure hold and comfortable working
- Steplessly adjustable stroke speed for precise work suitable for particular material
- Adjustable guide block for optimum utilisation of the saw blade
- With extensive protection against penetration of dust or splashing water
- Universal holder for all commonly used saw blades

Scope of supply for all models:

- Transport case
- 3 assorted saw blades

Type		JR3050T	JR3060T
Power consumption	W	1010	1250
Number of strokes	min ⁻¹	0-2800	0-2800
Stroke height	mm	28	32
Weight	kg	3.2	4.2
84 710...		028	035



84 710...



For replacement sabre saw blades, please see page 686 onwards



84 712 SDS - Plus rotary hammer drill

- With SDS-plus tool holder
- Handle with integrated rubber pad for secure hold and comfortable working
- Electronically controllable speed and number of blows
- Hammer stop
- Forward / reverse rotation

Scope of supply:

- Transport case
- Side handle
- Depth stop

Type		HR 2450
Power consumption	W	780
No-load speed	min ⁻¹	0-1100
No load impacts per minute	min ⁻¹	0-4500
Single impact force	J	2.7
Drilling performance in concrete	mm	24
Drilling performance in wood	mm	32
Drilling performance in steel	mm	13
Weight	kg	2.4
84 712...		003



...003





Primat ®

**Precision tools
Plant & equipment**



Warranty.

We provide a 5 year warranty for all our WODEX, PRIMAT and ARTEC brand products. This relates to verifiable material, design and production defects.

For more details please refer www.wollschlaeger.de on the internet

ibemo Kazakhstan - 090301 Republic of Kazakhstan, West Kazakhstan Oblast, Aksai, Pramzone, BKKS office complex
Phone: +7 71133 93077 ; Fax: +7 71133 93074 ; E-Mail: info@ibemo-kz.com

Core drills

Due to their high working performance and magnetic holding power but low weight, **Primat magnetic core drills** are ideal for using in structural steelwork and plant building. They can easily be used to work overhead on steel beams.



The solution when drilling through workpieces:

Drill holes up to **100 mm** can be made in one operation

for suitable core drills,
please refer to page 60

81 451 Magnetic core drill

- weighing only 9.9 kg it is ideal for professional, robust construction site use, even overhead
- Automatic internal lubrication: The cutting oil is guided from the inside to the cutting tip of the drill. Optimally metered, convenient handling.
- Suitable for core drill cutting depth 30 mm Ø 12 - 30 mm

Scope of supply:

Magnetic core drill with core drill direct mounting, ejector pin, transport case, safety chain, Allen key SW 4, operating instructions, warranty certificate



81 451 110

81 454 Magnetic core drill

- powerful 2 speed machine
- with quick action drill bit change "Keyless" system for fast drill bit change
- Automatic internal lubrication: The cutting oil is guided from the inside to the cutting tip of the drill. Optimally metered, convenient handling.
- MK2 spindle taper
- integrated cutting oil tank
- Gear in oil bath
- internal cable routing
- ...310: with forward/reverse rotation and full wave control electronics



81 454 210



81 454 310

Scope of supply:

Magnetic core drill, "keyless" quick action drill bit change system, ejector pin, transport case, safety chain, Allen key SW 4, operating instructions, warranty certificate

- ...310: with geared chuck 13 mm, taper shank arbor MK2/B16, tapping adaptor for taps to DIN 376 M10, M12 and M16

81 458 Magnetic core drill

- Universal magnetic core drills with high torque
- for core drilling, rotary drilling, tapping and reaming

Scope of supply:

Magnetic core drill, transport case, "Keyless" quick action drill bit change system, industrial mounting MK3/32 mm Weldon shank, ejector pins, safety chain, operating instructions, Allen keys SW 6, drill drifts MK 3, warranty certificate

with "Keyless" quick action
drill bit change system



81 458 110

	PMB 30	PMB 40	PMB 40 E	PMB 100
Power consumption	800 W	1150 W	1150 W	1800 W
Electronic controls	-	-	yes	yes
Speed level 1	450 min ⁻¹	250 min ⁻¹	50-250 min ⁻¹	40 - 110 min ⁻¹
Speed level 2	-	450 min ⁻¹	180-450 min ⁻¹	65 - 175 min ⁻¹
Speed level 3	-	-	-	140 - 370 min ⁻¹
Speed level 4	-	-	-	220 - 600 min ⁻¹
Core drill capacity Ø	12 - 30 mm	12 - 40 mm	12 - 40 mm	12 - 100 mm
Twist drill capacity Ø	-	18 mm	18 mm	32 mm
Core drill cutting depth	30 mm	55 mm	55 mm	110 mm
Weldon shank	19 mm (Ø 3/4")	19 mm (Ø 3/4")	19 mm (Ø 3/4")	19/32 mm (Ø 3/4" / 1 1/4")
Spindle taper	-	MK2	MK2	MK3
Thread die cutting and tapping	-	M16	M30	-
Forward / reverse rotation	-	-	yes	yes
Reaming Ø	-	-	18 mm	30 mm
Stroke	80 mm	150 mm	150 mm	255 mm
Voltage	230 V	230 V	230 V	230 V
Height x Width x Length	300/370 x 157 x 230 mm	440/590 x 175 x 295 mm	440/590 x 175 x 295 mm	450/705 x 239 x 355 mm
Size of magnet	80 x 160 mm	84 x 168 mm	84 x 168 mm	110 x 220 mm
Weight	9.9 kg	13.0 kg	13.0 kg	25 kg
Product number	81 451 110	81 454 210	81 454 310	81 458 110

for suitable core drills, please refer to page 60

81 462 Pipe clamping device

for Primat core drills



81 462...

Clamping capacity Pipe Ø	81 462...		for series
80 - 250 mm	025		PMB 40/E
150 - 500 mm	050		PMB 100

81 464 Accessories

for Magnetic core drills No. 81 451... - 81 458...



Name	81 464...	
Industrial mounting MK MK 2/19 mm Weldon with manual lubrication	011	
Industrial mounting MK MK 3/19 mm Weldon with manual lubrication	012	
Ejector pin, short type for cutting depth 30 mm	018	
Ejector pin, long type for cutting depth 55 mm	020	
Drill chuck adaptor 1/2" - 19 mm Weldon	022	
Safety chain	030	



...011



...018



...020



...022

81 470 Deburring and chamfering machine

ideally suited for deburring and chamfering metal parts made of steel, stainless steel, non-ferrous metals, brass and plastic. The compact design enables use on straight edges, internal and external radii, as well as drill holes from Ø 22 mm.

The fine adjustment enables easy chamfering to deburring through to weld seam preparation.

Scope of supply: Deburring and chamfering machine in sheet metal case, milling cutter incl. 2 HM tips.



81 470...

Technical data:	
Voltage V:	230
Power kW:	1.5
Speed min-1	6000
Feed:	Manual
Land width 30°:	0-8mm stepless
Land width 45°:	0-7mm stepless
L x B x H mm	310 x 138 x 295
Weight kg:	4.6

Type	81 470...	
EKF 300 - 30°	030	
EKF 300 - 45°	045	
EKF 452 - R=2.5mm	055	



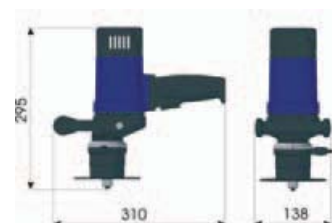
Fräser 30° - Fase 0-7 mm



Fräser 45° - Fase 0-8 mm



Neu: Fräser Radius R=2,5 mm



81 470 Accessories

for Deburring and chamfering machine



Type	81 470...	
ZFR 300 Milling tool 30°	130	
ZFR 450 Milling tool 45°	145	
ZFR 452 Milling tool R = 2.5 mm	155	
SHM 200 HM tip 30°/40°	200	
SHM 202 HM tip R = 2.5 mm	205	
SHM 200-E HM "Vario" tip 30°/40°	210	

81470130 to 155: Milling cutters are supplied without tips.

81470200 to 210: 2 tips are required for each milling cutter



80 831 Tinsnips

- For cutting steel, stainless steel, non-ferrous metals and plastics
- Faster and more precise cut even overhead
- Reversible blades made from high alloy cold work steel
- Free view of the layout markings
- Maximum curve manoeuvrability
- Chipless cutting
- Long tool lives

Scope of supply for all models:

- Blade
- Hexagon key
- Operating instructions

TRUMPF



80 831 003



80 831 007



80 831 009

	S 160-6	S 250-6	S 450-4
Maximum sheet metal thicknesses			
Steel 400 N/mm ² mm	1.6	2.5	4.5 (Coil 3)
Steel 600 N/mm ² mm	1.2	2.0	3.5 (Coil 2.5)
Steel 800 N/mm ² mm	1.0	1.5	2.5 (Coil 1.5)
Aluminium 250 N/mm ² mm	2.0	3.0	4
Working speed m/min	8 - 12	4 - 7	4 - 6
Starting hole Ø mm	27	28	75
Smallest radius mm	15	20	35
Motor output rating W	350	500	1400
Number of strokes at rated load 1/min	4800	1760	1600
Weight (without cable) kg	1.6	2.2	6.2
Total insulation protection class	II	II	II
Pneumatic version available	yes	yes	yes
80 831...	003	007	009

Wearing parts available on request. Cordless version also available.

80 837 Slitting shears

- Toolless blade change
- The cutting guides can be reversed
- Integrated chip clipper of the PLUS version
- No need for setting or adjusting work
- Slender handle
- For excellent ergonomics
- Optimum cutting clearance setting by selecting the right blade

Scope of supply for all models:

- Blade
- Cutting guides
- Operating instructions

TRUMPF



80 837 002



80 837 008



80 837 010

	C 160-2	C 160-2 PLUS	C 250-0 Plus
Maximum sheet metal thicknesses			
Steel 400 N/mm ² mm	1.6	1.6	2.5
Steel 600 N/mm ² mm	1.2	1.2	1.5
Aluminium 250 N/mm ² mm	2.0	2.0	3.0
Working speed m/min	6 - 10	6 - 10	3 - 10
Starting hole Ø mm	8	8	15
Smallest radius mm	40	40	50
Motor output rating W	350	350	500
Number of strokes at rated load 1/min	3.800	3.800	2.400
Weight (without cable) kg	1.4	1.4	2.0
Total insulation protection class	II	II	-
Pneumatic. version available	yes	yes	no
80 837...	002	008	010

Wearing parts available on request.



80 840 Nibblers

- For sheet metal thickness from 0.4 to 10.0 mm
- For fast, safe cutting of different material thicknesses of steel, stainless steel, non-ferrous metals and plastics
- Torsion free cuts
- Easy to guide
- Good economic efficiency with high performance.
- Patented concave male die (can be pivoted) for sheet metal thicknesses up to 3.5 mm
- Distortion free cutting method
- Cutting without feed force

Scope of supply for all models:

- Male die
- Female die
- Operating instructions

...001: profile lead

...003: speed controlled



80 840 001



80 840 003



80 840 007

		N 160 E	N 200-4	N 350-4
Maximum sheet metal thicknesses				
Steel 400 N/mm ²	mm	1.6	2.0	3.5
Steel 600 N/mm ²	mm	1.0	1.5	2.3
Steel 800 N/mm ²	mm	07	1.0	1.8
Aluminium 250 N/mm ²	mm	2.0	2.5	3.5
Working speed	m/min	1.5	1.5	1.4
Starting hole Ø	mm	21	16	30
Smallest radius	mm	40	4	7
Motor output rating	W	350	500	1400
Number of strokes at rated load 1/min		1600	1540	720
Weight (without cable)	kg	1.7	2.2	3.7
Total insulation protection class		II	II	II
Pneumatic. version available		no	yes	yes
80 840...		001	003	007

80 843 Nibblers (for thick metal sheets)

- For cutting capacities from 5.0 to 10.0 mm
- With extremely stable square male die
- Cutting of sheet metals with shaping through to square pipes with large wall thicknesses
- Easy to change re-sharpenable tools

Scope of supply for all models:

- Male die
- Female die
- Handle
- Operating instructions



80 843 001



80 843 003



80 843 005

		N 500-6	N 700-2	N 1000-0
Maximum sheet metal thicknesses				
Steel 400 N/mm ²	mm	5.0	7.0	10.0
Steel 600 N/mm ²	mm	3.2	5.0	7.0
Steel 800 N/mm ²	mm	2.5	3.5	5.0
Aluminium 250 N/mm ²	mm	7.0	10.0	12.0
Working speed	m/min	1.5	1.3	1.0 - 1.6
Starting hole Ø	mm	41	50	75
Smallest radius	mm	90	140	300
Motor output rating	W	1400	1600	2000
Number of strokes at rated load 1/min		720	300	230 - 370
Weight (without cable)	kg	4.0	8.3	14.7
Total insulation protection class		II	II	II
Pneumatic. version available		yes	yes	yes
80 843...		001	003	005

80 846 Sectional sheet nibbler

- For fast, precise and easy cutting of all commonly used corrugated, sectional and trapezoidal sheet metals
- up to a max. depth of 162 mm

...002:

- a short toolholder for flat trapezoidal sheet metal
- a long holder for, e.g. backplates (deep trapezium)

Scope of supply for all models:

- Male die
- Female die
- Operating instructions



80 846 002



80 846 005



80 846 020

	PN 200-4	PN 161-4	PN 200-4 Set
Maximum sheet metal thicknesses			
Steel 400 N/mm ² mm	2.0	2.0	2.0
Steel 600 N/mm ² mm	1.5	1.5	1.5
Steel 800 N/mm ² mm	1.0	1.0	1.0
Aluminium 250 N/mm ² mm	3.0	3.0	3.0
Working speed m/min	2.0	2.0	2.0
Starting hole Ø mm	24	24	24
Smallest radius mm	50	50	50
Motor output rating W	500	500	500
Number of strokes at rated load 1/min	1540	1540	1540
Weight (without cable) kg	2.1	2.3	2.1
Total insulation protection class	II	II	II
Pneumatic. version available	yes	yes	yes
80 846...	002	005	020

80 853 Deburrers

- For achieving a clean visible edge on a component
- For bevelling sharp edges
- For preparing a weld seam
- Machining edges in mild steel, stainless steel, aluminium and others
- With constant dimensional accuracy
- Quiet and without sparking
- The edge surface remains oxide free

Scope of supply:

- Tips
- Tip holder
- Face pin spanner
- TORX screwdriver
- Single open-ended spanner
- Safety goggles
- Operating instructions



80 853 001



80 853 003

	TKA 300-0	TKA 500-0
Max. bevel height / bevel length (45°)		
Steel 400 N/mm ² mm	2.1/3.0	3.5/5.0
Steel 600 N/mm ² mm	1.0/1.4	1.8/2.5
Steel 800 N/mm ² mm	0.7/1.0	1.0/1.5
Aluminium 250 N/mm ² mm	4.2/6.0	6.5/9.2
Minimum sheet metal thickness mm	0.7	0.7
Smallest inner radius mm	12	12
Motor output rating W	850	1400
Weight (without cable) kg	2.9	3.5
80 853...	001	003

available on request:

- diverse tips for machining mild and stainless steel and aluminium
- diverse tip holders for 30°, 45°, 60° and radius edges

80 856 Bevellers

- Any weld edge start and end point
- Fast and easy to adjust to different sheet metal thicknesses
- Practical manoeuvrability in vertical, horizontal or overhead position
- Also available with pneumatic drive for working in potentially explosive areas

Scope of supply for all models:

- Blade
- Handle
- Hexagon key
- Operating instructions

TRUMPF


80 856 001



80 856 003



80 856 005

		TKF 700-2	TKF 1100	TKF 1500-0
For edges		30°/37.5°/45°	30°/37.5°/45°	20° - 45°
Maximum bevel lengths				
Steel 400 N/mm ²	mm	7.0/7.0/7.0	11.0/11.0/11.0	15
Steel 600 N/mm ²	mm	5.8/5.7/5.6	9.0/9.0/9.0	9
Steel 800 N/mm ²	mm	4.0/4.0/4.2	6/6/6	6
Sheet metal thickness		1 - 20	3 - 25	4 - 160
Working speed	m/min	1.5	2.0	2.0
Smallest inner radius	mm	40	40	55
Motor output rating	W	1400	1600	2000
Number of strokes at rated load 1/min		720	340	370
Weight (without cable)	kg	5.4	9.9	16.5
Total insulation protection class		II	II	II
Pneumatic. version available		yes	yes	yes
80 856...		001	003	005

80 860 Shears

- Flush trimming of ventilation pipes at walls and ceilings
- Trimming C-L-U profiles
- Trimming straight sheet metals
- Especially for the ventilation and air conditioning industry
- Perfect cutting quality, even over folded spiral seams
- Handy and compact machine
- Interchangeable blades, double tool lives
- Low feed force
- Min. pipe Ø: 50 mm

Scope of supply:

- Integrated blade
- TORX screwdriver TX 20
- System case
- Operating instructions
- Blade, set of 2
- Set of carbon brushes (2) 115 V - 230 V

TRUMPF


80 860 114

		S 114-0
max. sheet thickness	mm	
Steel 400 N/mm ²		1.6
Steel 600 N/mm ²		1.0
Aluminium 250 N/mm ²		2.0
Folded spiral seam tube, steel 400 N/mm ²		4 x 0.75
Folded spiral seam tube, steel 600 N/mm ²		4 x 0.50
Working speed	m/min	4 - 6
Smallest radius	mm	60
Min. pipe Ø	mm	50
Throat depth	mm	30
Rated power input	W	350
Strokes at rated load	1/min	3500
Weight	kg	1.9
80 860...		114



80 901 Edge deburrers

- Edge deburrers are developed for direct use in cutting machine tools.
- Flexible use due to the transportable design with a possible 230 V connection
- The longitudinal direction of the edge cutters prevents secondary burr formation and is ideally suited for the usual edge deburring work for cutting and chip removal.
- Guide rails made of hardened steel
- Position 1 - material thickness from 4.5 mm
- Position 2 - material thickness from 1.0 mm
- Guide rails made of high quality plastic for sensitive workpieces

...015, ...016, ...040:

- Design: flat

...025:

- Design: high

Scope of supply:

...015 and ...040:

- Chip collection tank



80 901 015



80 901 016



80 901 025



80 901 040

Type	80 901...		Guide rail BxH mm	Tabletop mm	Drive output W	Weight kg
KEG 150	015		40 x 50	-	1050	5.5
KEG 151	016		15/40 x 150	-	1050	3
KEG 250	025		-	250 x 250	500	12
KEG 400	040		50/70 x 400	-	1050	9

80 901 Foot operated switch for edge deburrers

- Suitable for edge deburrers 80 901...
- for fast work and less motor stress through runtime reduction.



80 901...	Price
101	



80 901 101

80 951 Drill bit sharpener

- new, redeveloped, stable housing with attractive design
- Very easy drill bit positioning
- Improved positioning claws made of ALU, for longer life
- Excellent conical surface finish due to curve-controlled chuck
- Optimised chuck with extended clamping pins for central clamping
- Variable drill pointing in one setup
- Easy to replace grinding rings
- New generation of motors with permanent magnets ensure constant power, irrespective of the speed or load

...050:

- For drill Ø 2.5 - 13.0 mm

...075:

- For drill Ø 2.5 - 19.0 mm
- Adjustable removal rate increases the life of the grinding rings
- Additional grinding ring with coarse grain for drill bit Ø 13.0 to 19.0 mm
- Supplied in rigid moulded case



80 951 050



80 951 075

Grinding capacity mm	80 951...		Point angle
2.5 bis 13.0	050		118° and 135°
2.5 bis 19.0	075		stepless 115° - 140°



80 920 Universal electric straight sander

Optimum for fine sanding, structuring and polishing work

- with low speeds and high tractive power
- for working on large surface structures
- ideal for construction sites and assembly
- totally insulated
- incl. 12 mm collet chuck
- high power output ensures very good speed stability.
- ideal for producing large surface structures
- lightweight, easy to handle machine.
- High drive power
- Integrated overload protection
- Soft-start control for protecting mechanism and electronics



optimum for working with the "POLIFLAP" abrasive system (see page 727)



80 920 010

Type		UGER 10/20 SI
Speeds	min ⁻¹	700, 900, 1100, 1300, 1450, 1600
Voltage	V	230
Power consumption	W	1050
Power output	W	660
Shank connection	mm	Ø 12
Weight	kg	3.2
80 920...		010

80 930 Belt sander set in aluminium case

Lightweight and very handy belt sander, for giving a join-free finish to radii in difficult to access areas with sanding and non-woven belts.

- incl. belt sander attachment and belt sander attachment arm
- totally insulated
- stepless speed control
- high power, handy shape
- electronic speed control for constant speeds even under load
- soft start for protecting mechanism and electronics
- electronic cut-off in the event of overload
- robust, easy to service design
- suitable for short sanding and non-woven belts with width 3, 6, 12, 16, 20 mm, belt length 520 mm



Head can be rotated through 180°

Contents:

1 electric belt sander with stepless speed control,
Power 500 watt
1 belt assortment: Coarse finish: 2 sanding belts each 6 + 12 mm wide,
Grain 40, 60, 80, 120 and 180 (max. peripheral speed: 32 m/s)
Fine finish: 2 non-woven belts each - coarse, medium and fine (max.
peripheral speed: 25 m/s)

For suitable sanding belts, please refer to page 674 (42 508... and 42 514...)



80 930 001

Belt speed	m/s	16 - 6.5
Belt length	mm	520
Voltage 50 - 60 Hz	V	230
Power consumption	W	500
Power output	W	300
80 930...		001



81 201 Compact sanders

FESTOOL

FESTOOL compact sanders always were small, lightweight and handy. Now tougher than ever before: thanks to the effective technology change. You can look forward to a new generation which makes lengthy working even easier and without fatigue. Vertical, horizontal or overhead. Try it out for yourself!

How does the new "compact" generation differ from the previous generation? A technology change which is subtly concealed beneath the housing so that only the "T" in the name indicates there is something new at first glance. For example, the new double row ball bearing and the inner housing made of die cast aluminium. That makes the new compact sander more robust and even more attractive.

Drawn from the practical world for the practical world: The new compact sander generation makes working easy and convinces with innovative solutions. This makes these small lightweights technical giants. Just as you would expect from Festool. The highlights at a glance.

Extremely robust.

The robust design and optimised components make the sander tough. The improved bearings provide even more stability and ensure a long life.

Excellent handling, relaxed working.

The compact sanders are so light and ergonomically built that they are ideal for one-handed use - just as comfortable for both right and left-handed persons. The optimised balance increases the running smoothness of the backing pad or sanding pad. This enables you to work longer without tiring - and spares your joints.

Compatible with the material you are working on.

Wood, plastic or paint/varnish - the electronics steplessly adjust the speed to the material and keeps it constant.

Faster equipment change.

Easily change the machine with one turn! And if the cable breaks you do not have to interrupt your work for long: You simply change the cable and carry on.

Clean and gentle on the health.

There is nothing better than perfect extraction with suction hose and mobile extractor. Your working environment remains clean, the working results are optimised - and last but not least your health will thank you for it.

...001: RTS 400 EQ-Plus orbital sander

- ideal for smaller areas
- Sanding of natural wood parts and veneers before varnishing - especially furniture
- Sanding door linings and doors

...003: DTS 400 EQ-Plus delta sander

- ideal for edges and corners
- Close to the edge sanding of different materials
- Sanding in voids and gaps

...005: ETS 125 EQ-Plus random sander

- ideal for shaped and curved parts and surfaces
- Pre-sanding of natural wood frames or surfaces, without traces in the opposite grain
- Polishing preparation for vehicle paint care and conservation

Scope of supply for all models:

- Filter cartridge
- StickFix sanding sheet
- StickFix sanding pad
- Systainer size SYS 1

Technical data

		Orbital sander RTS 400 EQ-Plus	Delta sander DTS 400 EQ-Plus	Random sander ETS 125 EQ-Plus
Power consumption	W	200	200	200
Speed	min ⁻¹	6000-14000	6000-14000	6000-14000
Sanding stroke	mm	2	2	2
Sanding pad	mm	80 x 130	100 x 150	-
Backing pad		-	-	Ø 125
Connection for dust extraction	mm	27	27	27
Weight	kg	1.1	1.1	1.1
81 201...		001	003	005



...001



...003



...005



81 208 Orbital sander, in the Systainer

FESTOOL

...010:

- optimum mix of weight, size and performance in terms of area
- good sanding quality on surfaces, in corners, on louveres or upright surfaces
- including numerous accessories

...020:

- Very high performance in terms of area
- Excellent sanding results
- Fatigue-free working

...040:

- High economic efficiency due to the extremely high attrition
- with 5 mm stroke
- Clean workplace, clear view and a healthy working environment thanks to the turbo extraction

Scope of supply for all models:

- Filter cartridge
- 1 Stickfix sanding sheet
- Systainer

...010:

- Stickfix sanding pad 93 x 175 mm

...020, ...040:

- StickFix sanding pad 115 x 225 mm



...010



...020



...040

Technical data

		RS 300 EQ-Plus	RS 200 EQ-Plus	RS 100 Q-Plus
Power consumption	W	280	330	620
Speed	min ⁻¹	4000-10000	4000-10000	6000
Working strokes	min ⁻¹	8000-20000	8000-20000	-
Sanding stroke	mm	2.4	2.4	5
Interchangeable sanding pad	mm	93 x 175	115 x 225	115 x 225
Connection for dust extraction Ø	mm	27	27	27
Weight	kg	2.3	2.5	3.3
81 208...		010	020	040

81 211 Accessories

for orbital sander No. 81 208...

FESTOOL



81 211 010 - ...035



81 211 040 - ...050

Name	81 211...		Size mm	suitable for
Sanding pad	010		93 x 175	81 208 010
Sanding pad	030		115 x 225	81 208 020
Sanding pad	035		80 x 130	81 208 030
Turbo filter, 5 per pack	040		-	81 208 010
Turbo filter, 5 per pack	050		-	81 208 020

81 213 Random orbit sander, in the Systainer**FESTOOL**

- one of the lightest in its class
- ideally suited for finishing
- achieves optimum surface quality due to the 3 mm sanding stroke.
- with electronics

Scope of supply:

- Stickfix sanding pad Ø 150 (soft)
- 1 Stickfix sanding disc
- Filter cartridge
- Operating tool
- Systainer

For replacement sanding pads,
please refer to page 734

**81 213 003****Technical data**

		ETS 150/3 EQ-Plus
Power consumption	W	310
Speed	min ⁻¹	6000 - 10000
Working strokes	min ⁻¹	8000 - 20000
Sanding stroke	mm	3
Interchangeable sanding pad	mm	STF Ø 150
Connection for dust extraction	mm	27
Weight	kg	1.8
81 213...		003

**81 215 Rotex RO 150 FEQ-Plus, in the Systainer****FESTOOL**

- Greater removal due to ROTEX rotary motion
- FastFix sanding pad change for sanding compatible with material
- Ergonomically optimum handle position
- with electronics

Scope of supply:

- 1 Brillant 2 P 120 abrasive
- Plug-it cable 4 m
- Operating tool
- Systainer

Technical data

		RO 150 FEQ-Plus
Power consumption	W	720
Speed of the Rotex rotary motion	min ⁻¹	320-660
Eccentric motion speed	min ⁻¹	3300-6800
Sanding stroke	mm	5
Interchangeable sanding pad	mm	STF Ø 150
Connection for dust extraction Ø	mm	27
Weight	kg	2.3
81 215...		010

**81 215 010****81 218 Accessories****FESTOOL**

for random orbital sanders No. 81 213... and 81 215...

...020 to ...080: For random orbital sander ETS 150/3 **81 213 003**...090 to ...094: For Rotex RO 150 FEQ-Plus **81 215 010****81 218 020****81 218 060****81 218 070****81 218 090****81 218 092**

Name	81 218...		Type
Sanding pad	020		soft, 150 mm Ø
Sponge	050		fine, 20 mm high
Sanding pad	055		hard, connecting thread M8
Sponge	060		coarse, 20 mm high
Non-woven	070		soft, 10 mm high
Non-woven	080		hard, 10 mm high
Sanding pad 8 FX-H	090		hard, high edge strength
Sanding pad 8 FX-W-HT	092		high temperature resistance
Sanding pad 8 FX-SW	094		super soft, elastic structure

**81 218 094**

81 220 TRION pendulum jigsaw, in the Systainer **FESTOOL**

- Superior life due to durable drive components
- No rework due to patented triple saw blade guide
- for precise, exact angle cuts and improved splinter protection
- for tear free cuts even in veneered surfaces
- Easy, effortless saw blade change without tools due to the patented FastFix quick saw blade clamping
- Fatigue-free one-hand operation in any position due to favourable centre of gravity and ideal switch position
- also for cuts under the table.

Scope of supply:

- 2 saw blades
- 1 splinter guard
- Systainer

For jigsaw blades,
please refer to page 684



81 220 010



Technical data

		PS 300 EQ-Plus
Power consumption	W	720
Number of strokes	min ⁻¹	1000-2900
Pendulum stroke adjustment in stages		4
Inclination	°	0-45
Cutting depth in wood	mm	120
Cutting depth in non-ferrous metal	mm	20
Cutting depth in steel (soft)	mm	10
Connection for dust extraction Ø	mm	27
Weight	kg	2.3
81 220...		010

81 224 Circular saws, in the Systainer **FESTOOL**

- Energy saving work thanks to particularly low own weight
- Faster and easier saw blade change due to Fast Fix spindle stop
- Virtually tear free cut on both sides due to splinter guard

Scope of supply for all models:

- Operating tool
- FS 1400/2 guide rail
- 1 splinter guard
- Systainer

...010:

- HW fine tooth saw blade Z48

...016:

- HW universal saw blade Z36
- Kick back stop

For circular saw blades,
please see page 680



81 224 010



81 224 016

Technical data

		TS 55 EBQ-Plus-FS	TS 75 EBQ-Plus-FS
Power consumption	W	1200	1600
Saw blade speed	min ⁻¹	2000-5200	1350-3550
Sawblade Ø	mm	160	210
Inclination	°	0-45	0-47
Cutting depth at 90°	mm	0-55	0-75
Cutting depth at 45°	mm	0-43	0-54.5
Connection for dust extraction Ø	mm	27/36	27/36
Weight	kg	4.5	6.2
81 224...		010	016



81 240 Routers

OF 1010 EBQ FS set with 800 mm guide rail

Sufficiently strong with 1010 watt, the OF 1010 weighs 2.7 kg and is one of the lightest in its class. No matter whether free hand or guided, it is possible to work perfectly and sensitively with one hand. with electronics

Scope of supply: Collet chuck \varnothing 8 mm, side stop, operating tool, in the Systainer

OF 2000 E/1 Plus

Ideal for large material thicknesses, hardwood or highly compacted materials. Enormously reliable due to milling spindle supported on double bearings in the metal housing and torsion free cutting table.

with electronics

Scope of supply: \varnothing 8 mm collet, \varnothing 12 mm collet, copying ring, D 12/M 12 adapter, extraction hood, side stop, operating tool, in the Systainer

OF 1400 EBQ-Plus

Centred, toolless clamped copying ring for fast and easy change. Optimum precision, no twisting of the baseplate during milling thanks to the double column clamping.

Easy to use extraction adapter and the 360° rotating impact hood ensure perfect extraction.

Convenient milling cutter change, in the Systainer

FESTOOL



...010



...020



...030

Technical data

		OF 1010 EBQ FS-Set	OF 2000 E/1 Plus	OF 1400 EBQ-Plus
Power consumption	W	1010	2000	1400
Milling cutter spindle speed	min ⁻¹	10000-22000	12000-22000	10000-22500
Cutting depth quick adjustment	mm	55	65	70
Cutting depth fine adjustment	mm	8	5	8
Connection for dust extraction \varnothing	mm	27	27	27/36
Weight	kg	2.7	5.1	4.5
81 240...		010	020	030

Extensive milling cutting accessories available on request

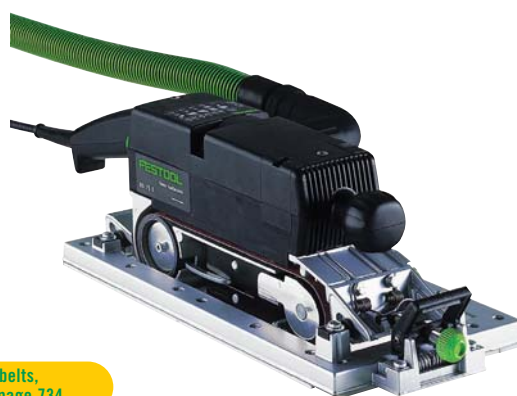
81 250 Belt sander

- Surface sanding frame with precision height adjustment and lifting device
- perfect work results up to a width of 75 mm
- steplessly adjustable belt speed for coarse and fine finish
- fatigue-free working due to the balanced centre of gravity position of the longitudinally positioned motor
- economic working due to the motor's high tractive power
- fast belt tensioning and regulation
- Supplied in cardboard box

Scope of supply:

- 1 surface sanding frame
- 1 stationary device
- 4 sanding belts P60, P80, P100, P120
- 1 extraction adapter
- 1 dust sack

FESTOOL



For sanding belts,
please refer to page 734

Technical data

81 250 010

		BS 75 E
Power consumption	W	1010
Sanding belt	mm	75
Belt length	mm	533
No load belt speed	m/min	200-380
Rated load belt speed	m/min	150-320
sanding area	mm	135-75
Connection for dust extraction \varnothing	mm	27/36
Weight	kg	5
81 250...		010



81 252 DOMINO joining system in the Systainer **FESTOOL**

- Patented milling cutter principle with excellent ergonomics.
- For fast production of stable connections.
- The milling cutter tool rotates and oscillates simultaneously.
- Kick-back free and therefore safe working.
- Absolutely precise milled elongated holes.
- Width of the elongated holes can be changed by changeover while the machine is running.
- With sliding step stop.
- Milling cutting angle of 0-90°.

Scope of supply:

- DOMINO DF 500 joining machine
- DOMINO D 5 cutter
- Support bracket
- Operating tool
- Systainer



Technical data

		DF 500
Power consumption	W	420
Milling cutter spindle speed	min ⁻¹	24,300
Depth stop for milling cutting depth	mm	12, 15, 20, 25, 28
DOMINO slitting cutter Ø	mm	5, 6, 8, 10
Cutting height adjustment with scale	mm	5 - 30
sliding step stop	mm	16, 20, 22, 25, 28, 36, 40
Mitre cutting		0 - 90°
Connection for dust extraction Ø	mm	27
Weight	kg	3.2
81 252...		003

81 253 Domino Systainer assortment **FESTOOL**

Scope of supply:

- DOMINO dowel assortment with 1 105 pcs in sizes:
 - 5 x 30mm
 - 6 x 40mm
 - 8 x 40mm
 - 8 x 50mm
 - 10 x 50mm
- 4 DOMINO milling cutters: D5, D6, D8, D10
- SYSTAINER size 2



81 253...	
005	

DOMINO dowel refill packs and other DOMINO accessories available on request



81 258 Systainer

- For safe transport of the FESTOOL electrical tools
- Modular and flexible systems
- Supplied without contents (**except: ...011**)

Scope of supply

...011:

with 13 individually removable plastic containers:

- 2 x red: 50 x 50 x 60 mm
- 8 x yellow: 105 x 50 x 60 mm
- 2 x blue: 105 x 105 x 60 mm
- 1 x green: 160 x 105 x 60 mm



...010



...015



...021



...031

Dimensions L x B x H	81 258...		Weight kg
395 x 295 x 105	010		1.4
395 x 295 x 105	011		2.0
395 x 295 x 157.5	015		1.6
395 x 295 x 210	021		1.9
395 x 295 x 315	031		2.4

FESTOOL



...011

81 270 CTL 22 E mobile dust extractor

- Optimum safety on uneven construction sites due to robust chassis, large wheels and double steering castors
- Reduced consumption of filter bags thanks to 95% utilisation
- Optimum safety against falling from scaffolding or stairs due to integrated parking brakes.
- For dusts **NOT** harmful to health.
- Higher tool life due to double flat cartridge with integrated cleaning device.

Scope of supply:

- 1 filter sack installed
- Suction hose Ø 27 x 3.5 m

Technical data

		CTL 22 E
Power consumption	W	350 - 1200
Connected load machine socket outlet max.	W	2400
Volumetric flow rate max.	l/min	3800
Vacuum max.	Pa	23000
Filter surface	cm ²	14000
Mains connection cable, rubber insulated	m	7.5
Container/filter bag volume max.	l	22/20
Size (L x B x H)	mm	625 x 380 x 440
Weight	kg	12
81 270...		001

FESTOOL

81 270 001



81 270 Replacement dust bag (filter bags)

- Suitable for mobile dust extractor 81 270 001
- Pack of 5

81 270...	
101	

FESTOOL



81 270 101

81 280 Cordless drill in the Systainer

- Drill chuck replaced with angle and eccentric attachment (accessories) for maximum flexibility
- Removable FastFix drill chuck shortens the driver by 6 cm and releases the bit direct mounting

Scope of supply for all models:

- LC 45 charger
- CENTROTEC tool chuck
- FastFix drill chuck 13 mm
- Bit PZ 2
- CENTROTEC D4 twist drill
- CENTROTEC bit holder

...015:

- 2. C NiCd 1.3 Ah battery pack

...030:

- 2. S NiCd 2.4 Ah battery pack
- FastFix angle attachment
- FastFix eccentric attachment

FESTOOL

For bits and further screw accessories, please refer to page 882



...030



...015



Technical data

		C 12 CE-NC-C45-Plus	TDK 12 CE-NC 45-Plus
battery voltage	V	12	12
Idling speed, 1st gear	min[-1]	0 - 450	0 - 430
Idling speed, 2nd gear	min[-1]	0 - 1500	0 - 1400
Torque adjusting range	Nm	2 - 7	14
Drilling capacity in steel, Ø	mm	14	25
max. torque in metal	Nm	30	2 - 7
Drilling capacity in wood, Ø	mm	25	25
max. torque in wood	Nm	18	20
Chuck capacity	mm	1 - 13	1 - 13
Battery power	Ah	3.0	2.4 / 3.0
NiCd/NiMH charging time	min	50 / 70	50 / 70
Weight with battery	kg	1.7	1.8
81 280...		015	030

81 282 Depth stop for cordless drill

- integrated jaw clutch ensures precise achievement of the required drilling depth.
- suitable for all Festool battery drills with FastFix drill chuck (81 280 015 and ...030)
- faster bit change due to removable sleeve

FESTOOL


81 282 003

	DD-DC
81 282...	003

81 610 High-pressure cleaner, cold water “semi-professional”

- Offers optimum power and reliability for regular cleaning
- Pressure control
- Brass cylinder head
- Removable cleaning agent tank
- Steel reinforced high-pressure hose
- High-pressure gun with quick closing coupling
- Automatic Start/Stop

...150:

- Hanging attachment for HP hose

...160:

- Ceramic piston

Scope of supply:

- Tornado nozzle
- Powerspeed nozzle
- Transport trolley

...160:

- Manual hose reel

**Nilfisk
ALTO**
Why Compromise

...150



...160



		P 150. 1-10 B	P 160. 1-15 B X-TRA
Pressure	max. bar / MPa	10 - 150 / 1 - 15	10 - 160 / 1 - 16
Working pressure IEC	bar / MPa	10 - 140 / 1 - 14	10 - 150 / 1 - 15
Water quantity	l/h min. / max.	540 - 610	570 - 650
Max. inlet temperature	°C	60	60
Power consumption	A	12.6	14.5
Voltage	V	230	230
Motor rated power	kW	2.9	3.3
Weight	kg	23	24.5
L x B x H	mm	394 x 391 x 955	394 x 391 x 955
Hose length	m	10	15
Mains cable	m	5	5
81 610...		150	160

Extensive accessories available on request



81 630 High-pressure cleaner, cold water “Professional”

- Alternating current
- Cold water high-pressure cleaner for professional use by tradesmen, on small constructions sites and small farms.
- With compact design
- Automatic standby
- Excellent ergonomics thanks to Ergo system
- Stainless steel pump
- Cleaning agent injector

Scope of supply:

- Ergo 1000 gun
- Ergo 3000 jet lance
- Tornado Plus nozzle

...035:

- Integrated hose reel

**Nilfisk
ALTO**
Why Compromise

...030



...035



230V alternating current version

		Poseidon 3 - 30	Poseidon 3 - 30 XT
Pressure	max. bar / MPa	150 / 15	150 / 15
Water flow, Qmax. / Qiec	l/h	660 / 600	660 / 600
Water flow Qmin.	l/h	600	600
Max. inlet temperature	°C	60	60
Suction height	m	0.5	0.5
Power consumption	A	16	16
Voltage	V	230	230
Power consumption	kW	3.5	3.5
Pump speed	rpm	2.800	2.800
Weight	kg	35.5	38.0
L x B x H	mm	385 x 450 x 980	390 x 450 x 980
Hose length	m	10 / DN 6	15 / DN 6
81 630...		030	035

Extensive accessories available on request



81 650 High-pressure cleaner, cold water “Professional”

- Three-phase alternating current
- Type as 81 630...
- Scope of supply:**
 - Ergo 1000 gun
 - Ergo 3000 jet lance
 - Tornado Plus nozzle
- ...035:**
 - Integrated hose reel

400V three-phase alternating
current version

...030

**Nilfisk
ALTO**
Why Compromise



...035



		Poseidon 3 - 40	Poseidon 3 - 40 XT
Pressure	max. bar / MPa	170 / 17	170 / 17
Water flow, Qmax. / Qieq	l/h	825 / 750	825 / 750
Water flow Qmin.	l/h	750	750
Max. inlet temperature	°C	60	60
Suction height	m	1	1
Power consumption	A	16	16
Voltage	V	400	400
Power consumption	kW	4.0	4.0
Pump speed	rpm	2.800	2.800
Weight	kg	36.5	39.0
L x B x H	mm	385 x 450 x 980	390 x 450 x 980
Hose length	m	10 / DN 6	15 / DN 6
81 650...		030	035



Extensive accessories available on request

81 670 High-pressure cleaner, hot water “Professional”

- Compact **hot water** high-pressure cleaner with real class.
- For the target groups: agriculture, automobile and small construction sites
- For convenient and effective washing
- EcoPower for low fuel consumption
- Motor pump unit with 1450 rpm
- Ceramic piston
- DUO motor system
- Robust steel frame
- Ceramic piston
- Scope of supply:**
 - Ergo 1000 gun
 - Ergo 3000 jet lance
 - Tornado Plus nozzle
 - Hose reel

Hot water version

**Nilfisk
ALTO**
Why Compromise



...030

		Neptune 3 - 33 X
Pressure	bar / MPa	160 / 16
Water flow, Qmax. / Qieq I	/h	710 / 650
Water flow Qmin.	l/h	280
Max. inlet temperature	°C	40
Water temperature	°C	80 / 140
Power consumption	A	7.7
Voltage	V	400
Power consumption	kW	4.6
Pump speed	rpm	1.450
Working noise	dB(A)	74
Fuel tank	l	15
Fuel consumption	kg / h	3.2
Weight	kg	130
L x B x H	mm	1053 x 685 x 760
Hose length	m	15 / DN 8
81 670...		030



Extensive accessories available on request



Dust classes for safety vacuum cleaners

Dust class M

These vacuum cleaners enable the pickup of dust class L and M dusts. These include all dusts harmful to health, non-carcinogenic with maximum workplace level values $> 1.0\text{mg/m}^3$ as well as hardwood dusts.

Asbestos

Asbestos dusts may only be picked up with vacuum cleaners conforming to dust class H. In Germany the vacuum cleaners must also fulfill the asbestos requirements.

Dust class H

These vacuum cleaners enable the picking up of dust class L, M and H dusts. These include all dusts harmful to health with maximum workplace level values, all carcinogenic dusts as well as dusts contaminated with germs and bacteria.

Type 22

These vacuum cleaners are approved for picking up explosive dusts as well as dust class L and M dusts. These include hardwood dusts, all non-carcinogenic dusts with maximum workplace level values $> 1.0\text{mg/m}^3$ and/or flammable dusts for uses in ATEX Zone 22.

Since 1997 EN 60335-2-69, IEC 60335-2-69		Risks
Dust classes/Zone	Max. penetration	
L	1%	Filtration efficiency 99% of: • dusts with maximum workplace level values $> 1\text{mg/m}^3$
M	0.1%	Filtration efficiency 99.9% of: • dusts with maximum workplace level values $> 0.1\text{mg/m}^3$ • Wood dusts (up to 1200W/50 l)
H	0.005%	Filtration efficiency 99.995% of: • Dusts with maximum workplace level values • Carcinogenic dusts • Dusts with germs
Additional asbestos requirement	as H	• Asbestos dusts
Explosive dusts (ATEX Zone 22)	Type 22: As dust class L, M or H, with additional requirements Separate approval for Zone 2	• Dusts in dust explosion classes St1, Dust 2 and 3 in ATEX Zone 22 (previously Zone 11)
Explosive gases (ATEX Zone 2)	Separate approval for Zone 2	• Flammable gases which exist less than 10 h per year

81 685 ATTIX 3 industrial vacuum cleaners (wet/dry)

- The perfect wet / dry vacuum cleaner for small contractors or trades which are often on the move
- Due to their compact design the vacuum cleaners fit in any car
- Strong vacuum power
- Compact, ergonomic and powerful
- The Push&Clean filter cleaning system cleans the filter in a few seconds
- Washable PET non-woven filter for high dust separation and low maintenance costs
- SilentPower - top power that can be seen but not heard
- 27l tank volume and filter bag for optimum dirt separation

Scope of supply:

Floor nozzle, brush nozzle, filter element, PET non-woven, ATTIX filter bag, crevice nozzle, D36 2 x 500 suction tube aluminium / silver, suction tube holder, suction hose 32 x 3000 mm, hand tube and universal nozzle

		ATTIX 360-11
Air flow rate	l/min	3600
Vacuum	mbar/kpa	230/23
Power Pmax	(W)	1500
Power Pic	(W)	1200
Mains connection	V/Hz	230/50-60
Working noise	DB/A	59
Tank volume L-max		27
Dimensions L x B x H	mm	390 x 380 x 570
Weight	kg	10
Cable length	m	7.5
81 685...		001

Nilfisk
ALTO
Why Compromise



...001

81 687 ATTIX 5 industrial vacuum cleaners (wet/dry)

- high capacity and enormously high vacuum power
- extremely quiet
- robust, ergonomic and powerful
- The fully automatic XtremeClean filter cleaning system cleans the filter regularly without interrupting your work for a second
- Washable PET non-woven filter for high dust separation and low maintenance costs
- SilentPower - top power that can be seen but not heard

Scope of supply:

- Disposal bag
- Filter element
- Tool adapter
- Suction hose 27 x 3500 mm

		ATTIX 560-21 XC
Air flow rate	l/min	3600
Vacuum	mbar/kpa	230/23
Power Pmax	(W)	1500
Power Piec	(W)	1200
Mains connection	V/Hz	230/50-60
Working noise	DB/A	57
Tank volume L-max		45
Dimensions L x B x H	mm	506 x 476 x 655
Weight	kg	16
Cable length	m	7.5
81 687...		005

**Nilfisk
ALTO**
Why Compromise



...005

81 689 ATTIX 9 industrial vacuum cleaners (wet/dry)

- When industrial power is a "must"
- strong, high-performance vacuum cleaner with two motors
- for picking up heavy, coarse dirt
- with Push&Clean filter cleaning
- with tilting, removable 70 litre stainless steel tank, mounted on a steel frame
- The SoftStart spares the motors
- Washable filter element made of PET non-woven: large filter surface for high efficiency and low maintenance costs
- Complete package with accessories
- Suitable for wet and dry vacuuming due to reliable float system
- Robust filter bag made of PET non-woven

...003:

- with XtremeClean automatic filter cleaning

Scope of supply:

Suction hose, extension tube, stainless steel, curved hand tube, rubber inclined tube nozzle, floor nozzle, filter bag

...003:

Disposal bag

**Nilfisk
ALTO**
Why Compromise



...001



...003

		ATTIX 961-01	ATTIX 965-21 SD-XC
Air flow rate	l/min	2 x 3600	2 x 3600
Vacuum	mbar/kpa	230/23	230
Power Pmax	(W)	2 x 1500	2 x 1500
Power Piec	(W)	2 x 1200	2 x 1200
Mains connection	V/Hz	230/50-60	230/50-60
Working noise	DB/A	67	67
Tank volume L-max		70	70
Dimensions L x B x H	mm	580 x 600 x 970	580 x 600 x 970
Weight	kg	30	30
Cable length	m	10	10
81 689...		001	003

81 937 Wet and dry vacuum cleaners

- Shockproof with stainless steel tank
- Removable vacuum head equipped with bypass suction motors.
- The motors can be individually switched in multi-motor appliances.
- Separate air flows ensure motor cooling and strong suction power.
- Motor head material made of shockproof polypropylene.
- Suction air flow cut-off by float valve for wet vacuuming.

...040 to ...060:

- With tilting chassis, for easy emptying of liquids and vacuumed material

Scope of supply:

...010:

- Standard accessories set 36 mm Ø

...020 to ...060:

- Inclined tube nozzle
- Suction hose Ø 40 mm, 3.5 m long

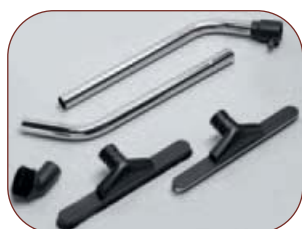
EVO
PRODUCTS

with tilting frame



Product	81 937...		Power consumption W max.	Voltage V	Air flow rate l/min	Vacuum mbar	Tank volume L	Dimensions cm	Weight kg
Standard models									
EVO 215 S	010		1200	230	2850	230	15	37 x 37 x 52	8.5
EVO 315 S	020		1200	230	2850	230	30	37 x 37 x 65	15.0
EVO 429 S	030		2 x 1200	230	5700	230	50	58 x 58 x 90	18.0
Tiltable mobile models									
EVO 303 K	040		1400	230	3580	240	30	58 x 55 x 90	16.0
EVO 429 K	050		2 x 1200	230	5700	230	50	54 x 55 x 106	21.0
EVO 440 K	060		3 x 1200	230	8550	230	73	54 x 55 x 106	23.5

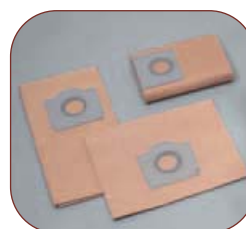
Accessories and options	81 937...	
Wet/dry floor cleaning set S hand tube Ø 40 mm, one wet and one dry vacuuming nozzle, one round brush nozzle	100	
Wide floor nozzle for vacuuming large areas (for tilting trolley models only)	105	
Paper filter for vacuuming very fine dusts, pack of 10 for 200 model 300 model 400 model	112 113 114	
Microfilter cartridge For vacuuming dusts harmful to health according to use category "M" (not for 200 model)	118	



...100



...105



...112 - ...114



...118



81 939 High-performance industrial vacuum cleaner



- suitable for heavy vacuumed material and machine vacuuming
- strong in industrial wet and dry use
- professional for daily maintenance cleaning
- can be used for virtually all applications
- with cyclone separator for preliminary separation of coarse material
- high filter power for long tool lives
- secure connection of the suction hose due to quick coupling with locking device
- alternatively available with chip emulsion separation system, therefore optimum for chip extraction in production areas

Scope of supply:

- 3.5 mm suction hose, 50 mm Ø
- Universal inclined tube nozzle

Accessories and options:

Industrial cleaning set (all models)

S hand tube, Ø 50 mm, metal chrome plated, large volume nozzle with brush strips and adjustable height castors, working width 600 mm, Pullman connection

Industrial cleaning set (all models)

as above; however, working width 300 mm

Wide floor nozzle

with rubber lip for vacuuming large areas, working width 700 mm

Rubber inclined tube nozzle

Pointed rubber nozzle



...010 - ...060



incl. chip emulsion separation system



...030 - ...090

Technical data

		NT 240	NT 360	DS 1505	DS 4005
Voltage	volt/Hz	230/50	230/50	400	400
Motor output	watt	2400	3600	1500	4000
Air discharge rate	l/min	6670	10000	4200	7500
Vacuum max.	mbar	230	230	150	230
Container volume	l	120	120	60	80
Size H x B x D	cm	50x60x105	50x60x105	91x48x106	102x48x106
Weight	kg	38	40	70	110
81 939...		010	020	050	060
Features incl. chip emulsion separation system					
81 939...		-	030	080	090



81 801 High-performance industrial vacuum cleaner



Usage:

- Extraction of dry dusts and chips
- Cleaning work on machines and workplaces

Special feature:

- Cleanable permanent filter cartridge (dust class M) with manual brush cleaning
- Patented tilting filter housing
- Test certificates H optionally available for an extra charge
- 230 V- (EUROSOG-W) and 400 V- (EUROSOG-I-D) version

Your benefits:

- High suction power
- Compact and handy design
- Easy disposal of the dust collection bag due to tilting filter housing
- Low running costs due to permanent filter



...001 - ...003

Type	81 801...		max. air flow rate m³/h	max vacuum Pa	Connection Ø mm	Voltage V	Output kW	Filter surface area m²	Dust collection tank l	Dimensions (LxBxH) mm	Weight kg
EUROSOG-W/N	001		360	22000	50	230	3 x 1.0	2	80	920x655x1230	74
EUROSOG-5-DIN	003		300	20000	50	400	2.2	2	80	1030x670x1240	81

Accessories for EUROSOG and SPÄNESOG	81 801...	
Suction hose, PU, 3 m long, with aluminium connection socket	101	
Standard suction hose, 3 m long, with connection socket	103	
Guide tube, aluminium, 1200 mm long, curved	105	
Floor nozzle, metal, heavy duty version, 500 mm wide	107	
Inclined tube nozzle, PVC, 350 mm long	109	
Dust collection bag, 1 set = 10 bags (EUROSOG only)	111	



...101



...105



...107



...109



...111

81 805 Metal swarf and emulsion vacuum cleaner



Usage:

- Vacuuming metal swarf in conjunction with emulsions and coolants
- Cleaning of CNC machines and workplaces

Special feature:

- Washable oil and water repellent permanent filter cartridge

Your benefits:

- Special vacuum cleaner for metal swarf and media mixed with emulsion
- Compact and handy design
- Low running costs due to permanent filter cartridge
- Robust, durable type



...001 - ...003

Type	81 805...		max. air flow rate m³/h	max vacuum Pa	Connection Ø mm	Voltage V	Output kW	Filter surface area m²	Dust collection tank l	Dimensions (LxBxH) mm	Weight kg
SPÄNESOG-5	001		300	20000	50	400	2.2	4.2	100	850x600x1280	90
SPÄNESOG-SB	003		300	20000	50	400	2.2	4.2	100	850x600x1280	105

81 807 Mobile dust extractor

Usage:

- Dust extraction at individual machines and craftsman workplaces with Ø 70 – 100 mm connection
- Free-flowing dusts – including those harmful to health

Special feature:

- Cleanable permanent filter cartridge (dust class M) with manual brush cleaning
- Test certificates M, H2, B1, GS

Your benefits:

- Low running costs due to cleanable permanent filter cartridge
- Mobility in conjunction with high extraction power
- Tilting filter housing for easy dust disposal
- Suitable for virtually all types of dust
- Optionally with test mark for special applications



...001 - ...003



Type	81 807...		max. air flow rate m³/h	max vacuum Pa	Connection Ø mm	Voltage V	Output kW	Filter surface area m²	Dust collection tank l	Dimensions (LxBxH) mm	Weight kg
DUSTOMAT-10	001		720	2800	100	230	1.3	3.5	100	1165x530x1636	65
DUSTOMAT-10*	003		720	2800	100	400	1.1	3.5	100	1165x530x1636	65

* 400 V version

Accessories for DUSTOMAT-10 and -61/67	81 807...	
PU hose (price per metre)		
DUSTOMAT-10, Ø 100 mm	101	
DUSTOMAT-61/67, Ø 160 mm	103	
Fixing clip for PU hose	105	
Dust collection bag, 1 Set = 10 bags		
DUSTOMAT-10	107	
DUSTOMAT-61/67	109	



...101



...105



...107 - ...109

81 809 Metal swarf and emulsion vacuum cleaner

Usage:

- Dust extraction at machines and workplaces in trade and industry
- Individual and multi-site extraction with connection Ø up to 160 mm
- Flowable, dry chips, swarf and dusts

Special feature:

- Cleanable permanent filter cartridges (dust class M)
- Filter cleaning methods: manual (DUSTOMAT-61)
Jet-Pulse (DUSTOMAT-67)

Your benefits:

- Compact and powerful
- Low running costs
- Easy dust disposal
- Suitable for virtually all types of dust
- Optionally with test mark for special applications



...001 - ...003

Type	81 809...		max. air flow rate m³/h	max vacuum Pa	Connection Ø mm	Voltage V	Output kW	Filter surface area m²	Dust collection tank l	Dimensions (LxBxH) mm	Weight kg
DUSTOMAT-61	001		1850	4600	160	400	3.0	9.6	200	1830x782x2040	220
DUSTOMAT-67*	003		1850	4600	160	400	3.0	9.6	200	1830x782x2040	220

* 400 V version



81 950 SONOREX SUPER compact bath ultrasonic cleaning equipment

- Stainless steel oscillating tank and stainless steel housing protected against dripping water, RK 102 H hard chrome-plated oscillating tank
- Timer 1 - 15 min and continuous operation
- Type 'H' with heating 30 - 80 °C, thermostatically controllable
- Type RK 31 H with 65 °C heating permanently set
- The ultrasonic is modulated to improve the effect, this results in a 4 times higher high-frequency output than top ultrasonic output

BANDELIN



81 950...

Type	81 950...		Capacity	Oscillating tank inside (L x B x D) mm	Outer dimensions (L x B x H) mm	Drain ball valve	ultrasonic peak output W	Heating output W	HF output W eff
RK 31 H	005		0.9	190 x 85 x 60	205 x 100 x 155	-	240	70	30
RK 52 H	010		1.8	150 x 140 x 100	175 x 165 x 225	-	240	140	60
RK 100 SH	015		3.0	240 x 140 x 100	260 x 160 x 250	Hose	320	140	80
RK 102 H	020		3.0	240 x 140 x 100	260 x 160 x 250	G 1/4	480	140	120
RK 255 H	025		5.5	300 x 150 x 150	325 x 175 x 305	G 1/4	640	280	160
RK 1028 H	030		28.0	500 x 300 x 200	535 x 325 x 400	G 1/2	1200	1300	300

81 955 SONOREX TECHNIK ultrasonic cleaning equipment

- Modular system - with ultrasonic and heating
- Frequency 40 kHz (25 kHz on request from RM 110 UH)
- Heating 30 - 80 °C thermostatically controllable
- Welded tank 2 mm stainless steel 1.4571
- incl. overflow bag and drain
- The ultrasonic is modulated to improve the effect, this results in a 4 times higher high-frequency output than top ultrasonic output

Further types available on request

- ultrasonic tank without heating
- Rinsing tank with or without heating
- Both without ultrasonic

BANDELIN



81 955...

Type	81 955...		Capacity	Oscillating tank inside (L x B x D) mm	Outer dimensions (L x B x H) mm	Drain ball valve	ultrasonic peak output W	Heating output W	Mains connection	HF output W eff
RM 16 UH	005		19.0	325 x 275 x 200	365 x 340 x 390	G 1/2	1200	800	230 V, 50/60 Hz	1 x 300
RM 40 UH	010		45.0	480 x 300 x 300	540 x 340 x 500	G 3/4	2000	1250	230 V, 50/60 Hz	1 x 500
RM 75 UH	015		90.0	580 x 500 x 300	640 x 540 x 530	G 3/4	4000	1950	230 V, 50/60 Hz	1 x 1000
RM 110 UH	020		135.0	600 x 450 x 450	780 x 550 x 800	G 1	4000	4800	400 V, 50/60 Hz	1 x 1000
RM 180 UH	025		215.0	1000 x 500 x 400	1180 x 600 x 800	G 1	4000	7200	400 V, 50/60 Hz	1 x 1000
RM 210 UH	030		265.0	750 x 650 x 500	930 x 750 x 800	G 1	4000	7200	400 V, 50/60 Hz	1 x 1000

81 960 Accessories for ultrasonic cleaning equipment **BANDELIN**

- made of stainless steel
- Do **NOT** place the items to be cleaned on the bottom of the tank



Type	81 960... Removable basket		Basket's internal dimensions (L x B x D) mm	Mesh size mm	81 960... Cover	
RK 31 H	005		170 x 65 x 50	4 x 4	105	
RK 52 H	010		120 x 110 x 40	3.5 x 3.5	110	
RK 100 SH, RK 102 H	015		200 x 110 x 40	3.5 x 3.5	115	
RK 255 H	020		260 x 110 x 40	3.5 x 3.5	120	
RK 1028 H	025		455 x 245 x 50	5 x 5	125	
RM 16 UH (up to 10 kg)	030		275 x 245 x 50	5 x 5	130	
RM 40 UH (up to 10 kg)	035		440 x 240 x 50	5 x 5	135	
RM 75 UH (up to 10 kg)	040		540 x 445 x 50	12.5 x 12.5	140	
RM 110 UH	045		540 x 410 x 90	12.5 x 12.5	145	
RM 180 UH	050		940 x 460 x 90	12.5 x 12.5	150	
RM 210 UH	055		690 x 610 x 90	12.5 x 12.5	155	

81 950 SONOREX SUPER RK 255 H ultrasonic cleaning equipment set

BANDELIN

- Stainless steel oscillating tank and stainless steel housing protected against dripping water
- Timer 1 - 15 min and continuous operation
- Heating 30 - 80 °C, thermostatically controllable
- Drain ball valve G 1/4

Accessories supplied:

- Removable basket
- Stainless steel cover
- Cleaner, 5 litres

Top quality • Top price in set

incl. 5 l canister TICKOPUR R 33,
removable basket, cover



Type	81 950...		Capacity l	Top performance W/Per.	Heating output W	Oscillating tank inside (L x B x D) mm	Outer dimensions (L x B x D) mm
RK 255 H	800		5.5	max. 2 x 320	280	300 x 150 x 150	325 x 175 x 305

81 950 800

81 965 Cleaning preparations for trade and industry

BANDELIN

- For optimum cleaning results
- Specially developed for cleaning in ultrasonic bath



81 965...

Name / composition	81 965... 2 litre Bottle		81 965... 5 litre Canister		81 965... 25 litre Canister	
TICKOPUR TR 13 Special cleaner, demulsifying Concentrate, silicate free Use 0.1 - 10 %, alkali, pH 11.9 (1%)	005		105		205	
TICKOPUR R 30 Neutral cleaner, gentle on materials Concentrate, with anti-corrosion proofing Use 1 - 5 %, pH 7 (1%)	010		110		210	
TICKOPUR R 33 All-purpose cleaner, with anti-corrosion protection Concentrate, use 1 - 5 %, mild alkaline, pH 9.9 (1%)	015		115		215	





Explanation of the NOVUS tacker pictograms



Type of fastener: The tacker can be used with both staples and nails



Staple inspection window: The staple inspection window lets you know in good time when the tool needs refilling.



Lock-down handle: The handle can be locked without triggering a blank shot if the tacker is not being used and for storing the tacker



Metal tool: The high self-weight of the tacker's metal housing ensures low recoil, fatigue-free working.



Multi-stroke function: An additional stroke is triggered at the press of a finger if the fastener has not been completely driven home with the first stroke (particularly when working with very hard materials).



Safety lock release: The patented safety lock release ensures that the tacker can only be opened and reloaded in the correct position.



Type of staple: The tacker can tack fine wire staples and flat wire staples.



Belt hanger: If both hands are needed for work the tacker can be conveniently hung from the belt hanger.



Distance holder: The distance holder is indispensable if the row of staples is to be absolutely parallel at one level.



Nozzle: The long, narrow "nozzle" of the tacker enables problem-free working in corners and grooves too.



Impact power adjustment: The impact power can be adjusted to suit the material. This takes place steplessly by electronic means in electric tackers.

81 400 Electric tacker



The hobby panel tacker with an advanced, ergonomic design. Due to its narrow, extra long nozzle it is ideally suited for fixing standard panel staples or for direct fixing of wooden profiles in the side of the groove.

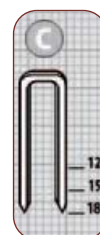
Cable length: over 2.5 m

Staple length mm	81 400...	
18	001	

NOVUS



81 400 001



81 401 Electric tacker



Very low recoil panel tacker with an advanced, ergonomic design. Due to its narrow nozzle it is ideally suited for fixing standard panel staples.

Scope of supply: including panel staple guide

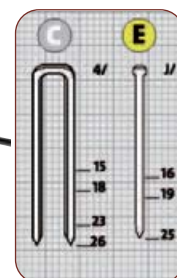
Cable length: over 3 m

Nail length mm	81 401...		Staple length mm
25	015		26

NOVUS



81 401 015



81 403 Electric tacker

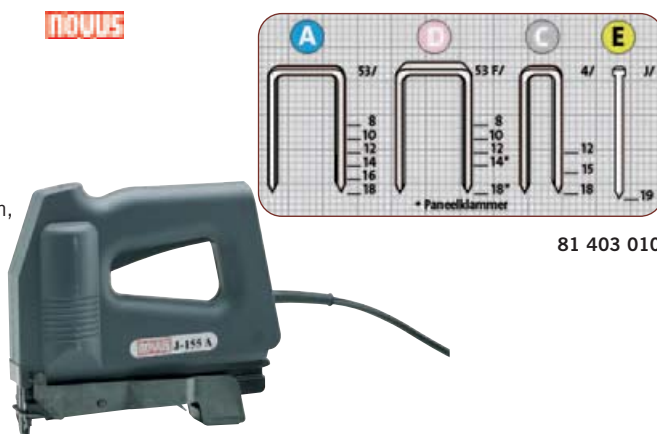


with automatic, electronically controlled multi-stroke function and limit stop, the convenient shearing-off technique makes handling substantially easier, this tool is suitable for professional decoration, household and hobby work.

Scope of supply: Tacker, front plates, protective shoe, in case

Cable length: over 3 m

Nail length mm	81 403...		Staple length mm
19	010		18



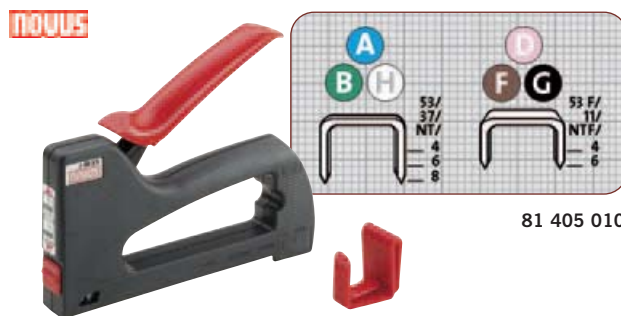
81 403 010

81 405 Hand tacker



made of high-quality plastic, ideal for the household and minor decoration work

Staple length mm	81 405...	
8	010	



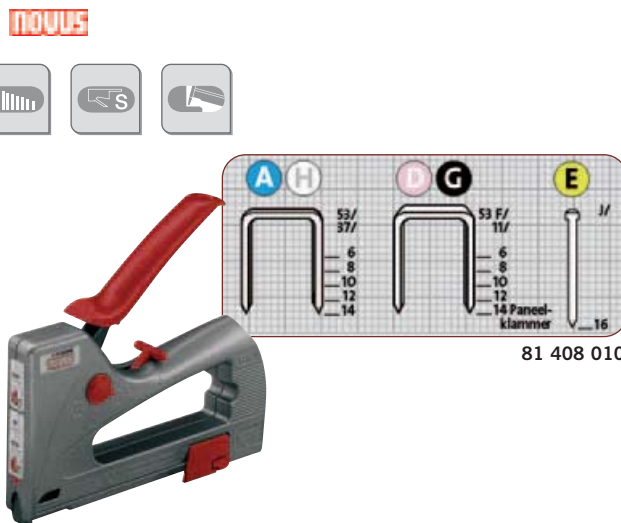
81 405 010

81 408 Professional hand tacker



made from die cast zinc, for many hobby and decoration applications, with impact power adjustment, multi-stroke feature and lever lock

Nail length mm	81 408...		Staple length mm
16	010		14



81 408 010

81 410 Hammer tacker



for all work where absolutely accurate tacking is not necessary, e.g. roofing or packaging work, very easy to handle, magazine for holding 168 staples

Staple length mm	81 410...	
10	010	



81 410 010



The NOVUS fastener range

the right consumables for every tacker

- A** Fine wire staple Type 53
- E** Nail Type J
- B** Fine wire staple Type NT
- F** Flat wire staple Type NTF
- C** Narrow crown staple Type 4
- G** Flat wire staple Type 11
- D** Flat wire staple Type 53F
- H** Fine wire staple Type 37

81 422 Narrow crown staples

suitable for 81 401..., 81 403...

NOVUS

C

Type	81 422...		Pack of
4 / 18	018		2000
4 / 23	023		2000
4 / 30	030		2000



81 422...

81 423 Fine wire staples

made of high strength steel wire

suitable for 81 403..., 81 405..., 81 408...

NOVUS

A

Sizes 53/6 to 53/14 are also available in large packs for industry

Type	81 423...		Pack of	81 423...	Price O	Large pack of
53 / 4	004		2000	-	-	-
53 / 6	006		5000	106	13.56	12000
53 / 8	008		5000	108	13.56	9800
53 / 10	010		5000	110	15.08	8000
53 / 14	014		1000	114	12.09	5600
53 / 18	018		1000	-	-	-



81 423...

81 424 Nails

suitable for 81 401..., 81 403...

NOVUS

E

Type	81 424...		suitable for	Pack of
J 16	016		81 401...	1000
J 19	019		81 401... / 81 403...	1000
J 30	030		81 401...	1000



81 424...

81 425 Flat wire staples

Suitable for 81 410...

NOVUS

G

Type	81 425...		Pack of
11 / 6	006		5000
11 / 8	008		5000
11 / 10	012		5000



81 425...

84 400 HG 2300 E / HG 2300 EM hot air gun

powerful, **electronically controlled** professional hot air guns with continuously adjustable air flow and temperature control

Application examples:

- Welding plastics
- Shrink-fitting cables, tubings, films, moulded parts, etc.
- Overlap welding of plastic films, e.g. PVC, roofing and pond membranes and tarpaulins
- Laying plastic flooring
- Repair welding and shaping of bumpers, spoilers, car body parts, etc.
- Heating up for shaping, bending and attaching couplers in plastics and metals
- Bonding bitumen
- Soldering copper pipes and solder connectors
- Shaping in orthopaedics
- For thawing and drying
- Stationary use in the shrink tunnel

STEINEL



84 400 014

84 400 024

Technical data		HG 2300 E	HG 2300 EM
Size	mm	355 x 100	375 x 100
Voltage	V	230	230
Output	W	2300	2300
Frequency	Hz	50 / 60	50 / 60
Brushless motor		yes	yes
Heating element		Ceramic	Ceramic
Temperature	°C	50 - 600	50 - 600
Temp. control		Continuously variable	Continuously variable
Air flow rate l/min		600	600
Air flow control		Continuously variable	Continuously variable
Air pressure Pa (Pascal)		3000	3000
Weight	g	850	850
Cable length	m	2.5	2.5
84 400...		014	024



84 400 Accessories for hot air guns

STEINEL



Accessory	84 400...	
Flat angled nozzle 40 x 2 mm	041	
Flat angled nozzle 20 x 2 mm	044	
Round nozzle Ø 5 mm	047	
Round nozzle Ø 10 mm	048	
Welding nozzle	049	
Flat angled nozzle 74 x 3 mm	051	
Flat nozzle 70 x 10 mm	053	

HG 2300 EM compatible with Leister nozzles

84 404 HG 2310 LCD hot air gun

Electronically controlled hot air gun **with digital display**, air flow control and cold level. The HG 2310 LCD is suitable for all hot air applications due to its high output and continuous adjustability of temperature and air flow. The precise temperature display also enables work on temperature-critical materials. Automatic cut-out on overheating, 4 program settings can be stored and individually changed.

STEINEL

with digital display



84 404 005

Technical data	HG 2310 LCD
Size (L x B x H)	265 x 85 x 210 mm
Voltage	230 V
Power	2300 W
Temperature	50° C to 650° C
Type of display	LCD in 10° C steps
Blower	continuously adjustable
Air flow rate	min. 150 l/min max. 500 l/min
Weight	880 g
84 404...	005



84 404 Accessories for HG 2310 LCD and HG 2300 E hot air guns

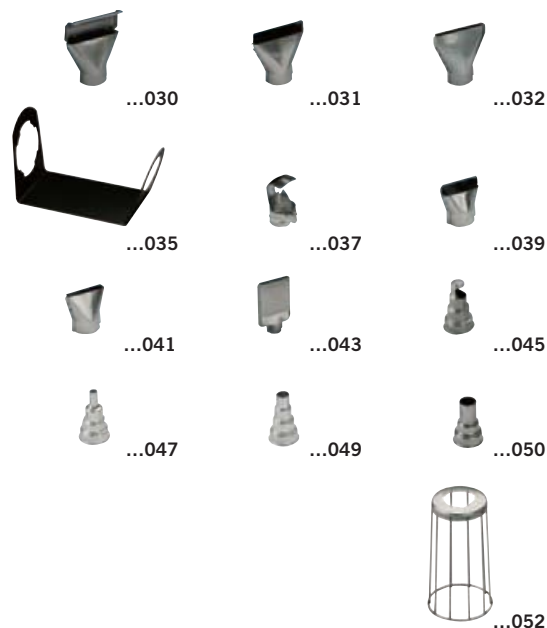
STEINEL

- ...030 Large reflector nozzle**
for shaping and shrink fitting large diameters
- ...031 Window nozzle 75 mm**
protects by deflection, e.g. glass panes against overheating
- ...032 Surface nozzle 75 mm**
ensures air is spread during drying and paint removal
- ...035 Hot air gun stand**
for fixing the tool during diverse work
- ...037 Reflector nozzle**
for soldering pipes and shrinking shrink-fit tubings
- ...039 Window nozzle 50 mm**
protects against overheating narrow places by deflecting
- ...041 Surface nozzle 50 mm**
ensures air is spread over small areas
- ...043 Wide slit nozzle**
for welding tarpaulins, can be pushed onto 9 mm reflector nozzle

- ...045 Soldering reflector nozzle**
for soldering and shrinking soldering sleeves and shrink-fit tubings
- ...047 Reduction nozzle 9 mm**
pinpoint heat source for de-soldering and PVC welding
- ...049 Reduction nozzle 14 mm**
pinpoint heat source for desoldering and PVC welding
- ...050 Reduction nozzle 20 mm**
pinpoint heat source for desoldering and PVC welding
- ...052 Guard cage**
to protect user from burning themselves on the delivery nozzle

further accessories available on request

Accessory	84 404...	
Large reflector nozzle	030	
Window nozzle 75mm	031	
Flat spray nozzle 75 mm	032	
Hot air gun stand	035	
Reflector nozzle	037	
Window nozzle 50 mm	039	
Flat spray nozzle 50 mm	041	
Wide slit nozzle	043	
Soldering reflector nozzle	045	
Reduction nozzle 9 mm	047	
Reduction nozzle 14 mm	049	
Reduction nozzle 20 mm	050	
Guard cage	052	



84 404 Shrink tubings:

for shrinking onto cable terminals, breaks, looms, etc.

STEINEL

Type	Ø mm	84 404...		Pack of staples
Typ 2	1.6	101		90
Typ 3	2.4	103		90
Typ 4	3.2	105		85
Typ 5	4.8	107		60
Typ 6	6.4	109		50
Typ 7	9.5	111		25
Typ 8	12.7	113		20
Typ 9	19.0	115		8
Typ 10	25.4	117		5



84 445 Purglue 50 hot-melt glue gun

Glues ceramics, marble, metal, glass, wood, leather, textiles, diverse plastics (except PP, PE, polystyrene); immediate high initial bond strength, high load-bearing final bond strength; lower application temperature than conventional hot-melt adhesives; high heat resistance, thermally stable -40° C to +100° C; bond can be separated by applying heat (130° C) from a hot air tool without leaving residue; weather resistant; suitable for applications indoors and outdoors as well as in damp areas

STEINEL

Name	84 445...	
Hot-melt glue gun	001	
Replacement cartridge	011	

Cordless working!



84 445...



82 150 Low intake immersion pump

- Pumping out, pumping empty, circulating clean water
- With float switch for automatic mode
- With angle connection bracket as a standard
- TÜV/GS tested

metabo
work. don't play.



...045



...060



...130

Type		TP 6000 S	TP 7000 S	TP 19000 S
Rated power input	W	250	350	750
Mains voltage	V/Hz	230 / 50	230 / 50	230 / 50
Max. delivery rate	l/h	6,000	7,000	19,000
Max. delivery height	m	5.5	7	9
Max. submerged depth	m	5	5	5
Max. pressure	bar	0.6	0.7	0.9
Pressure connection		1"	1 1/4"	1 1/4"
Pump housing		Plastic	Plastic	Plastic
Connection cable	m	10	10	10
Number of impellers		1	1	1
Weight	kg	4	4.3	5.8
80 150...		045	060	130

82 152 Garden pump

- Diversely usable garden pump
- Higher water output and low power consumption
- For watering gardens with rainwater and non-potable water
- For pumping out and circulating different liquids

Safety instructions:

- Not suitable for aggressive liquids (alkalis, acids, petrol, heating oil, etc.)
- Not for pumping faeces, for sewage treatment plant, waste disposal sites, mining, etc.

metabo
work. don't play.



...040

Type		P 4000 N
Delivery rate	W	1300
Max. delivery rate	l/h	4000
Max. suction head	m	7.5
Max. delivery height	m	48
Max. pressure	bar	4.8
Voltage	V/Hz	230 / 50
Pressure connection		1"
Intake connection		1"
Pump housing		Stainless steel
Pump shaft		Stainless steel
Number of impellers		1
Weight	kg	14
80 152...		040

82 155 Wastewater immersion pump

- Pumping out, pumping empty, circulating clean and dirty water
- With float switch for automatic mode
- Watering gardens

metabo
work. don't play.



...160



...180

Type		PS 17000 SN	PS 24000 SG
Rated power input	W	1.100	1.100
Mains voltage	V/Hz	230 / 50	230 / 50
Max. delivery rate	l/h	17,000	24,000
Max. delivery height	m	9	11
Max. submerged depth	m	5	10
Max. pressure	bar	0.9	1.1
Pressure connection		1 1/2" IG	1 1/2" IG
Pump housing		Stainless steel	Grey cast iron
Connection cable	m	10	10
Max. particle size up to	mm	33	10
Number of impellers		1	1
Weight	kg	10.6	18.0
80 155...		160	180



84 800 Turbine grinding machines

- High speed for excellent machining quality
- Easy to maintain
- High concentricity for long continuous running times
- The elastic bearing substantially reduces wear
- Oil-free operation

...055, ...065:

- Rear exhaust
- Runout brake, prevents overruns

...100:

- Front exhaust

Scope of supply for all models:

- Intake hose 1.5 m
 - Key for tool change
- ...055, ...065:
- Exhaust hose 1.0 m

**MANNESMANN
DEMAG**



Type		GTK 1000 D	GT 652 D	GTV 1000
No-load speed	min ⁻¹	100.000	65000	100.000
Power	kW	0.10	0.07	0.10
Carbide burrs up to max. Ø	mm	3	4	3
Mounted points and wheels up to max. Ø	mm	5	6	5
Collet chuck	mm	3	3	3
84 800...		055	065	100

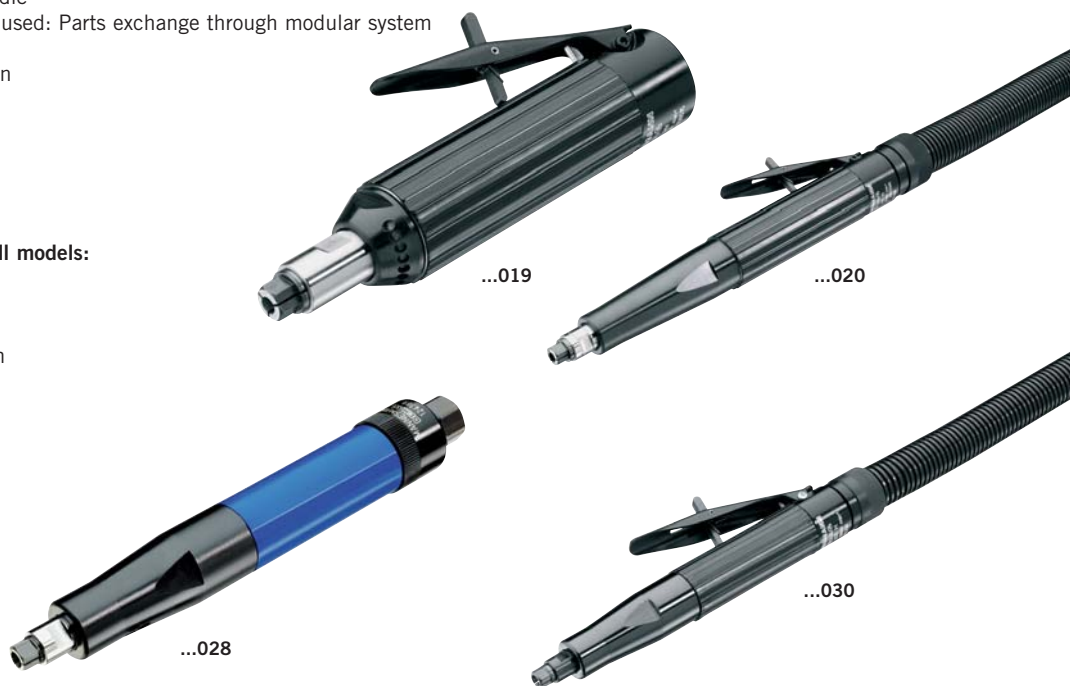
84 802 Pneumatic grinder

- Precise working under load conditions
 - An appropriate grinder for every application
 - Safety lever valve conforms to EN 792
 - Cold insulating handle
 - If several types are used: Parts exchange through modular system
 - Easy to service
 - Low air consumption
 - Low noise level
- ...019 and ...028:
- Front exhaust
- ...020 and ...030:
- Rear exhaust

Scope of supply for all models:

- Key for tool change
- ...020, ...030:
- Intake hose 2.5 m
 - Exhaust hose 1.0 m

**MANNESMANN
DEMAG**



Type		GK 201.00 HV	G 201 H	G 281 DV	G 300 H
Exhaust system		front	rear	front	rear
No-load speed	min ⁻¹	20000	20000	28000	30000
Power	kW	0.44	0.44	0.22	0.22
Weight	kg	0.95	1.10	0.41	0.45
Carbide burrs up to max. Ø	mm	12	12	10	10
Mounted points and wheels up to max. Ø	mm	32	32	16	16
Collet chuck	mm	6	6	6	6
84 802...		019	020	028	030

84 803 Collet chucks

for pneumatic grinders 84 802 019 und 84 802 020

Ø mm	84 803...	
6.0	006	
8.0	008	

MANNESMANN
DEMAG



84 803...

84 802 Pneumatic grinder

- Ergonomic design
- Especially for fine milling cutting, grinding, engraving and polishing work
- Exhaust to the rear via hose unit with integrated silencer
- The classic among the small grinders

Scope of supply for all models:

- Intake hose 1.5 m
- Exhaust hose 1.0 m
- Key for tool change

MANNESMANN
DEMAG



84 802 055



84 802 065

Type		G 551 D	G 852 D
No-load speed	min ⁻¹	55000	85000
Power	kW	0.10	0.10
Weight	kg	0.15	0.25
Carbide burrs up to max. Ø	mm	6	4
Mounted points and wheels up to max. Ø	mm	8	6
Collet chuck	mm	3	3
84 802...		055	065

84 805 Pneumatic countersinks

- Extremely quiet and robust
- Self-start by pressing
- Low air consumption as driven only during the work operation
- Therefore longer life
- Easy handling, especially of large workpieces
- Suitable for secondary work during the main period on CNC machine tools
- Cold insulating handle
- The ergonomic manageability of the handle makes fatigue-free working possible
- with speed control

...015:

- Angle version for deburring difficult to access places, e.g. holes with transverse holes

Scope of supply for all models:

- Intake hose 1.5 m
- Exhaust hose 1.0 m
- Key for tool change

MANNESMANN
DEMAG



84 805 010

For countersinks, please refer to page 103 onwards



84 805 015

Angle version

Type		BS 502	BSW 506
No-load speed	min ⁻¹	500	500
Countersink up to bore Ø	mm	30	25
Collet chuck	mm	8	1/4" hexagon
Weight	kg	0.65	0.85
Air consumption per min	m ³	0.32	0.12
84 805...		010	015

84 806 Pneumatic angle grinder

- Without bevel gears (...012), therefore more robust, longer life and easy to service
- Additional handle can be mounted on both sides
- Air discharge via cold insulated housing to the rear
- Extremely quiet with additional hose unit and integrated silencer
- Low angle heads

Scope of supply for all models:

- Key for tool change
 - Side handle
- ...013:
- Intake hose 2 m
 - Exhaust hose 1.2 m

**MANNESMANN
DEMAG**

For cutting, roughing and grinding wheels,
please refer to page 698 onwards



Type		GW 120/2 H	GW 125 H
No-load speed	min ⁻¹	12000	12000
Power	kW	0.75	0.95
Weight	kg	1.55	2.30
Grinding wheel, synthetic resin, Ø	mm	125	125
Spindle thread		M14	M14
84 806...		012	013

84 808 Pneumatic impact wrenches

**MANNESMANN
DEMAG**

- With composite housing
- Twin hammer impact mechanism
- 4 stage impact strength control
- Well balanced
- Easy maintenance
- Exhaust passed through the handle
- Air consumption 0.40 m³/min
- Connection thread 1/4"

...016: MDS 1102, formerly MP 16



84 808 016



84 808 018



84 808 020



84 808 022

Type		MDS 1102	MDS 1104	MDS 1105	MDS 1106
Square drive		1/2"	1/2"	3/4"	1"
Max. torque	Nm	310	850	1500	1750
Rec working range	Nm	50 - 270	50 - 500	270 - 900	200 - 1350
Speed	min	7500	6000	5500	4000
Weight	kg	1.4	2.5	5.5	8.6
Length	mm	173	185	220	250
Noise level	dB(A)	85	88	91	92
84 808		016	018	020	022

84 810 Pneumatic impact wrenches

- Favourable power to weight ratios and recoil torques
 - Lightweight and fatigue free handling
 - Easy to maintain due to two-piece housing
 - High outputs and economic air consumption
 - For robust use in all branches of industry
 - Can be used in many areas due to impact strength control
- ...030:
- Impact mechanism runs in oil bath, therefore longer life due to permanent lubrication

Scope of supply for all models:

- Impact mechanism grease
- Oil bottle

...017:

- Clamp

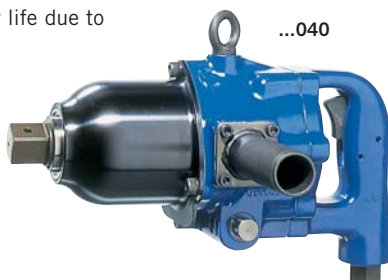
...024, ... 036:

- Threaded sleeve

...040:

- Fist handle

**MANNESMANN
DEMAG**



...040



...036

Type	E 18 P3	E 24 P 3	E 25 P	E 36 P1	E 40 F
For screws up to	M18	M24	M24	M36	M40
max tightening torque Nm	400	950	1500	3000	2700
Square drive	1/2	3/4	3/4	1	1
Weight	2.4	4.15	5.68	9.35	10.80
Speed	6800	5300	4800	3100	3400
Connection thread	1/4"	3/8"	1/2"	1/2"	1/2"
84 810...	017	024	030	036	040

84 818 Pneumatic screwdrivers

- Extremely high cut-out accuracy through automatic coupling with differences of $\pm 5\%$ of the nominal value for ideal connections
- Quick change chuck
- Fast and easy torque adjustment from the outside
- Low noise and vibration level
- Push start in straight screwdrivers
- Ergonomically shaped handles, therefore user friendly handling as well as safe and fatigue-free working
- Oil-free operation

Scope of supply for all models:

- Key for torque adjustment
- Retaining clip

**MANNESMANN
DEMAG**



...017



...005



...013



...009

Type	A4 - 901 UAS	A6 - 1200 UAS	A8 - 550 UAS	A8 - 450 UAPS	AW12 - 301 UA
Type	straight	straight	straight	gun	Inverted cone
No load speed	900	1000	500	500	300
for screws	M4	M6	M6	M8	M12
Torque range	0.6 - 3.3	2.5 - 8.0	2.5 - 10.0	2.5 - 10.0	26.0 - 60.0
Weight	0.56	0.87	0.87	1.10	2.30
84 818...	005	007	009	013	017

84 819 Pneumatic ratchet wrenches

- Compact for use where space is limited
- Cold insulated soft handle
- Can be switched between forward and reverse
- Exhaust discharge can be rotated through 360 °
- Threaded connection can be rotated through 360 °

...004:

- With speed control

...012:

- With rotatable head

**MANNESMANN
DEMAG**

Type		MDR 2100	MDR 2101	MDR 2102	MDR2103
Square drive		1/4"	3/8"	1/2"	1/2"
No load speed	min ⁻¹	220	180	180	180
For screws up to		M 10	M 10	M 10	M 10
Working torque	Nm	6 - 33	13 - 120	13 - 120	13 - 120
Max torque	Nm	55	160	160	160
Noise level	dB(A)	82	84	84	84
Air consumption	l/sec.	4.7	10.8	10.8	10.8
Weight	kg	0.60	1.30	1.30	1.30
Overall length	mm	200	270	270	270
Hose internal size	mm	8	10	10	10
Connecting thread		1/4"	1/4"	1/4"	1/4"
Vibration	m/s ²	3.5	3.3	3.7	3.7
84 819		004	008	012	014

84 826 Chisel hammer set

- The complete set, in a robust metal case
- Easy to handle
- Ergonomic design
- Easy to maintain
- For caulking work in concrete, for construction remedial work such as knocking off plaster, etc., for polishing foundry products or in vehicle body manufacture for cutting beading and welded points
- Lightweight, powerful and small design

Scope of supply:

- Open-ended spanner 17 mm
- Connection hose, complete
- Special robot oil
- Retaining spring
- Rubber ring
- Insert
- 1 point chisel
- 1 flat chisel
- 1 wide chisel

**MANNESMANN
DEMAG**

84 826...	023
-----------	-----

84 826 023

84 832 Pneumatic chipping hammer

- For removing weld slag, paint removal and concrete plastering
- Extremely low vibration level 2 m/s²
- Patented vibration system
- Noise level below 80 dB(A)

Scope of supply:

- Key

Type		SHV 150
Frequency	Hz	150
Length	mm	210
Weight	kg	1.45
84 832...		002

**MANNESMANN
DEMAG**



84 832 002

84 832 Flat chisel

- Sintered carbide tipped
- Suitable for pneumatic chipping hammer 84 832...

Size mm	84 832...	
100 x 10	010	
100 x 17	017	
100 x 36	036	



84 832 010 - ...036

84 835 Pneumatic needle scaler

- Diverse uses for rust removal, cleaning, slag removal, plastering, roughing, paint removal
- Easy to change the needles due to bayonet joint
- Patented vibration system
- Low air consumption

...018:

- Vibration level 3.5 m/s²

...019:

- Vibration level < 2 m/s²

Scope of supply:

...018:

- Needle set with 18 needles

...019:

- Needle set with 19 needles

**MANNESMANN
DEMAG**



...018



...019

Type		NGV 18	GNV 19
Number of blows	min ⁻¹	8800	6600
Weight	kg	1.80	2.40
84 835...		018	019

**“Welding
and Cutting” catalogue**

84 838 Pneumatic thread-cutting machine**MANNESMANN
DEMAG**

- Handy ergonomic handle
- Quiet
- Powerful
- Rational handling: Pendulum chuck enables easy initial cutting
- Optimum cutting capacity
- Double return speed
- Reverse gearing

Scope of supply:

- Pendulum chuck
- Side handle



84 838 005

WODEX® tapping tools
- see Page 145 onwards

		G 14-6 P
No load speed	min ⁻¹	600
Output	kW	0.55
Cutting in lightweight metal up to		M16
Cutting in steel up to		M14
Noise level	dB(A)	7.8
Air consumption	l/sec.	9.0
Weight	kg	2.20
84 838...		005

84 830 Chipping hammers**F+K**

- particularly easy to use and extremely powerful
- recoil cushioned construction
- vibrations are absorbed
- greater running smoothness makes work easier
- With finely controllable valve and muffled exhaust ring
- Easy to maintain



...010



...016

Type		525180	5251531
Number of blows	min ⁻¹	6300	3200
Weight	kg	0.71	1.80
Chisel bushing		S 12.5 x 36	RS 14.3
84 830...		010	016

84 850 Air impact wrenches

Double impact mechanism with pressure lubricating system. Variable speed control via the push control in handle for optimum power control.

84 850 010 - ...030

Quiet tool technology

Integrated air ducts reflect the noise and result in reduction of the noise level. Does not limit air flow and does not flow stagnation, sound insulation does not wear and does not have to be replaced. Housing made of titanium, as durable as steel and resistant to corrosion. Large weight reduction, therefore fatigue free working is possible.



Type		131S-EA	2130XP	2115QTi	2125QTi	2135QTi	258	271-EU
Square drive	inch	1/2"	1/2"	3/8"	1/2"	1/2"	3/4"	1"
Working torque	Nm	34 - 450	68 - 544	34 - 312	34 - 312	68 - 814	270 - 1088	136 - 1350
max. tightening torque	Nm	610	612	339	339	848	1360	1630
max. release torque	Nm	610	800	380	380	950	1360	1630
Air consumption	l/min	120	135	114	114	142	220	226
max. bolt size		M14	M16	M12	M12	M16	M27	M30
Weight	kg	2.6	2.0	1.1	1.1	1.8	4.9	5.7
free speed	1/min	8000	9500	15000	15000	9500	6200	5500
Blows per minute		1200	1250	1500	1500	1250	1100	1000
Overall length	mm	185	186	142	142	185	249	226
Connection thread	inch	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Minimum hose size	mm	13	13	13	13	13	13	13
84 850...		003	006	010	020	030	040	050

84 850 Impact wrench lubricant kits

Ideal maintenance set with lubricants and tube press for easy maintenance of the impact wrench. Can be used for impact wrench 84 850 010 - ...030

84 850...	
100	



84 850 100

84 857 Pistol grip drill

- convenient, comfortable grip surface for holding the rear part of the motor housing
- compact design
- low weight
- contoured push control in handle and restrictor lever - for reduced stress and uniform gripping force distribution
- soft start and precise speed control
- ribbed comfort coating of the handles made of composite material
- best output to weight ratio



Type		QP301LD	QP151D	7AQST8
Weight	kg	0.65	0.7	1.25
max. torque	Nm	1.8	3.4	30.5
free speed	1/min	3000	1500	600
Overall length	mm	184	171	222
Connection thread	inch	1/4"	1/4"	1/4"
Bore capacity	mm	6	6	13
84 857...		003	006	009



84 860 Air random orbital sander

For high quality surface work. The models ensure swirl free surface finish. Possible surface contamination due to oil mist is avoided. The machines are lightweight.

- Air outlet can be rotated through 360°
- Connection for dust extraction



Type		4151-HL	4152-HL
Weight	kg	0.87	0.87
Pad diameter	mm	152	152
free speed	1/min	12000	12000
Overall length	mm	118	118
Connection thread	inch	1/4"	1/4"
Eccentric stroke	mm	5	2.5
84 860...		003	006



84 860...





presents the extended range of industrial tools for service and maintenance work. Development was focussed on improving productivity. The CP development centres ensure that the right tool can be found for every application.

Outstanding due to its high level of reliability, the RediPower series offers an excellent value for money. All CP tools are developed and produced to standards which are to be expected from a manufacturer of high-quality industrial tools.

84 910 Air impact wrenches

- integrated air restrictor for fast torque adjustment
- handy and powerful versions
- ergonomic handle design for fatigue-free working
- short screw driving times for high productivity
- Fast torque adjustment

...005:

- No losing of the socket spanner

...007:

- Favourable power to weight ratio
- Air is diverted away from the workpiece

...012:

- Long tool lives
- Good user comfort
- Ideal for maintenance work

...015:

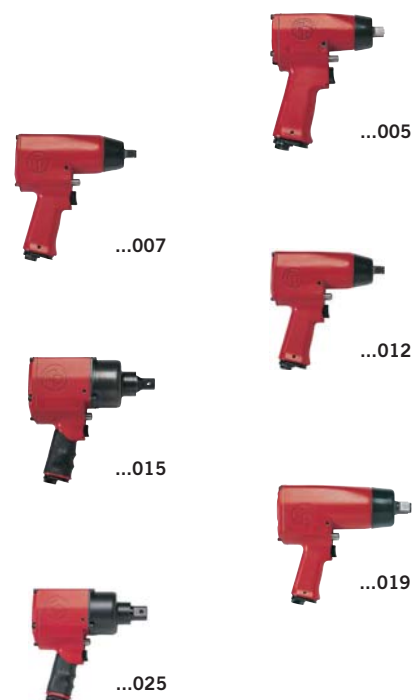
- For soft and hard screw driving cases
- Robust
- Good user comfort

...019:

- Especially for hard screw driving cases
- Easy handling

...025:

- Also for large socket spanners
- For soft and hard screw driving cases



Type		RP9527	RP9540	RP9546	RP9547	RP9560	RP9548
Square drive	inch	1/2"	1/2"	1/2"	3/4"	3/4"	1"
Working torque	Nm	27-217	34-420	68-210	135-810	200-950	135-810
Max. torque	Nm	272	576	827	1285	1360	1285
Socket spanner holder		Pin	Friction ring	Friction ring	Bore	Friction ring	Bore
Air consumption	l/s	5.7	7.1	9.0	18.4	11.3	18.4
Overall length	mm	152	191	178	226	244	226
Weight	kg	1.4	2.3	2.5	5.75	4.8	5.75
Connection thread	inch	1/4" NPTF	1/4" NPTF	1/4" NPTF	3/8" NPTF	3/8" NPTF	3/8" NPTF
84 910...		005	007	012	015	019	025

84 915 Pistol grip air drills

- ergonomic handle design for fatigue-free working
- handy and powerful versions improve productivity
- long tool lives for durability
- the right drill for all applications

...003:

- Can also be used as a screwdriver
- Fast change from forward / reverse

...007:

- Suitable for standard drill bit sizes
- "All-round machine" for small drill bits

...013:

- Faster drill bit change
- Higher output for short cycle times

...015:

- Drilling and screw driving possible

...017:

- Drilling and screw driving possible

...021:

- Guides the air away from the user

...023:

- For confined areas
- Drilling and screw driving possible

...025:

- Ideal for vertical drilling
- Better hold



Type		RP1664	RP1454	RP1274	RP9789
Output	kW	0.19	0.23	0.28	0.27
Drill chuck capacity	mm	max. 10	max. 10	max. 10	max. 13
Forward/reverse		yes	no	no	yes
No-load speed	1/min	2000	4300	2900	800
Air consumption	l/s	9.3	9.3	9.3	11.5
Overall length	mm	225	225	175	177
Weight	kg	0.7	0.7	0.9	1.8
Connection thread	inch	1/4" BSP/NPT	1/4" BSP/NPT	1/4" BSP/NPT	1/4" NPT
84 915...		003	007	013	015

Type		RP9790	RP9285	RP9879	RP9887
Output	kW	0.27	0.38	0.18	0.37
Drill chuck capacity	mm	max. 10	max. 10	max. 10	max. 10
Right/left rotation		yes	no	yes	no
No-load speed	1/min	2000	2900	1300	2800
Air consumption	l/s	11.5	10.0	8.5	12.0
Overall length	mm	165	165	200	215
Weight	kg	1.4	1.1	0.7	0.9
Connection thread	inch	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT
84 915...		017	021	023	025

84 920 Air hammers

- Round chisel holder 10.2 mm
- Handy and powerful versions

...005:

- Low vibration stress
- Slow start

...007 and ...009:

- Robust
- Fast working



Type		RP9537	RP9311	RP9315
Cold rivet capacity Dural/steel	mm	7.9 / 6.4	6.4 / 4.8	7.9 / 6.4
Bore x stroke	mm	19 x 90	19 x 67	19 x 89
Blows	1/min	2200	3000	2300
Air consumption	l/s	8	11.8	11.8
Overall length	mm	280	171	225
Weight	kg	2.1	1.6	1.9
Connection thread	inch	1/4" NPT	1/4" NPT	1/4" NPT
84 920...		005	007	009

84 957 BASIC compressors

- Robust, mobile reciprocating compressors - suitable for small and versatile commercial applications
- For single phase alternating current
- Pressure reducer for controlled working pressure
- Pressure gauge for boiler pressure
- Thermal motor protection
- Brand name quick-action coupling
- Pressure switch with startup valve
- Boiler and chassis are plastic coated
- 10 year boiler warranty against rusting
- Built according to CE guidelines
- Oil-less reciprocating compressor - with innovative WPS technology

...160, ...170:

- Two quick action couplings
- Additional pressure gauge for working pressure

...170:

- High alloy piston rings for high stresses
- Machine tested in accordance with German operating safety regulations (ZUA)

metabo
 work. don't play.


...160



Type		Basic 240	Basic 260	Basic 270
Suction rate	l/min	220	235	250
Capacity	l/min	110	135	150
Max. pressure	bar	8	8	8
Motor output	kW	1.1	1.5	1.55
Speed	rpm	2850	2850	2850
Voltage	V	230	230	230
Boiler size	l	24	24	50
Weight	kg	21.5	22.0	35.0
Dimensions	mm	600 x 260 x 660	640 x 260 x 660	905 x 410 x 690
84 957...		140	160	170

84 959 POWER compressors
metabo
 work. don't play.

- Compact and mobile reciprocating compressors for professional use in interior finishings and on construction sites
- For single phase alternating current
- Fittings and controls protected and clearly visible in the tubular frame
- Two pressure gauges for controlled working and boiler pressure
- Pressure reducer for controlled working pressure
- Thermal motor protection
- Brand name quick-action coupling
- Pressure switch with startup valve
- Boiler and chassis are plastic coated
- 10 year boiler warranty against rusting
- Built according to CE guidelines
- Can be transported flat
- Slowly turning motor, particularly low noise and vibrations

...115:

- Oil-less reciprocating compressor with innovative WPS technology
- Vibration damping suction feet

...130, ...138:

- Oil lubricated reciprocating compressor
- Foldaway, rubberised pull handle
- High quality filter on pressure reducer for improved air quality
- Large wheels for good travel properties

...130:

- Additional start valve for good startup in cold weather
- Two quick action couplings

...138:

- 2 cylinders in V arrangement
- With large tool shelf



...130



...115



...138

Type		Power 150	Power 300	Power 380
Suction rate	l/min	100	290	320
Capacity	l/min	50	165	220
Max. pressure	bar	8	10	10
Motor output	kW	0.75	1.85	2.0
Speed	rpm	1450	2850	1450
Voltage	V	230	230	230
Boiler size	l	3	20	20
Weight	kg	16.0	33.5	42
Dimensions	mm	465 x 310 x 465	530 x 470 x 840	530 x 470 x 840
84 959...		115	130	138

84 961 MEGA compressors

- Sturdy, mobile V-belt compressors - tried and tested machines for professional use
- Robust quality - quiet and durable
- 2-cylinder compressor
- Two pressure gauges for controlled working and boiler pressure
- Pressure reducer for controlled working pressure
- Thermal motor protection
- Built according to CE guidelines
- 10 year boiler warranty against rusting
- Two brand name quick action couplings
- Pressure switch with startup valve
- Boiler and chassis are plastic coated
- Large wheels for good travel properties
- Two front castors with parking brake
- Machine tested in accordance with German operating safety regulations (ZUA)
- Pressure reducer with fine filter against condensate and oil

...135, ...145:

- For single phase alternating current
- Additional start valve for good startup in cold weather

...145, ...146, ...151, ... 160, ...165:

- With after cooler for less condensation

...146, ...151, ... 160, ...165:

- Three phase alternating current version with 400 V CCE plug and phase reverser

...151, ... 160, ...165:

- Instrument panel with easy to read pressure gauges for boiler and working pressure
- Cable winding at drive handle
- Boiler with internal rustproof coating
- Hose reel with 10 m textile hose

...160, ...165:

- Two-stage technology for high air flow rate

Scope of supply ...145 - ...146 Partner Edition:

- Blow gun
- Pneumatic hose

metabo
work. don't play.



...135

...145 and ...146



Blow gun
Pneumatic hose



...160



...151



...165

Type		Mega 350 W	Mega 450 W Partner Edition	Mega 450 D Partner Edition	Mega 500 D	Mega 600 D	Mega 700 D
Suction rate	l/min	290	380	380	380	480	600
Capacity	l/min	195	280	280	280	370	500
Max. pressure	bar	10	10	10	10	10	10
Motor output	kW	1.85	2.2	2.2	2.2	3.0	4.0
Speed	rpm	1300	1150	1150	1150	1275	1250
Voltage	V	230	230	400	400	400	400
Boiler size	l	50	60	60	60	90	90
Weight	kg	49	79	79	79	98	114
Dimensions	mm	880x490x780	1100x460x810	1100x460x810	1100x460x810	1230x555x910	1230x555x970
84 961...		135	145	146	151	160	165



85 556 Bench grinders

bench-mounted version, equipped with two normal corundum grinding wheels, spark protection guards on both sides and adjustable tool supports, operating voltage 230 V or 400 V (three-phase current)

Suitable for grinding, deburring and sharpening of all kinds of tools.

Accessories: Machine stand Prod. No. 85 556 220 119.00



Type	PTS 150 SW	PTS 175 SW	PTS 200 SW	PTS 175 SD	PTS 200 SD	PTS 250 SD
Dimensions of the grinding disk	50 x 25 x 32 mm	175 x 25 x 32 mm	200 x 25 x 32 mm	175 x 25 x 32 mm	200 x 25 x 32 mm	250 x 40 x 51 mm
Weight	14 kg	15 kg	22 kg	15 kg	22 kg	34 kg
Speed	3000 min ⁻¹	3000 min ⁻¹	3000 min ⁻¹	3000 min ⁻¹	3000 min ⁻¹	1500 min ⁻¹
Motor power	0.52 kW	0.52 kW	0.90 kW	0.90 kW	0.90 kW	0.90 kW
Motor	230 V/50 Hz	230 V/50 Hz	230 V/50 Hz	400V	400V	400V
Prod. No.	85 556 115	85 556 117	85 556 120	85 556 017	85 556 020	85 556 025

85 700 and 85 703 Belt grinders
 type BGM and BX

BGM belt grinders have a powerful 3 kW motor. The machines come complete with an adjustable angle guide, eye protection and motor circuit breaker with no-volt release. The low-noise machines are equipped with a fully closed grinding head, and the self-adjusting belt with a belt speed of 34 m/s can be changed quickly. The machines are prepared for installing a dust extraction.

BX 10-50 is a compact belt grinder for workbench mounting. It comes with a side grinding disk and tiltable workpiece supports. The machine is available for connection to 1 x 240 V and 3 x 400 V.



85 703...



85 700...



Type	Prod. No.		Motor	Belt speed	Belt dimensions	Contact wheel	Face grinding length
			kW	m/s	mm	mm	mm
BGM 75	85 700 001		3.0	34	2000 x 75	200 x 75	530
BGM 150	85 700 003		3.0	34	2000 x 150	200 x 150	530
BX 10-50	85 703 010		0.55	23	1000 x 50	150 x 50	300

85 701 Dust extraction

incl. 1 dust extraction bag



	suitable for Belt Grinder type BGM
85 701...	001

85 701 Dust extraction bag

	suitable for Belt Grinder type BGM
85 701...	002

85 710 Metal Shears type TS & TPS



Metal shears of type TS are user-friendly bench models. Operation is carried out either via hand lever or motor drive. The self-adjusting cutting gap can be precisely adjusted and grants cuts free of burr. The metal shears of type TS and TS M are particularly suitable for cutting printed circuit boards, plastics and metals.

Metal shears type TS M, machine with motor drive. The motorized metal shears come with foot switch incl. emergency stop, illumination of cut edges and safety guard. They are particularly quiet in spite of high cutting speed.

Type TPS, in modern and new design, is user-friendly with self-adjusting cutting gap achieving cuts free of burrs. The ideal machine for tanners, roofers and insulators. Standard on all models is the rear width guide with mm scale and angle guide.



85 710 015



85 710 010

Type	85 710...		Working width 400 N/mm mm	Sheet metal thickness Pro/min mm	Cuts Quantity	Motor kW	Bench width mm	Bench height mm
TS 06/12	010		650	1.25	-	-	265	172
TS 06/12M	015		650	1.25	60	0.75	265	272
TS 10/10	020		1050	1.00	-	-	265	200
TS 10/10M	025		1050	1.00	60	0.75	265	340

85 730 Gate Shears type TLS



The hand-lever gate shears are powerful and user-friendly machines.

Type TLS 10/22 is a heavy cast-iron design, ideally suitable for cutting sheet metals from 1 to 2.25 mm thickness. The machine comes complete with sheet metal hold-down and a spindle-adjustable, angle-adjustable parallel guide from 65 – 500 mm.

Type TLS 10/16 is perfectly suitable for cutting thin sheet metals such as zinc, copper, etc. and hence is ideal for roofers, plumbers and tanners. The machine has a swivel-mounted sheet metal hold-down and a spindle-adjustable rear width guide up to 600 mm with counter. Perfect to continuously cut equally sized sheet metals.



85 730 022



85 730 016

Type	85 730...		Working length 400 N/mm ² mm	Sheet metal thickness mm	Bench length mm	Bench width mm	Bench height mm
TLS 10/16	016		1010	Max. 1.6	1290	785	760
TLS 10/22	022		1000	Max. 2.25 Min. 1.00	1260	600	795

85 740 Mechanical Panel Shears type SMP



The panel shears type MLS is a machine with all-welded sliding-block guide. The machine is driven by a standard geared brake motor via chain connection to the main axle. The cutters are of top quality. Together with the rubber-lined sheet metal hold-down, the optimal cutting angle ensures perfect cuts. Bearings and guides are maintenance-free and lubrication-free.

Basic version:

- Rear width guide with mm scale
- Illuminated cut edges
- 600 mm bench extensions
- Right-angled guide, left
- Movable 24 V foot switch with emergency stop
- Motor circuit breaker and emergency stop
- 2 cut edges per cutter
- Safety guard.



85 740 010

Type	85 740...		Working length	Sheet metal thickness 400N/mm ²	Cutting angle	Cut Pro/min	Motor	Width guide	Bench width
			mm	mm	Deg.	Qty.	kW	mm	mm
SMP 12/30	010		1275	3.0	2,0°	35	3.0	635	330/930
SMP 20/20	020		2025	2.0	1.75°	38	3.0	640	330/930

85 745 Mechanical Panel Shears type MPS



The panel shears type MPS is a machine with all-welded sliding-block guide. The power transmission via a chain link to the axle ensures a fast work sequence that is safe to operate. The combination of high cutting speed, rubber-lined sheet metal hold-down and optimal cutting angles ensure perfect cuts.

Basic version:

- Rear width guide with mm scale
- Illuminated cut edges
- 600 mm bench extensions
- Right-angled guide, left
- Movable 24 V foot switch with emergency stop
- Thermal circuit breaker and emergency stop
- 2 cut edges per cutter
- Safety guard

Special accessories:

- Motorized rear width guide with manual fine adjustment
- Pneumatic sheet metal hold-up device



85 745 030

Type	85 745...		Working length	Sheet metal thickness 400N/mm ²	Cutting angle 1/min	Cuts	Motor	Width guide	Bench width
			mm	mm	Deg.	Quantity	kW	mm	mm
MPS 12/40	010		1250	4.00	2.4°	35	4.0	635	400/650
MPS 20/30	020		2050	3.00	2.0°	35	4.0	635	400/650
MPS 25/25	030		2550	2.50	1.8°	35	4.0	635	400/650
MPS 30/25	040		3050	2.50	1.5°	35	4.0	635	400/650

85 748 Mechanical Panel Shears type MPSH



The panel shears type MPS is a well-dimensioned machine with all-welded sliding-block guides. The power transmission via a chain link to the axle ensures a fast work sequence that is safe to operate. The combination of high cutting speed, rubber-lined sheet metal hold-down and optimal cutting angles ensure perfect cuts.

Standard accessories:

- Rear width guide with mm scale, 600 mm
- Illuminated cut edges
- 600 mm bench extension
- Right-angled guide, left, 400 mm
- Movable 24 V foot switch with emergency stop
- Thermal circuit breaker and emergency stop
- 2 cut edges per cutter
- Safety guard

Special accessories:

- Motorized rear width guide with manual fine adjustment
- Pneumatic sheet metal hold-up device



85 750 010

Type	85 748...		Working length	Sheet metal thickness 400 N/mm ²	Cutting angle	Cut 1/min	Motor	Width guide
			mm	mm	Deg.	Quantity	kW	mm
MPSH 12/45	010		1300	4.50	2.4°	30	5.5	650
MPSH 20/40	020		2050	4.00	2.0°	30	5.5	650
MPSH 25/30	030		2550	3.00	1.8°	30	5.5	650
MPSH 30/30	040		3050	3.00	1.75°	30	5.5	650
MPSH 40/20	050		4050	2.00	1.5°	30	5.5	

85 760 Swivel Bending Machines type TB



The manual swivel bending machines type TB allow simple and fast operation, designed as light, modern construction. Particularly suitable for roofers and plumbers to fabricate gutters, covers and ventilation ducts.

The sub-frame can be demounted for transportation with simple movements.

The machines are available with 3 different top clamping bars:

Type S = High, with 90° segment rail

Type L = Low, with 45° end-to-end bending rail

Type H = High, with 90° end-to-end bending rail

Special accessories:

- Rear guide
- Bending rails with different radii
- Metal fittings for bench mounting



85 760 050



85 760 060



85 760 150

Type	85 760...		Working length 400 N/mm ² mm	Sheet metal thickness mm	Max. mm	Bending angle Deg.
TBL 10/10	020		1030	1.00	42	135°
TBL 07/20	030		650	2.00	38	135°
TBH 07/15	040		650	1.50	35	95°
TBS 07/12	050		650	1.25	42	95°
TBL 10/15	060		1050	1.50	40	135°
KFL 10/15	070		1050	1.25	42	95°
TBS 10/10	080		1050	1.00	35	95°
TBL 13/12	090		1350	1.25	28	135°
TBH 13/10	100		1350	1.00	35	95°
TBS 13/10	110		1350	1.00	35	95°
TBL 15/10	120		1520	1.50	45	135°
KFL 20/10	130		2020	1.00	42	135°
TBL 25/10	140		2520	1.00	42	135°
TBL 30/10	150		3020	1.00	45	135°



85 760 Swivel Bending Machines type TF and KFS BICKENBACH®

TF and KFS offer a complete series of manually operated swivel bending machine for handicraft enterprises, manufacturing and repair plants. The machines come with weight compensation of the bending cheek as well as recesses in all 3 cheeks and the adjustable bending stop as standard.

Bending machines: (see TFM)

Type TF3S is equipped with segments in all 3 cheeks to bend opposing splays.

Type TF has an end-to-end bending rail.

Types TFS and KFS with segmented bending rail are designed to bend box profiles.



85 760 230



85 760 260



85 760 290

Type	85 760...		Working length	Sheet metal thickness 400 N/mm ²	Max. opening width	Bending angle
			mm	mm	mm	Deg.
TF 10/15	170		1020	1.50	33	150
TFS 10/15	180		1020	1.50	33	135
TF 10/25	190		1020	2.50	46	150
KFS 10/25	200		1020	2.50	47	135
TF 12/20	210		1270	2.00	46	150
KFS 12/20	220		1270	2.00	47	135
TF 20/12	250		2020	1.25	45	150
TFS 20/12	260		2020	1.25	47	135
TF 20/20	270		2020	2.00	122	150
TFS 20/20	280		2020	2.00	122	135
TF 25/16	290		2520	1.60	122	150
TFS 25/16	300		2520	1.60	122	135

85 760 Swivel Bending Machines type TFM



This series of mechanical swivel bending machines is powerful, user-friendly and reliable in service yet at a minimum of maintenance requirements.

The power transmission is ensured through chain connections. Bearings and guides are maintenance-free.

Standard equipment:

- PLC control
- Foot-operated switch
- Emergency stop
- continuously adjustable bending angle

Special accessories:

- manual rear guide
- manual, spindle-adjustable rear guide
- Motorized rear guide
- programmable rear guide and bending angle



85 760 310 - ...360

Type	85 760...		Working length	Sheet metal thickness 400 N/mm ²	Max. opening width	Motor top clamping bar	Motor bending cheek
			mm	mm	mm	kW	kW
TFM 1000	310		1020	2.25	100	0.37	0.75
TFM 1200	320		1270	2.00	100	0.37	0.75
TFM 1500	330		1520	1.75	100	0.37	0.75
TFM 2000	340		2020	1.50	100	0.37	0.75
TFM 2500	350		2520	1.00	100	0.37	0.75
TFM 3000	360		3020	1.00	100	0.37	0.75

85 770 Swivel Bending Machines type KSM

The mechanical swivel bending machines type KSM are of very rugged design. The three cheeks can be individually adjusted so that the machine can be used for diverse tasks.



Basic version:

- PLC control
- continuous adjustment of the bending angle
- dual foot switch with emergency stop
- Motor circuit breaker with no-voltage release

Special accessories:

- manual or motorized rear width guide
- programmable rear guide and bending angle
- Bending rails with radius or raised bending rails or segmented rails.



85 770 100

Type	85 770...		Working length	Sheet metal thickness 400 N/mm ²	Max. opening width	Motor top clamping bar	Motor bending cheek
			mm	mm	mm	kW	kW
KSM 3/3000	010		3020	3.00	200	2.20	4.00
KSM 3/3500	020		3520	3.00	200	2.20	5.50
KSM 4/2000	030		2020	4.00	200	1.50	4.00
KSM 4/3000	040		3020	4.00	200	2.20	5.50
KSM 5/2500	050		2520	5.00	200	2.20	5.50
KSM 5/3000	060		3020	5.00	200	3.00	7.50
KSM 5/3500	070		3520	5.00	400	3.00	2x4.00
KSM 7/1500	080		1520	7.00	200	2.20	4.00
KSM 6/2000	090		2020	6.00	200	2.20	5.50
KSM 6/3000	100		3020	6.00	400	3.00	2x4.00
KSM 8/3000	110		3020	8.00	400	3.00	2x5.50

85 780 Rounding Machines type TTA & TTE



TTA rounding machines are robust machines of modern steel weldment type for sheet metal thicknesses up to 1.5 mm. The machines come complete with sub-frame and gear transmission.

TTE rounding machines are motorized machines with two-stage speed control in both directions.

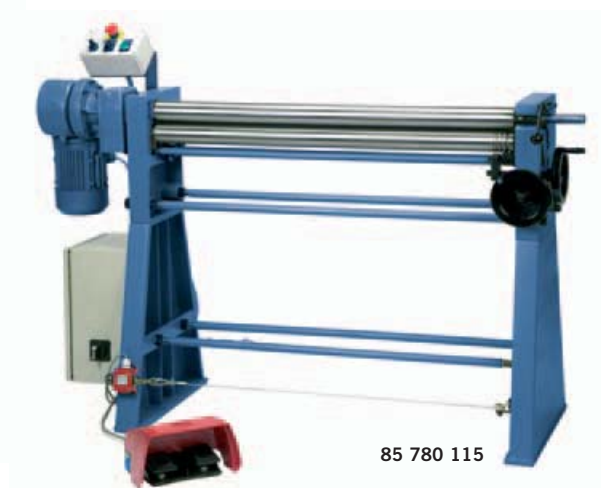
The rounding machines of type TTA and TTE have crowned, asymmetrically arranged rolls in a rugged machine frame.

Standard accessories:

- Sub-frame
- complete safety equipment
- Foot pedal incl. emergency stop for forward and reversed rotation and a 0.75 kW braking motor



85 780 100



85 780 115

Type	85 780...		Working length 400 N/mm mm	Sheet metal thickness Diameter mm	Rolls mm
TTA 6/06	006		675	0.60	30/35
TTA 6/10	010		675	1.00	42/48
TTA 6/15	015		675	1.50	50/55
TTA 6/20	020		675	2.00	60/65
TTA 10/10	100		1020	1.00	50/55
TTA 10/15	115		1020	1.50	60/65
TTA 12/12	120		1260	1.25	60/65
TTE 6/20	010		675	2.00	60/65
TTE 10/10	020		1020	1.00	50/55
TTE 10/15	030		1020	1.50	60/65
TTE 12/12	040		1260	1.25	60/65



85 790 Corner shears type TCS & P

Type TCS 100 is an easy to handle and user-friendly, hand-operated bench model.

- Adjustable set of cutters
- Quick-adjustment angle guides
- With mm scales inserted in bench
- Quick and easy to handle cutting gap adjustment
- Rugged design - machine weight 100 kg
- Gearing-up to hand lever

Type P 130/3 is of compact and modern design, particularly with regard to uncomplicated and convenient operation.



The basic version includes:

- adjustable guides with mm scales
- Safety foot pedal and quick adjustment of the cutting gap

The cast-iron construction ensures perfect cuts up to 3 mm sheet metal thickness. Air pressure is 8 tam. Air consumption 18 l/stroke.



85 790 100



85 790 130

Type	85 790...		Working length	Sheet metal thickness 400 N/mm	Work surface	Cuts Angle Pro/min.	Cutters
			mm	mm	mm		Deg.
TCS 100	100		102 x 102	3.00	380 x 280	-	90°
P 130 / 3	130		130 x 130	3.00	600 x 460	60	90°

85 115 Bench Drilling Machine TB M1 ST

Very reasonable, continuously variable drilling machines with high drilling performance. The drilling machine designed for workshops and industry.



Standard accessories:

- Emergency stop
- Depth gage
- Connection cable 1.5 m, without CEE plug
- Continuously variable speed control
- Undervoltage release
- Bench height adjustment
- Forward/reverse rotation

Type	TB M1 ST
Speed range	R2 (300 - 3300 rpm)
Continuous/standard drilling capacity	15/18 mm
Spindle speeds, continuous	300 - 3300 rpm
Spindle	MK2
Motor	3-phase 400 V, pole-changing 0.45/0.75 kW
Bench surface (W x L)	240 x 290 mm
85 115...	001



85 115 001

85 122 Upright Drilling Machine SB M3 ST MV

Upright drilling machine incl. coolant device.

Very reasonable, continuously variable drilling machines with high drilling performance. The drilling machine designed for workshops and industry.

Standard accessories:

- continuously variable speed control,
- Mushroom-head emergency button
- Undervoltage release
- Table height adjustment via toothed rack
- Manual reverser for right and left-hand rotation
- Depth gage with fine adjustment
- Connection cable 1.5 m, with CEE plug
- Coolant device
- Advance with electromagnetic coupling

Type	SB M3 ST MV
Continuous/standard drilling capacity	25/30 mm
Spindle speeds, in 2 stages	125 - 4000 rpm
Stage 1	125 - 2000 rpm
Stage 2	250 - 4000 rpm
Spindle	MK3
Advance	0.10 / 0.16 / 0.25 mm/rev.
Motor	3-phase 400 V, pole-changing 0.90/1.45 kW
Table surface (usable)	420 x 340 mm
85 122...	001



85 122 001

85 123 Upright Drilling Machine SB M4 ST MV

Upright drilling machine incl. coolant device.

Very reasonable, continuously variable drilling machines with high drilling performance. The drilling machine designed for workshops and industry.

- Continuously variable speed control
- Mechanical advance incl.
- Mushroom-head emergency button
- Manual reverser for right and left-hand rotation
- Undervoltage release
- Table height adjustment via toothed rack
- Depth gage with fine adjustment
- Connection cable 1.5 m, without CEE plug
- 3-phase pole-changing motor
- Advance with electromagnetic coupling

Type	SB M4 ST MV
Continuous/standard drilling capacity	30/35 mm
Spindle speeds	125 - 2000 rpm
Spindle	MK3
Advance	0.10 / 0.16 / 0.25 mm/rev.
Motor	3-phase 400 V, pole-changing 1.5/2.0 kW
Table surface (usable)	420 x 340 mm
85 123...	001



85 123 001

85 125 Upright Drilling Machine SB P 40 STG BICKENBACH®

Upright drilling machine incl. coolant device, threading attachment and chip breaker.

Very reasonable, continuously variable drilling machines with high drilling performance. The drilling machine designed for workshops and industry.

- Continuously variable speed control
- Mushroom-head emergency button
- Undervoltage release
- Depth gage with fine adjustment
- Connection cable 1.5 m, with CEE plug
- Digital speed indication
- Digital indication of drilled depth
- Digital advance indication
- Electronic continuously variable advance incl. spindle monitoring
- Precision cutting device
- Threading attachment
Threading capacity
max. M30
6-10 threads/min (depending on size)
Adjustment of thread-cutting depth via digital depth indication
- Depth gage programmable, simple operation
- Drilling cross with pushbutton for
Advance ON/OFF
- Chip breaker module
- Coolant device

Type	SB P 40 STG PV
Continuous/standard drilling capacity	35/40 mm
Spindle speeds	70 - 1400 rpm
Spindle	MK4
Advance	0 - 4.0 mm/rev.
Motor	3-phase 400 V, pole-changing 1.5/3.0 kW
Table surface (usable)	590 x 450 mm
85 125...	001



85 125 001

85 110 Bench Drilling Machine TB 18 BICKENBACH®

Very reasonable, continuously variable drilling machine with high drilling performance. The drilling machine designed for workshops and industry.

Type	TB 18
Drilling performance in steel	18 mm
Drill spindle	MK2
Drilling depth	90 mm
Reach	15 mm
Column dia.	80 mm
Table size	300 x 300 mm
Spindle speed	12/280 - 2300 min ⁻¹
Advance	manually
Motor power	0.75 kW
Height of machine	1090 mm
Weight	80 kg
85 110...	038



85 110 038

85 160 Universal Drilling and Milling Machine



Universal drilling and milling machine with stable, heavy-walled column. Head advance via toothed racks and handcrank, spindle sleeve/quill advance via coarse/fine advance, manual table advance into all directions, adjustable table and depth gage guides, mechanical speed control.

Basic equipment:

1 Milling head adapter MK3/M12, 1 milling head, 1 chuck adapter B 16 MK 3/M12, 1 chuck, 1 vertically swiveling vise, operation tools

Optional: Sub-frame Prod. No. 85 160 031

Type		BFM 30 T
Drilling performance in steel	mm	30
Milling capacity with milling head	mm	20
Milling capacity with shank-type cutter	mm	20
Spindle		MK3
Spindle-sleeve stroke	mm	130
Spindle speeds	mm/min	100/160/190/ 235/305/365/ 640/865/1010/ 1205/1500/2080
Table dimensions	mm	730 x 210
Mounting surface	mm	630 x 210
Weight	kg	270
85 160...		030



85 160 030

85 421 Horizontal Bandsaw



Suitable for sawing solid materials, pipes and steel, cast iron and yellow metal profiles. Electrical design 400 V/50 Hz acc. to UUV and VDE 0113.

Wheeled device using two transport castors, stable design thanks to steel construction, integral cooling equipment, automatic belt stop after cutting, high sawing accuracy because of double guided saw band (guide rollers), miter cuts possible by swiveling the material cheeks to the right, swarf removing brush.

Type		HBS 175
Cutting range 90°		
round	mm	175
flat	mm	175 x 305
square	mm	175 x 175
Cutting range 45°		
round	mm	150
flat	mm	175 x 150
square	mm	150 x 150
Cutting speed	m/min	15, 38, 60, 83
Dimension of saw band	mm	2360 x 20 x 0.9
Weight	kg	125
85 421...		001



85 421 001

85 426 Horizontal Bandsaw



Rugged compact machine, particularly suitable for sawing solid materials, pipes and steel, cast iron and yellow metal profiles.

Stable steel-construction design, integral cooling equipment, automatic band stop after cutting, fourfold guided saw band (guide rollers), swarf removing brush, electrical equipment 400 V/50 Hz.

Type		HBS 225 ST
Cutting range 90°		
round	mm	225
flat	mm	400 x 225
square	mm	225 x 225
Cutting range 45°		
round	mm	162
flat	mm	152 x 178
square	mm	200 x 200
Cutting speed	m/min	17 - 84, continuously variable
Dimension of saw band	mm	3280 x 25 x 0.9
Weight	kg	320
85 426...		000



85 426 000

85 430 Horizontal Bandsaw



Rugged bandsaw with plenty of advantages:

Material saving thanks to low cutting losses, dimensioned for bimetal saw blades, hydraulic sawing advance, sensitively controllable, length guide 500 mm, continuously variable cutting speed, automatic stop after cutting, coolant device, roller guide with precision ball bearings and 400 V/50 Hz electrical equipment.



85 430 001

Type		HBS 260
Cutting range 90°		
round	mm	260
flat	mm	450 x 200
square	mm	260 x 260
Cutting range 45°		
round	mm	160
flat	mm	260 x 160
square	mm	160 x 160
Cutting speed	m/min, continuously variable	17 - 106
Dimension of saw band	mm	3660 x 25 x 0.9
Weight	kg	360
85 430...		001

85 453 Vertical Bandsaw



Vertical bandsaw: ergonomic operating elements, drive units protected in machine stand, swarf-blowing device. The stable table is adjustable to the right and left side.

Standard accessories:

Band welding equipment, scissors and oil stone, saw band protection, indication of band speed, machine lamp, overload circuit breaker and automatic table advance.



85 453 001

Type		VBS 1610 E
Cutting width	mm	396
Cutting height under lead-in	mm	255
Cutting speed	mm	20 - 80
2 stages (continuously variable)	m/min	250 - 1040
Drive output	kW	1.5
Table advance force	kg/cm	80
Table travel	mm	300
Table height	mm	1000
Max. length of saw blade	mm	3140
Max. width of saw blade	mm	16
Butt welding capacity	mm	16
Weight	kg	435
85 453...		001

Engine and bar lathe LZ 20-10-S



High-grade Meehanite casting forms the basis of the machine. It is strongly finned and hence guarantees low-vibration and stable machine operation. The engine bed is of wide design, hardened and precision ground.

Paint gray/blue, CE type design

Standard equipped with following accessories:

- Digital 3-axis display (RSF Z 730/ Heidenhain) incl. scales, attachment kit and attachment
- 3-jaw chuck RÖHM, OD=250 incl. drilling and lathe jaws
- Multifix cutter holder head plus 2 cutter holders (2 outer, 1 inner, 1 cutter bar holder)
- 1 revolving center, 2 fixed lathe centers
- Machine lamp 24 V
- 1 fixed steady rest
- 1 cpl. coolant device
- Leading spindle cover
- Reducing sleeve
- rear swarf guard
- Fourfold length guide
- Manual central lubrication
- 6 pcs. machine setting elements
- 1 set of operation tools
- 1 Operating instructions



Type		LZ 20 -10 S
Swing	mm	200
Center distance	mm	1000
Prime mover	kW	3.5
Spindle speed	min ⁻¹	20 - 2000
Diameter turned over bed	mm	410
Diameter turned, gap	mm	620
Spindle bore	mm	58
Connection	V / Ph / Hz	400 / 3 / 50
Installation surface	mm	2290 x 1050
Weight	kg	1150
Prod. No.	MA511504	with Bickenbach digital display
Prod. No.	MA511700	with Heidenhain digital display



Upright drilling machine

„FLOTT”



Flott		SB P 40 STG PV Electronic
Drilling capacity	mm	up to 40
Thread		up to M30
Spindle		MK IV

SB P 40 STG PV Electronic



Bandsaws

JAESPA

Jaespa		Concept 260 GTH
Cutting range	mm	90° round up to 260
Speed of saw blade	m/min	37/ 74

Concept 260 GTH



Saw technology

BERG + SCHMID

Berg & Schmid		VKS 315
Cutting range	mm	90° round up to 100
Speed of saw blade	m/min	17/33 or 33/66

VKS 300

