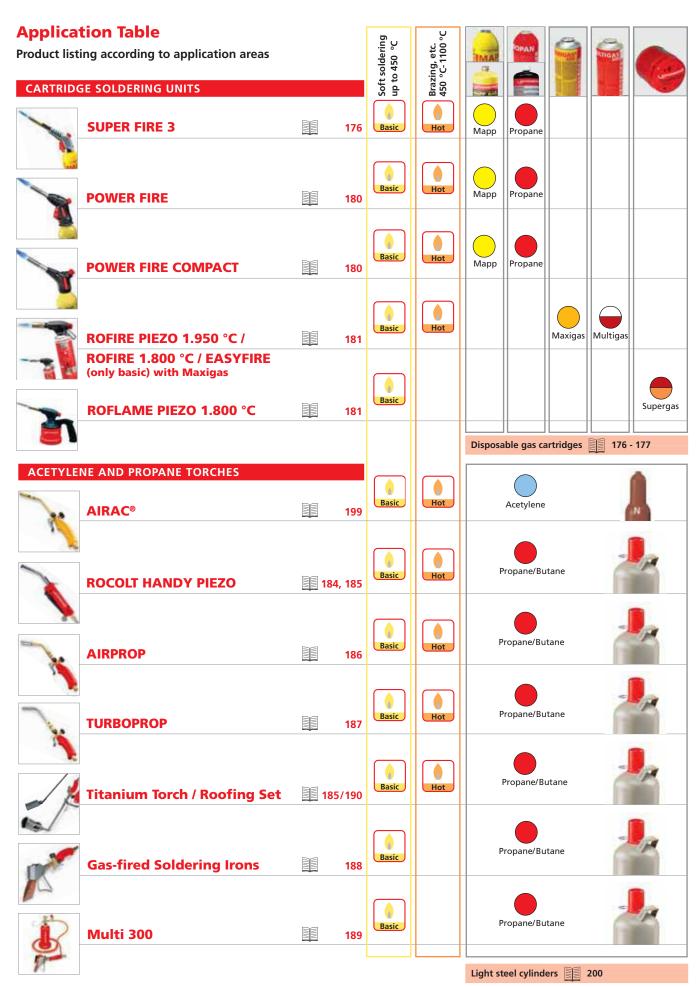
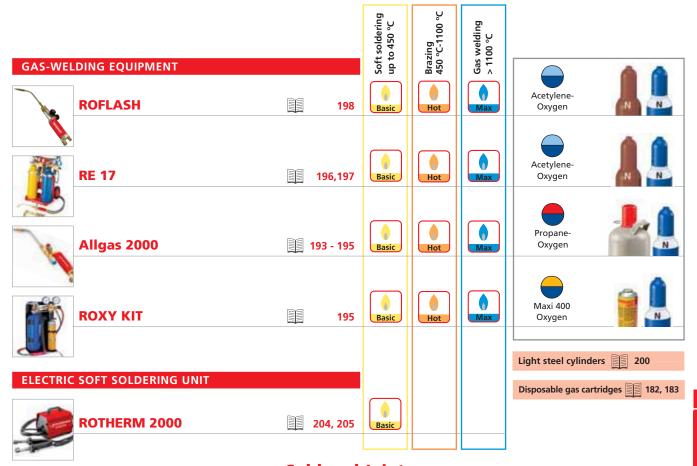
# **Soldering and Welding Equipment Application Table** 174 – 175 "Mobile Energy" 176 - 181 **Disposable Gas Cartridges and Accessories** 182 - 183 **Propane High-Performance Torches** 184 - 187 **Universal Soft-Soldering Torches** 188 - 189 **Warming-up Torch** 190 **Propane Accessories** 191 – 192 **Mobile Gas-Welding Equipment** 193 **Mobile Brazing Equipment** 194 - 195 **Gas-Welding Equipment** 196 - 198 Acetylene Brazing Equipment 199 **Accessories for Gas-Welding** 200 Accessories for Soldering, Brazing and **201 – 203 Welding Technology** 204 – 205 **Electric Soft Soldering Unit Soft Solders & Accessories** 206 - 207**Hard Solders** 208 - 211 ROTHENBERGER" ROTHENBERGER bemo Kazakhstan - 090301 Republic of Kazakhstan, West Kazak

# Systemised Soldering, Brazing and Welding Equipment



# 6

# **Systemised Soldering, Brazing and Welding Equipment**



# **Soldered Joints**

Material	Required Hard Solder	Melting Range	Working Temperature	Standard
Copper-Copper	S 34 Cu / S 34 Cu U S 94 / S 94 XN / S1 S 2 / S 5 S 15 S 30 / S 30 U S 45 / S 45 U	630 °C - 730 °C 710 °C - 880 °C 650 °C - 810 °C 650 °C - 800 °C 600 °C - 690 °C 595 °C - 630 °C	710 °C 730 °C 710 °C 710 °C 680 °C 610 °C	DIN EN 1044
Copper-Carbon Steel	S 34 Cu / S 34 Cu U S 45 Cu / S 45 Cu U S 30 / S 30 U S 45 / S 45 U	630 °C - 730 °C 640 °C - 680 °C 600 °C - 690 °C 595 °C - 630 °C	710 °C 670 °C 680 °C 610 °C	DIN EN 1044
Copper-Brass	S 94 / S 94 XN / S1 S 2 S 5 S 15	710 °C - 880 °C 650 °C - 810 °C 650 °C - 810 °C 650 °C - 810 °C	730 °C 730 °C 710 °C 710 °C	DIN EN 1044
Brass-Carbon Steel	S 30 / S 30 U S 45 / S 45 U S 34 Cu / S 34 Cu U S 45 Cu / S 45 Cu U	600 °C - 690 °C 595 °C - 630 °C 630 °C - 730 °C 640 °C - 680 °C	680 °C 610 °C 710 °C 670 °C	DIN EN 1044
Brass-Brass	S 94 / S 94 XN S 1 (not standardised) S 2 / S 5 S 15	710 °C - 880 °C 710 °C - 880 °C 650 °C - 810 °C 650 °C - 810 °C	730 °C 730 °C 710 °C 710 °C	DIN EN 1044
Carbon Steel-Carbon Steel	S 30 / S 30 U S 45 / S 45 U S 34 Cu / S 34 Cu U S 45 Cu / S 45 Cu U	600 °C - 690 °C 595 °C - 630 °C 630 °C - 730 °C 640 °C - 680 °C	680 °C 610 °C 710 °C 670 °C	DIN EN 1044

ROTHENBERGER

# "Mobile Energy"

# **SUPER FIRE 3**

### Ergonomic HEAVY-DUTY brazing unit up to Ø 28 mm

For soft soldering, brazing and other applications such as loosening of colour or shrinking of hoses

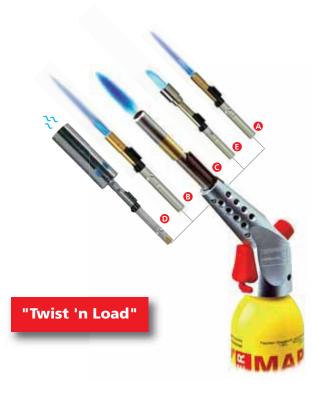
## **Product Profile**

### **KEY FEATURES**

- Versatile for use in all positions (360°)
- 1 Extremely high flame temperature
- 2 Long service life
- 3 "Twist 'n Load" system (5 different nozzles available)
- Precise flame adjustment
- **5** Up to 2.5 hours of hard soldering with one cartridge
- 6 Even more comfortable for longer jobs
- 7 Reliable Piezo ignition (up to 30,000 ignitions)
- 8 Doubles the safety

# **SUPER FIRE 3 Nozzles**

Quick exchange with the "Twist 'N Load" system



### **TECHNICAL DATA**

Brazing:up to  $\emptyset$  28 mmSoft soldering:up to  $\emptyset$  35 mmCoupling:7/16" EU

Handle: Aluminium, bolted

Burner: Brass / stainless steel

"Twist 'N Load": 5 different nozzles
for different uses

## **Pin-point Nozzle:**



For fine soldering; precise and stable flame

# **Standard Nozzle:**



For soft soldering and other jobs with lower heat application; precise, powerful and stable flame

# Cyclone Nozzle:



For hand and soft soldering with an efficient swirl flame (allows pipe to heat up evenly)

# **Hot air Nozzle:**





For the removal of paint and for shrinking work up to approx. 80 mm diameter; wind-stable, powerful current of hot air

# **Shrinking Nozzle:**

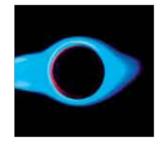


For shrinking up to dia. 300 mm and for heating; powerful, wind-stable soft flame

Soft soldering in heating installation



High flame temperature through cyclone swirl



Hard soldering in gas installation



Hard soldering in refrigeration and climate control



























Fig. SUPER FIRE 3 HOT BOX

# **SUPER FIRE 3 HOT BOX**





### **KEY FEATURES**

The ideal service kit



**5 part** set (No. 3.5490) includes: handle (No. 3.5445), cyclone nozzle (No. 3.5457), pin-point nozzle (No. 3.5455), flame reflector (No. 3.1043), universal torch support (No. 3.5461), 2 x MAPP® gas cartridges (No. 3.5551-A), carrying case

Model			No.
SUPER FIRE 3 HOT BOX	1	4	3.5490
SUPER FIRE 3 HOT BOX US, without MAPP® gas	s 1	4	3.5490U

# **SUPER FIRE 3 Basic Set**

Set (No. 3.5436/No. 3.5431) includes: handle (No. 3.5445), cyclone nozzle (No. 3.5457)





No. 3.5436/No. 3.5431

No. 3.5437

Universal torch support MAPP® Gas



No. 3.5432

# **SUPER FIRE 3 MAPP®-Set**

Set (No. 3.5432) includes: handle (No. 3.5445), cyclone nozzle (No. 3.5457), MAPP® gas cartridge (No. 3.5551-A)



# **SUPER FIRE 3 All-In-One-Set**

Set (No. 3.5437) includes: handle (No. 3.5445), cyclone nozzle (No. 3.5457), pin-point nozzle (No. 3.5455), universal torch support (No. 3.5461), MAPP® gas cartridge (No. 3.5551-A)



When placing your order, remember to order the universal torch support (No. 3.5461) for stationary soldering, too!

Model			No.
SUPER FIRE 3 Basic Set	1	4	3.5436
SUPER FIRE 3 Basic Set US	1	4	3.5431
SUPER FIRE 3 MAPP® Set	1	10	3.5432
SUPER FIRE 3 All-in-One-Set	1	5	3.5437

#### **ACCESSORIES** 6 0 4 Description No. Description No. Pin-point nozzle 15 mm 176 3.5455 Hot air nozzle 38 mm 176 3.5458 Standard nozzle 16 mm 176 3.5456 Shrinking nozzle 24 mm Ø 3.5459 176 Handle, EU coupling 3.5457 3.5445 Cyclone nozzle 176 O-Ring set (2 pieces) 83.0806 Flame reflector 191

3.5461

MAPP® Gas

# **SUPER FIRE 3 MAPP® Mixed Displays**

# Display 1.9167-A contains:

2 x SUPER FIRE 3 MAPP® Set (No. 3.5432)

2 x SUPER FIRE 3 All-in-One-Set (No. 3.5437)

4 x SUPER FIRE 3 HOT BOX (No. 3.5490)

24 x MAPP® Gas cartridge (No. 3.5551-A)



3 x SUPER FIRE 3 MAPP® Set (No. 3.5432)

2 x SUPER FIRE 3 All-in-One-Set (No. 3.5437)

4 x SUPER FIRE 3 HOT BOX (No. 3.5490)

1 x Hot air nozzle 38 mm (No. 3.5458)

1 x Pin-point nozzle 15 mm (No. 3.5455)

1 x Cyclone nozzle 16 mm (No. 3.5457)

24 x MAPP® Gas cartridge (No. 3.5551-A)





Model		No.
SUPER FIRE 3 MAPP® Mixed Display	1	1.9167-A

Model	<i>a</i>	No.
SUPER FIRE 3 MAPP® Mixed Display	1	1.9169-A



# "Mobile Energy"

# **POWER FIRE**

PROFESSIONAL brazing- Ø 22 mm and soft soldering-unit up to Ø 35 mm

# **Product Profile**

### **KEY FEATURES**

- 1 Ideal for brazing up to Ø 22 mm
- 2 Precise adjustment of the flame
- 3 Adjustable for all gases (adjustable access valve)
- 4 Continual use with locking button
- 5 Immediate flame ignition, up to 30,000 ignitions

















# **TECHNICAL DATA**

**Brazing:** up to  $\emptyset$  22 mm **Soft soldering:** up to  $\emptyset$  35 mm **Coupling:** 7/16" EU

**Handle:** Fibreglass reinforced plastic

**Burner:** Stainless steel





# **POWER FIRE Compact**

PROFESSIONAL brazing- Ø 22 mm and soft soldering-unit up to Ø 35 mm



# **KEY FEATURES**

### Characteristics

- With Piezo ignition button
- For use in all positions (MAPP® Gas)
- Compact and 45% lighter (compared to POWER FIRE)



# TECHNICAL DATA

Coupling: 7/16" EU

Brazing: up to Ø 22 mm

Soft soldering: up to Ø 35 mm



Model No.

POWER FIRE Compact Set (including MAPP® Gas)

3.0813

# <u>6</u>

# **ROFIRE 1800 °C**





ECONOMY soft soldering unit up to Ø 22 mm

### **KEY FEATURES**

- Burner with integrated support bracket
- Precise adjustment of the flame with the fine adjustment valve

## **TECHNICAL DATA**

Coupling: 7/16" EU

Soft soldering: up to Ø 22 mm





ROFIRE 1800 °C Set, contains: Burner (No. 3.5506), Multigas 300 (3.5510)

SOLDE

# **ROFIRE PIEZO 1950 °C**











Powerful soldering unit for CU-brazing joints up to Ø 15 mm and soft soldering up to Ø 28 mm

### **KEY FEATURES**

- Piezo Ignition
- Precise adjustment of the flame
- Burner head with integrated support bracket

# **TECHNICAL DATA**

Coupling: 7/16" EU

Brazing: up to Ø 15 mm

Soft soldering: up to Ø 28 mm





Burner (No. 3.5556), including Multigas 300 (No. 3.5510)

# **ROFLAME PIEZO 1800 °C**

CLASSIC soft soldering unit Ø 22 mm

High performance torch with Piezo ignition

# **KEY FEATURES**

- Piezo Ignition
- Precise adjustment of the flame

### **TECHNICAL DATA**

**Coupling:** Pluggable cartridge **Soft soldering:** up to Ø 22 mm

Model  $\sqrt[]{g}$  No.



# **EASY FIRE**

# ECONOMY soft soldering up to Ø 22 mm

ROFLAME PIEZO 1800 °C (without gas cartridge)

High performance torch with Piezo ignition







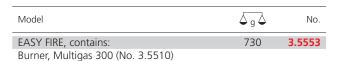
# **KEY FEATURES**

- Piezo Ignition
- Precise adjustment of the burner flame
- Suitable for Multigas 300

# TECHNICAL DATA

**Coupling:** 7/16" EU **Soft soldering:** up to Ø 22 mm





ROTHENBERGER

# **Disposable Gas Cartridges**

# MAPP® Gas EU / US

Special gas mix for high-performance soldering work

Flame temperatures up to 2400 °C + 35 % faster than propane





# **Product Profile**

# **KEY FEATURES**

- 1 Extremely high flame temperature, utmost burning performance and guaranteed short working times
- 2 Guaranteed constant top burner performance
- 3 Poses no health risks (contains no BUTADIENE)

# **KEY FEATURES**

- 4 Easy to use
- Increased user safety
- 6 Longer periods of use



# Fig. MAPP® Gas EU

Fig. MAPP® Gas US

Model	Contents		No.
MAPP® gas cartridge	750 ml	12/360	3.5551-A
Languages: D, GB, F, E, I, P			
MAPP® gas cartridge	750 ml	12/360	3.5551-B
Languages: DK, NL, SE, FI, FR, F	RU		
MAPP® gas cartridge	750 ml	12 / 360	3.5551-C
Languages: CZ, PL, HU, BG, TR	, GR		
Adaptor for US and EU standar			3.5648X
You can find burners starting on	176		

# **Packaging Profile**

Description	MAPP® Gas EU/US
No.	3.5551-A/3.5698
EAN Code	4004625355510
Product size (mm) (W x H)	80 x 285
Contents (ml)	750
Weight (g)	670
Unit per PU (((()))	12
PU per layer / palette	8
Layer per palette	3
Units per palette	288
Number of palettes per truckload	60
Units per truckload	17.280
Palette weight (kg)	241
Palette size (mm) (L x W x H)	800 x 1200 x 1000
Carton size (mm) (L x W x H)	320 x 295 x 250

# **Disposable Gas Cartridges**

# **Maxigas 400**





# **Multigas 300**

temperatures up to 1900 °C.





High-performance welding, cutting and brazing gas. for flame temperatures up to 2200 °C Gas cartridge with 7/16" EU coupling thread





Gas cartridge with 7/16" EU coupling thread
•
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Propane / butane gas mixture for flame



Description	Maxigas 400
No.	3.5570
EAN Code	4004625355701
Product size (mm) (W x H)	65 x 260
Contents (ml)	600
Weight (g)	338
Unit per PU (	24
PU per layer / palette	9
Layer per palette	3
Units per palette	648
Number of palettes per truckload	60
Units per truckload	38.880
Palette weight (kg)	195
Palette size (mm) (L x W x H)	800 x 1200 x 1000
Carton size (mm) (L x W x H)	405 x 272 x 264

Description	Multigas 300
No.	3.5510
EAN Code	4004625355107
Product size (mm) (W x H)	65 x 260
Contents (ml)	600
Weight (g)	332
Unit per PU (((()	24
PU per layer / palette	9
Layer per palette	3
Units per palette	648
Number of palettes per truckload	60
Units per truckload	38.880
Palette weight (kg)	191
Palette size (mm) (L x W x H)	800 x 1200 x 1000
Carton size (mm) (L x W x H)	405 x 272 x 264

# **Propane Gas EU / US**









# C 200 Supergas







Description	Propangas EU/US
No.	3.5546-A/3.5547
EAN Code	4004625355466
Product size (mm) (W x H)	80 x 285
Contents (ml)	750
Weight (g)	550
Unit per PU (((()	12
PU per layer / palette	8
Layer per palette	3
Units per palette	288
Number of palettes per truckload	60
Units per truckload	17.280
Palette weight (kg)	198
Palette size (mm) (L x W x H)	800 x 1200 x 1000
Carton size (mm) (L x W x H)	320 x 295 x 250

Description	C 200 Supergas	_
No.	3.5900	
EAN Code	4004625359006	ľ
Product size (mm) (W x H)	90 x 95	
Contents (ml)	190	
Weight (g)	290	
Unit per PU (((()))	36	ľ
PU per layer / palette	9	- 1
Layer per palette	3	
Units per palette	972	
Number of palettes per truckload	60	
Units per truckload	58.320	
Palette weight (kg)	251	
Palette size (mm) (L x W x H)	800 x 1200 x 1000	
Carton size (mm) (L x W x H)	405 x 272 x 264	

# **Propane High-Performance Torches**

# **ROCOLT HANDY PIEZO Set**

Professional brazing system with Quick-change burner

Three burner tips for different applications

# **Product Profile**

# **KEY FEATURES**

- Three burner tips for different applications
- Tool-free burner exchange with the fast "Twist 'n Load" system
- 1 Reliable Piezo ignition for up to 30,000 ignitions
- 2 Increased safety with the hose failure protection
- 3 No twisting of the hose, work in any position















# **TECHNICAL DATA**

up to Ø 28 mm Brazing: Soft soldering: up to Ø 32 mm Warming-up: up to Ø 60 mm Coupling: 3/8" left

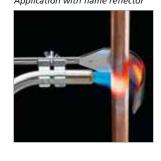
Handle: Plastic, with screws **Burner:** Brass / stainless steel



Fig. ROCOLT HANDY PIEZO Set

Application with flame reflector





 $\triangle_{kg}\triangle$ Model **ROCOLT HANDY PIEZO Set** 1.5 3.5390 **ROCOLT HANDY Handle** 0.1 3.5395 Brazing Soft soldering

8-part set (No. 3.5390) includes: ROCOLT handle (No. 3.5395), standard burner 19 mm (No. 3.5378), cyclone burner (No. 3.5398), pressure reducer including rotatable hose failure protection (No. 3.5356), propane hose 3 m (No. 3.5383), flame reflector 65 mm (No. 3.1043), ROVLIES® (No. 4.5268), plastic carrying case (No. 3.5355)





No.

# **Propane High-Performance Torches**

# **Titanium**

# **High-performance Warming-up Torch**

Lighter professional high-performance torch with Ø 60 mm head

# **Product Profile**

### **APPLICATION AREA**

For bonding of bitumen sheeting, large-area burning of weeds, defrosting, insulate and drying

#### **KEY FEATURES**

- Especially recommended by longer use with the ergonomic light design (430 g)
- Fast burner exchange with the "Twist 'n Load" system
- Built-in Piezo ignition in handle
- Closed, brand reinforced burner head is stable and not sensitive to wind

# **TECHNICAL DATA**

Flame type: Standard Burner head Ø: 60 mm **Burner length:** 600 mm

Gas usage: 8000 g/h at 4 bar

Performance at 4 bar: 102 kW Weight: 430 g



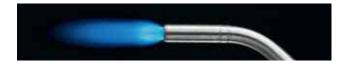
# **ROCOLT HANDY PIEZO Standard Burner**

Standard burner with extremely short, bundled flame for low consumption. Ideal burner for brazing, soft soldering, warming up annealing, hardening, etc.



# **ROCOLT HANDY PIEZO Cyclone Burner**

Cyclone burner with optimum enveloping flame aspect when soldering pipes and fittings. Ideal burner for brazing, soft soldering, warming up, annealing, hardening, etc.







Model	Ø mm		∆ <sub>g</sub> ∆	No.	Model	Ø mm	$\Delta_g \Delta$	No.
Piezo Standard Burner	14	0	160	3.5377	Piezo Standard Burner	14 4	180	3.5397
Piezo Standard Burner	19	2	150	3.5378	Piezo Standard Burner	19 🤨	150	3.5398
Piezo Standard Burner	25	<b>6</b>	160	3.5379	Piezo Standard Burner	25 6	180	3.5399

# ACCESSORIES













Description		Description	
Welding blanket	203	External brush for copper pipe	203
Internal brush for copper pipe	203	ROVLIES®	203
Solder	206 - 211	Fittings flux	207

# **AIRPROP**

# Propane high-performance torches for brazing up to Ø 22 mm and soft soldering up to Ø 54 mm

For brazing and soft soldering of copper and steel pipes up to 2000 °C without oxygen, as well as warming up, shrinking and flame cleaning

# **Product Profile**

#### **KEY FEATURES**

- 1 Bundled; concentrated and hot flame with the built-in gas turbine in brazing torch
- 2 Absolutely gas-tight with the optimised valve technology
- 3 Gas-saving operation with the smooth-running economy valve
- Fast burner exchange without tools













#### **TECHNICAL DATA**

Self-induced air: Turbine and combustion chamber

Surface treated, Burner: chromed brass

Hose coupling: 3/8" L

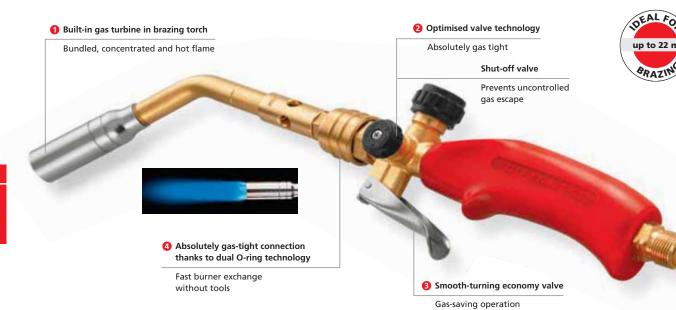




Abb. AIRPROP Set

Sets include: Safety handle with push-in coupling (No. 3.1009), brazing burner with push-in nipple Ø 14 mm (No. 3.1013) / Ø 16 mm (No. 3.1014) / Ø 19 mm (No. 3.1015), 2.5 m propane hose with 3/8" L coupling (No. 3.2201), safety igniter (No. 3.2077), replacement flints (No. 3.2088), open-ended spanner (No. 3.2073), steel case (No. 3.1005)

Model	$\Delta_{kg}\Delta$	No.
AIRPROP Brazing Set without propane regulator	2.8	3.1092
AIRPROP Brazing Set with propane regulator	3.1	3.1091
(as in set (No. 3.1092) but with regulator		
(No. 3.2081) (W 21.8 L – R3/8 L))		



# **AIRPROP Brazing Burner with threaded coupling**

Ø mm	<b>⊢</b> mm	g/h 2 bar	kWh – kcal – BTU	$\sqrt[4]{g}$ No.
14 mm	140	125	1.60 – 1375 – 5465	95 <b>3.0913</b>
16 mm	145	180	2.30 - 3300 - 7885	100 <b>3.0914</b>
19 mm	170	300	3.84 - 3300 - 13115	130 <b>3.0915</b>
22 mm	171	400	5.12 - 4400 - 26195	145 <b>3.0916</b>

# **AIRPROP Brazing Burner with push-in nipple coupling**

Ø mm	<b>⊢</b> mm	g/h 2 bar	kWh – kcal – BTU	$\Delta_g \Delta$	No.
14 mm	140	125	1.60 - 1375 - 5465	95 <b>3.</b>	1013
16 mm	145	180	2.30 - 3300 - 7885	100 <b>3.</b>	1014
19 mm	170	300	3.84 - 3300 - 13115	130 <b>3.</b>	1015
22 mm	171	400	5.12 – 4400 – 26195	145 <b>3.</b>	1016

# **Propane High-Performance Torches**

# **TURBOPROP**

# Propane high-performance torch for brazing up to Ø 28 mm and soft soldering Ø 54 mm

For brazing and soft soldering of copper and steel pipes up to 2000 °C without oxygen, as well as for warming up, shrinking and flame cleaning

# **Product Profile**

# **KEY FEATURES**

- High flame temperature due to turbine with increased oxygen self-induced air and 4 to 5-fold flame chamber
- 2 Fast burner exchange without tools
- 3 Gas-saving operation with the smooth-running economy valve
- 4 Shut-off valve prevents uncontrolled gas escape











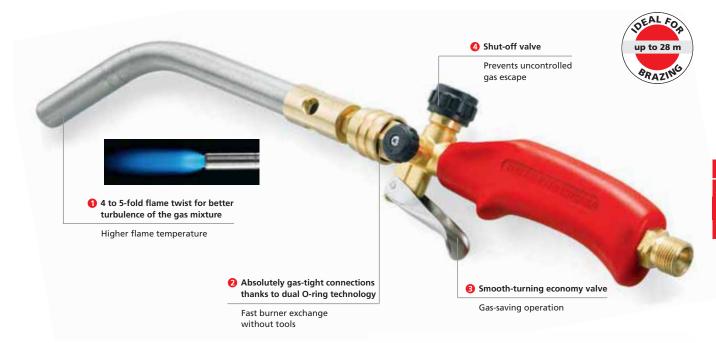


# **TECHNICAL DATA**

Self-induced air: Turbine and combustion chamber
Burner: Surface treated.

chromed brass

Hose coupling: 3/8" L





Sets include: Safety handle with push-in coupling (No. 3.1009), brazing burner with push-in nipple Ø 14 mm (No. 3.1013) / Ø 16 mm (No. 3.1014) / Ø 19 mm (No. 3.1015), 2.5 m propane hose with 3/8" L coupling (No. 3.2201), safety igniter (No. 3.2077), replacement flints (No. 3.2088), open-ended spanner (No. 3.2073), steel case (No. 3.1005)

Model	$\sqrt{g}$	No.
TURBOPROP-Set without propane regulator	2870	3.1090
TURBOPROP-Set with propane regulator	3120	3.1094
(as in set (No. 3.1090) but with regulator		
(No. 3.2081E) (W 21.8 L – R 3/8 L)		
TURBOPROP-Set with propane regulator	3120	3.1037
(as in set (No. 3.1090) but with regulator		
(No. 3.2083) (POL 7/8 L – R 3/8 L))		
TURBOPROP-Set with propane regulator	3120	3.1036
(as in set (No. 3.1090) but with regulator		
(No. 3.2084) (W 20 x 14 L - R 3/8 L))		



Fig. TURBOPROP Set

# **TURBOPROP Brazing Burner with push-in nipple**

Ø mm	<u>L</u> mm	g/h 2 bar	kWh – kcal – BTU	$\sqrt[]{g}$ No.
10 mm	165	70	1.89 - 770 - 3050	70 <b>3.1031</b>
12 mm	175	110	1.41 - 1210 - 4815	90 <b>3.1032</b>
15 mm	195	180	2.30 - 1980 - 7855	110 <b>3.1033</b>
18 mm	230	240	3.07 - 2640 - 10485	160 <b>3.1034</b>
24 mm	270	450	5.75 – 4950 – 19640	230 <b>3.1035</b>

# **GAS-FIRED Soldering Irons**

Professional soldering iron for the highest demands

Ideal for soft soldering in corners, edges, joints and channels

# **Product Profile**

# **KEY FEATURES**

- 1 Wind protected and heats up quickly
- 2 Excellent ignition behaviour with concentrated, stable flame
- 3 100% leak-proof with the shut-off valve
- 4 Impact-resistant, extremely robust and durable, with small dimensions
- **5** Flat and pointed copper heads useable

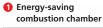


















Fig. Gas-heated Soldering Iron Set (No. 3.2025)

3 Smooth-turning economy valve

100% leak-proof

Special coupling Flat and pointed copper heads useable

> **Burner support** included!

Support for gas-heated soldering iron

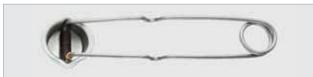
Safe use

4 Handle casing made of special plastic, fibreglass reinforced

Impact-resistant

Model	$\Delta_{kg}\Delta$	No.
Gas-heated Soldering Irons	0.7	3.2040
Gas-heated Soldering Irons (No. 3.2048),		
Copper head, flat 350 g (No. 3.2042)		
Gas-heated Soldering Irons - Set	1.0	3.2030
Safety handle with M 14 x 1 coupling		
(No. 3.1989), Gas-heated Soldering Irons (No. 3.204	l8),	
Copper head, flat 350 g (No. 3.2042)		
Gas-heated Soldering Irons - Set	1.3	3.2029
Safety handle with M 14 x 1 coupling		
(No. 3.1989), Gas-heated Soldering Irons		
(No. 3.2048), Copper head, flat 350 g		
(No. 3.2042), 2.5 m Propane hose (No. 3.2201)		





Model	$\Delta_{\text{kg}}\Delta$	No.
Gas-heated Soldering Irons - Set in case	5.7	3.2025
Safety handle with M 14 x 1 coupling		
(No. 3.1989), Gas-heated Soldering Irons		
(No. 3.2048), copper head, flat 350 g (No. 3.2042),		
2.5 m propane hose (No. 3.2201), open-ended span	nner	
(No. 3.2073), safety igniter (No. 3.2077),		
replacement flints (No. 3.2079), propane regulator		
(No. 3.2082), refilling adaptor (No. 3.2207), small p	ropane	
cylinder 0.5 kg (No. 3.3079), burner spanner		
(No. 3.5530), steel case (No. 3.5487)		

# **Special Copper Heads**

Made of cathode copper for gas-fired soldering irons

Model	ΔgΔ	No.
Copper Head 250 g flat	250	3.2041
Copper Head 350 g flat	350	3.2042
Copper Head 450 g flat	450	3.2043
Copper Head 350 g pointed	350	3.2044

ACCESS	ORIES		
Description			No.
Safety lighter	1	201	3.2077

# **Universal Soft Soldering Torches**

# **MULTI 300 Propane Soft Soldering Kit**

For soft soldering of copper pipes, for tin and lead soldering, for tinning, warming up, flame cleaning, etc.

# **Product Profile**

# **KEY FEATURES**

- For all types of fine soldering in the areas of electronics and telecommunications
- For working with lead (gutters, laminations and roof edging, ventilation shafts, etc.)

### **TECHNICAL DATA**

**Propane handle** with heat insulated wooden grip **Rotatable air / rotary valve** 

for the adjustment of an especially fine flame

Favourable working pressure with 1.5 bar

Rotatable hose coupling M10 x 1 L

With longer ball spindle and dual spring control



Fig. Multi 300 PROPAN Soft Soldering Kit

Model	∆kg∆	No.
MULTI 300 / Kit A without propane regulator	4.1	3.5486
MULTI 300 / Kit A with propane regulator (No. 3.2082)	4.3	3.5489
MULTI 300 / Kit B	9.0	3.5488

















**3-part** set (No. 3.5489) includes: Soft soldering iron copper head with 350 g flat (No. 52.0849), 2 m propane hose (No. 3.0927), small propane cylinder 0.5 kg with hook (No. 3.3079)

13-part set (No. 3.5488) includes: Soft soldering iron with copper head 350 g flat (No. 52.0849), soft soldering burner Ø 17 mm (No. 52.0856) / Ø 20 mm (No. 52.0857), wide burner 45 mm (No. 52.0845), propane regulator 0-6 bar (No. 3.2082), 2 m propane hose (No. 3.0927), small propane cylinder 0.5 kg with hook (No. 3.3079), refilling adaptor (No. 3.2207), burner spanner (No. 3.5530), open-ended spanner (No. 3.2073), safety igniter (No. 3.2077), replacement flints (No. 3.2088), steel case (No. 3.5487)

# **ACCESSORIES**























Description	$\sqrt{g}$	No.	Description	$\sqrt[]{g}$	No.
Soft Soldering iron with handle, iron burner,	940	52.0849	Copper Head 250 g flat	270	3.2098
Iron Holder, wind protector, copper head 350 g			Copper Head 350 g flat	270	3.2075
Soft Soldering iron with handle, iron burner,	570	52.0840	Soft soldering burner size 3 Ø 12 mm, M 15 x 1	370	52.0855
Iron Holder, wind protector, without copper hea	d		Soft soldering burner size 5, Ø 17 mm, M 15 x 1	70	52.0856
Handle with hose coupling M 10 x 1 L 300	300	52.0850	Soft soldering burner size 7, Ø 20 mm, M 15 x 1	120	52.0857
Iron Burner with coupling M 15 x 1	70	52.0865	Wide burner Ø 45 mm, M 15 x 1	120	52.0845
Iron Holder with foot	100	52.0866	Steel case	3390	3.5487
Wind protector	100	52.0867	Burner spanner	60	3.5530
Copper Head 250 g pointed	270	3.2099	Safety igniter with rolling file	60	3.2077
Copper Head 350 g pointed	370	3.2076	Replacement flints, tin with 5 pieces	15	3.2088

Propane surface-heating torch with Ø 63 mm high-performance burner









# **Product Profile**

# **APPLICATION AREA**

Ideal for roofing and asphalt work and for bonding of bituminous sheeting, large-scale burning of weeds, defrosting, insulation, shrinking, drying and warming up.

### **KEY FEATURES**

- 1 Large working range with 5 m propane hose
- High-performance burner with flame stabiliser
- Chrome plated with a reinforced edge
- Burner support



**TECHNICAL DATA** 

600 mm burner tube

**Burner support** 

5 m Propane hose

Large working range



Ø 63 mm

5-part set (No. 3.0954E) includes: Propane handle (No. 3.0910D), 63 mm high-performance burner (No. 3.2163), 600 mm burner tube (No. 3.2160), 5.0 m propane hose (No. 3.2203), burner support (No. 3.2213)

Model	$\Delta_g \Delta$	No.
Roofing-Set	1920	3.0954E
Burner support	60	3.2213

# **Surface-heating Burner Heads**

High-efficiency burner heads with flame stabilisers, made of special chrome plated steel, reinforced edge. For warming up, shrinking, insulating, hardening, general repair work, etc. Threaded M 20 x 1 coupling





g/h 2 bar

2500

3800

6700

Surface-heating



kWh – kcal – BTU

32.00 - 27500 - 109280

48.60 - 41800 - 165970

85.70 - 73700 - 292670

burner heads, closed



No.

3.2045

3.2051

3.2063

see page 187

# **Extensions**

Special tube, chrome plated, angled 40°, inlet M 14 x 1, outlet M 20 x 1



mm	$\sqrt[4]{g}$	No.	<b>L</b> mm	$\sqrt{g}$	No.
60	80	3.2105	350	190	3.2135
100	90	3.2110	600	290	3.2160
200	120	3.2120	750	470	3.2175

600 mm burner tube with support and 5.0 m propane hose



Improved ergonomics for fatigue-free work

mm

102

112

138

mm

45

51

57

63



High-performance burner with

240

270

440











# 1

# **Propane Accessories**

# **Closed Warming-up Burner Heads**

High-efficiency burner heads with flame stabilisers, closed and not sensitive to wind. Made of special chrome plated steel, with reinforced edge. For warming up, shrinking, insulating, hardening general repair work, etc. Threaded M 20 x 1 coupling

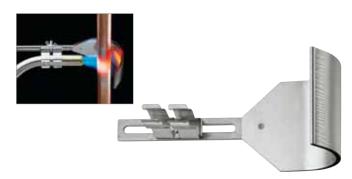
<b>►</b> mm	<b>L</b> mm	g/h 2 bar	kWh – kcal – BTU	$\Delta_{g}\Delta$	No.
45	102	2500	32.00 - 27500 - 109280	240	3.2111
51	112	3800	48.60 - 41800 - 165970	270	3.2112
57	126	5500	70.35 – 60500 – 240257	350	3.2113
63	138	6700	85.70 - 73700 - 292670	440	3.2114



# **Flame Reflectors**

- Made of high-quality stainless steel
- Protects surrounding materials
- For pipe soldering, to mount onto burner
- Better heat utilisation, saves time and energy
- Even warming of the pipe

Model	Width mm	Coupling Ø mm	ΔgΔ	No.
65 / 15	65	8 – 15	100	3.1042
65 / 22	65	15 – 22	100	3.1043



# **Safety Propane Handles**

With economy, regulating and shut-off valves, hose coupling R 3/8" L

Model	$\sqrt{g}$	No.
Safety handle with push-in coupling	350	3.1009
Safety handle with M 14x1 coupling	290	3.1989
Repair kit with shut-off valve, complete	10	3.0101
Repair kit with regulating valve, complete	10	3.0102
Repair kit for economy valve, complete	10	3.0103



# **Propane Regulators**

Brass, for 0.5 kg, 5 kg and 11 kg cylinders

	Working pressure Consumption					
Inlet	Outlet	Bar	kg/h	ΔgΔ	No.	
W 21.8 x 1/14" L	R 3/8" L	0,5 - 4.0	8	240	3.2081E	
R 3/8" L	R 3/8" L	0.5 - 4.0	8	200	3.2082	
W 21.8 x 1/14" L	R 3/8" L		10	270	3.2100	
W 21.8 x 1/14" L	R 3/8" L		8	230	3.0925	



# **Propane Hoses**

Top quality, DIN / DVGW tested, with strong inlay, durable and flexible, mounted with sleeves and nuts in middle (DK 6) or high-pressure (DK 30) versions

m L	Inlet	Outlet		Inner-Ø mm wall thickness	∑g ∆	No.
2	R 3/8" L	M 10 x 1 L	DK 6	4.0 x 3.5	310	3.0927
2.5	R 3/8" L	R 3/8" L	DK 6	4.0 x 3.5	350	3.2201
5	R 3/8" L	R 3/8" L	DK 30	4.0 x 4.0	730	3.3310
10	R 3/8" L	R 3/8" L	DK 30	6.3 x 5.0	1650	3.2223





# **Refilling Adaptor**

For refilling 0.5 propane cylinders from 3.5 or 11 kg propane cylinders, brass with guide pin

Inlet	Outlet	$\Delta_g \Delta$	No.
W 21.8 x 1/14" L	R 3/8" L	160	3.2207



# **Propane Hose Failure Protection**

Nominal pressure 1.5 - 4 bar, brass, DIN / DVGW tested

Automatic interruption of gas supply if hose is damaged or loosened, push-button for resetting after interruption

Inlet	Co Outlet	onsumptio kg/h	on Pressure class	- \( \sigma \)	No.
R 3/8" L	R 3/8" L	10	blue	130	3.5925



# **Propane Constant Regulator**

Adjusted to 4.0 bar, for connecting to 5 and 11 kg cylinders

Inlet	Co Outlet	nsumpti kg/h	on $\sqrt{g}$	No.
W 21.8 x 1/14" L	R 3/8" L	8	230	3.0925



# **Propane Regulator with Pressure Gauge**

Adjustable from 0.5 - 4 bar, for connection to 5 and 11 kg cylinders

	Consumption Outlet kg/h $\sqrt[]{g}$ N				
Inlet	Outlet	kg/h	$\Delta_g \Delta$	No.	
W 21.8 x 1/14" L	R 3/8" L	10	270	3.2100	



With 0.5 kg cylinder Protective collar included in delivery



# **Propane Lightweight Steel Cylinder**

With cylinder valve, TÜV tested, according to TRG

Model	Outlet	Contents	$\Delta_{kg}\Delta$	No.
Small cylinder, 0.5 kg with foot Cylinder 5 kg, with foot and cap	R 3/8"			3.3079 3.1081
W 21.8 x 1/14" L Collar				3.5636

# **Mobile Gas-Welding Equipment**

# **ALLGAS 2000**

# Mobile soldering and welding torch

Ideal mobile soldering and welding torch for plumbers, HVAC fitters, refrigeration technicians, automotive workshops and tinsmiths







# **Product Profile**

# **KEY FEATURES**

- 1 For use with all conventional gases and cylinder oxygen
- 2 Practically complete emptying of gas cylinders (money-saving)
- 3 Super compact for working in confined spaces
- 4 Efficient and economical professional use

# **TECHNICAL DATA**

Soldering range:

up to 2.5 mm material

thickness

Welding range: Suitable for use with: 0.2 - 5 mm Oxy-Acetylene

Propane and oxygen CNG and oxygen

Town gas and oxygen

# Suitable for use with the following gases:

- Oxy-Acetylene
- Propane with oxygen
- CNG and oxygen
- Town gas and oxygen

2 Low gas pressure of only 0.2 bar

> Practically complete emptying of gas cylinders (money saving) for use with all conventional gases and cylinder oxygen

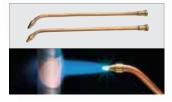
3 Small, very light handle (280 g)

Super compact for working in confined spaces



For use with all conventional gases and cylinder oxygen

# Flexible pipe welding tips



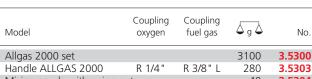
Dispersion nozzle for warming up

Welding tip holder can also be used as spanner



4 Economical





Mixing nozzle with union	n nut	40	3.5304
Welding tips, Welding attachments Size Brazing range mm		ΔgΔ	No.
Size 1	0.2 - 1.0	10	3.5305
Size 2	1.0 - 2.0	10	3.5306
Size 3	2.0 - 3.0	10	3.5307
Size 4	3.0 - 4.0	10	3.5308
Size 5	4.0 - 5.0	10	3.5309
Dispersion nozzle for wa	arming up 20		3.5311
Welding tip holder, can	be used as a spanner	20	3.5312
Size 1	2.0 - 3.0	40	3.5313
Size 2	4.0 - 5.0	40	3.5314
Coupling / union nut, siz	ze 14 10		3.5315
You will find further acce	essories on 200		



ROTHENBERGER

Fig. ALLGAS 2000 Set

20-part set (No 3.5300) includes: Handle (No. 3.5303), mixing nozzle with union nut (No. 3.5304), 5 welding tips Ø 0.2 mm (No. 3.5305) / Ø 1 - 2 mm (No. 3.5306) / Ø 2 - 3 mm (No. 3.5307) / Ø 3 - 4 mm (No. 3.5308) / Ø 4 - 5.0 mm (No. 3.5309), pipe welding tips, size 1 (No. 3.5313) / size 2 (No. 3.5314), coupling nut size 14 (No. 3.5315), dispersion nozzle (No. 3.5311), 2.5 m dual-hose package (No. 3.5221), open-ended spanner size 14 x 19 mm (No. 3.2073), welding tip holder / spanner (No. 3.5312), safety igniter (No. 3.2077), replacement flints (No. 3.2088), steel case (No. 3.5319)

# **Mobile Brazing Equipment**

# **ALLGAS 2000 PS 0.5 / 2 Compact**

## Portable fitter's brazing equipment

For brazing iron, steel, sheet steel, pipes and non-ferrous metals

# **Product Profile**

# **KEY FEATURES**

- Portable, light fitter's brazing equipment
- Ideal for mobile building-site and repair use
- Small propane cylinders can be refilled

### **TECHNICAL DATA**

**Transport secure:** In compliance with DIN EN 962,

BGV D34,

**Gas:** Propane with oxygen

**Flame temperature:** 2850 °C **Working temperature:** 1150 °C

### Carrying comfort



22-part set (No. 3.5655) includes: Handle Allgas 2000 (No. 3.5303), 2.5 m propane hose (No. 3.2201), 2.5 m oxygen hose (No. 3.5210), propane regulator adjustable 0 - 6 bar (No. 3.2082), oxygen pressure reducer 10 bar (No. 3.5634), mixing nozzle with union nut (No. 3.5304), welding tips 0.2-1 mm (No. 3.5505) / 1 - 2 mm (No. 3.5306) / 2 - 3 mm (No. 3.5307) / 3 - 4 mm (No. 3.5308) / 4-5 mm (No. 3.5309), pipe-welding tips, flexible size 1 (No. 3.5313) / size 2 (No. 3.5314), dispersion nozzle (No. 3.5311), welding tip holder / spanner (No. 3.5312), multi-size spanner (No. 3.5738), safety igniter (No. 3.2077), replacement filints (No. 3.2088), nylon safety goggles (No. 54.0620), small propane cylinder 0.5 kg, empty (No. 3.3079), steel oxygen cylinder 2.0 l, full (No. 3.5635), carrying frame (No. 3.5629)

















Model	$\Delta_{kg}\Delta$	No.
Allgas 2000 PS 0.5 / 2 Set	21.4	3.5655
Carrying frame without accessories	10.3	3.5629
You will find further accessories on 200		

# **ALLGAS 2000 Welding Tips**







No. 3.5311





Welding Tip

Size	Welding range mm	$\Delta_g \Delta$	No.
Size 1	0.2 - 1.0	10	3.5305
Size 2	1.0 - 2.0	10	3.5306
Size 3	2.0 - 3.0	10	3.5307
Size 4	3.0 - 4.0	10	3.5308
Size 5	4.0 - 5.0	10	3.5309
Dispersion nozzle for warming up		20	3.5311
Welding tip holder can be used as spanner		20	3.5312

# **Pipe-welding Tips, flexible**





4,0 - 5,0

3.5314

10

3.5315



Size 2

Coupling / union nut, size 14

# **Mobile Brazing Equipment**

# **ALLGAS 2000 PS 0.5 / 2 Basic**

### Portable fitter's brazing equipment

For brazing iron, steel, sheet steel, pipes and non-ferrous metals

# **KEY FEATURES**

- Compact and handy construction for mobile building-site and repair use
- Job compatible combination, assembled and ready to use



Space saving storage in service vehicles

**18-part** set (No. 3.5651) includes: Handle Allgas 2000 (No. 3.5303), 2.5 m propane hose (No. 3.2201), 2.5 m oxygen hose (No. 3.5210), propane regulator adjustable 0 - 6 bar (No. 3.2082), oxygen pressure reducer 10 bar (No. 3.5634), mixing nozzle with union nut (No. 3.5304), welding tips 0.2 - 1 mm (No. 3.5305) / 1 - 2 mm (No. 3.5306) / 2 - 3 mm (No. 3.5307) / 3 - 4 mm (No. 3.5308) / 4 - 5 mm (No. 3.5309), welding tip holder / spanner (No. 3.5312) multi-size spanner (No. 3.5738), safety igniter (No. 3.2077), replacement flints (No. 3.2088), steel oxygen cylinder 2.0 l, filled (No. 3.5635) Allgas stand (No. 3.5628)

Model	$\sqrt[]{\log \Delta}$	No.
Allgas 2000 PS 0.5 / 2 Set	14.4	3.5651
Allgas 2000 PS 0.5 / 2 Set	14.4	3.5652
You will find further accessories on 200		













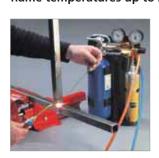


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Set (No. 3.5652) includes: As in set (No. 3.5651), additionally oxygen pressure reducer (No. 3.5677), oxygen cylinder 2 I (No. 3.5770), welding tips 2 - 3 (No. 3.5313), welding tips 4 - 5 (No. 3.5314), dispersion nozzle (No. 3.5311), nylon safety goggles (No 54.0620), carrying frame Allgas (No. 3.5629) The following articles are not included in set: (No. 3.5635), (No. 3.5305), (No. 3.5628), (No. 3.5634), (No. 9.4044), (No. 9.1929), (No. 9.1930), (No. 9.2778)

# **ROXY 400 L**

Standard gas-welding equipment for flame temperatures up to 3100 °C





**20-part** set (No. 3.5780) includes: Handle with fine regulating valve (No. 3.5580), Maxigas 400 (No. 3.5570), oxygen cylinder 2.0 L (No. 3.5635), fine regulating valve (No. 3.5723), oxygen pressure reducer according to DIN 0-315 / 200 bar 0-16 / 10 bar (No. 3.5634), oxygen hose (No. 3.5410), propane hose (No. 3.5525), oxygen blowback protection (No. 3.5678), gas blowback protection (No. 3.5691), mixing nozzle with union nut (No. 3.5587), high-performance tips 1.5 mm (No. 3.5422) / 2.0 mm (No. 3.5423), micro-tips 0.3 mm (No. 3.5712) / 0.5 mm (No. 3.5696) / 0.7 mm (No. 3.5713), micro-tip adaptor (No. 3.5585), welding goggles A5 (No. 3.5621), safety igniter (No. 3.2077), multi-size spanner (No. 3.5738) carrying frame (No. 3.5727)

Model	$\sqrt[4]{\log \Delta}$	No.
Roxy 400 L Set	10.8	3.5780
Accessories		
Roxy welding handle Profi	0.01	3.5580
Roxy hose package	0.60	3.3301
(including handle and 1.5 m hose)		
Dual hose kit (3 m without handle)	0.95	3.5421E

















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# **RE 17 UNIVERSAL Set**

For welding, cutting, brazing and warming up Welding range: 0.5 - 14 mm, Cutting range: 3 - 100 mm









Set (No. 3.5479) includes: Handle with coupling nut (No. 3.5324), welding tips 2 - 4 mm (No. 3.5327) / 4 - 6 mm (No. 3.5328) / 6 - 9 mm (No. 3.5329), pipe-welding tips 2 - 4 mm (No. 3.5347) / 4 - 6 mm (No. 3.5348), wing-lever cutting attachment (No. 3.5338), Cutting tip 3 - 25 mm (No. 3.5341), Heating nozzle 3 - 100 mm (No. 3.5339), Nozzle cleaning set, 10 piece (No. 51.0105), burner spanner (No. 51.0106), safety igniter (No. 3.2077), replacement flints (No. 3.2088), steel case (No. 3.5800)

►O Nominal size	$\sqrt[]{\log \Delta}$	No.
RE 17 Pipe-welding kit	4.3	3.5479
RE 17 Universal kit	4.8	3.5480
As in set (No. 3.5479), but also including		
with welding tips 0.5-1 mm (No. 3.5325) /		
1-2 mm (No. 3.5326), cutting tip 25-50 mm		
(No. 3.5341) / 25-50 mm (No. 3.5344)		
Steel case RE 17 (empty)	1.70	3.5800
RE 17 handle with burner coupling nut	0.47	3.5324
Coupling: oxygen R 1/4", gas R 3/8" L		

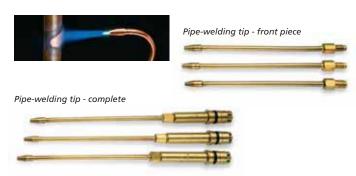




# **RE 17 Welding Tips**

Pipe-welding tips

Welding range mm	$\Delta_{kg}\Delta$	No.
0.5 – 1	140	3.5325
1 – 2	150	3.5326
2 – 4	170	3.5327
6 – 9	220	3.5329
9 – 14	260	3.5334
14 – 20	280	3.5335



# **RE 17 Pipe-welding Tips, flexible**

Welding range mm	ΔgΔ	No.	Welding range mm	ΔgΔ	No.
1 - 2	40	3.5346	1 - 2	130	3.5475
2 - 4	40	3.5347	2 - 4	140	3.5476
4 - 6	50	3.5348	4 - 6	150	3.5477

Flexible copper tips



# **RE 17 Wing-lever Cutting Attachment**

Model	ΔgΔ	No.
Cutting Attachment without tips	820	3.5338

# **RE 17 Cutting Tips and Heating Nozzle**

Model	Cutting range mm	ΔgΔ	No.
Cutting Tip	3 - 25	10	3.5341
Cutting Tip	25 - 50	20	3.5344
Cutting Tip	50 - 100	20	3.5345
Heating Nozzle	3 - 100	50	3.5339

# **Gas-Welding Equipment**

# **RE 17 UNIVERSAL THREE-GAS System AMS 5/5**

Assembly, welding, cutting and brazing system Welding range 0.5 - 14 mm, Cutting range 3.0 - 50 mm















27-part set (No. 3.5401) includes: Handle with coupling nut (No. 3.5324), welding tips 0.5 - 1 mm (No. 3.5325) / 1 - 2 mm (No. 3.5326) / 2 - 4 mm (No. 3.5327) / 4 - 6 mm (No. 3.5328) / 6 - 9 mm (No 3.5329) / 9 - 14 m (No. 3.5334), wing-lever cutting attachment (No. 3.5338), cutting tips 3-25 mm (No. 3.5341) / 25 - 50 mm (No. 3.5344), heating nozzle 3-100 mm (No. 3.5339), 5 m dual-hose package A / S (No. 3.5222), acetylene pressure reducer 1.5 bar (No. 3.5794), oxygen pressure reducer 10 bar (No. 3.5634), 2 each - protective rubber caps, red (No. 51.1428) / blue (No. 51.1427), 10 piece nozzle cleaning set (No. 51.0105), burner spann (No. 51.0106), safety igniter (No. 3.2077), replacement flints (No. 3.2088), acetylene cylinder 10 l (filled) (No. 3.5179), oxygen cylinder 10 l (filled) (No. 3.5189), Maxigas 400 (No. 3.5570), gas regulating valve Maxigas (No. 3.5723), hose adaptor Maxigas (No. 3.5491), steel case (No. 3.5800), dual-telescoping transport trollev (No. 3.5354)



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Model	$\Delta_{kg}\Delta$	No.
RE 17 Universal Three-gas System AMS 5/5	50	3.5400

# **RE 17 UNIVERSAL THREE-GAS System AMS 5 or 10**

Assembly, welding, cutting and brazing system Welding range 0.5 - 14 mm, Cutting range 3.0 - 50 mm

















25-part set (No. 3.5403) includes: Handle with coupling nut (No. 3.5324), welding tips 0.5 - 1 mm (No. 3.5325) / 1 - 2 mm (No. 3.5326) / 2 - 4 mm (No. 3.5327) / 4 - 6 mm (No. 3.5328) / 6 - 9 mm (No 3.5329) / 9 - 14 m (No. 3.5334), wing-lever cutting attachment (No. 3.5338), cutting tips 3-25 mm (No. 3.5341) / 25 - 50 mm (No. 3.5344), heating nozzle 3-100 mm (No. 3.5339), 5 m dual-hose package A / S (No. 3.5222), acetylene pressure reducer 1.5 bar (No. 3.5794), oxygen pressure reducer 10 bar (No. 3.5634), 2 each - protective rubber caps, red (No. 51.1428) / blue (No. 51.1427),10 piece nozzle cleaning set (No. 51.0105), burner spanner (No. 51.0106), safety igniter (No. 3.2077), replacement flints (No. 3.2088), Maxigas 400 (No. 3.5570), gas regulating valve Maxigas (No. 3.5723), hose adaptor Maxigas (No. 3.5491), steel case (No. 3.5800), dual-telescoping transport trolley (No. 3.5354)



Model	$\Delta_{kg}\Delta$	No.
RE 17 Universal Three-gas System AMS 5 + 10	23	3.5403

# **RE 17 UNIVERSAL THREE-GAS System AMS 10/10**

Assembly, welding, cutting and brazing system Welding range 0.5 - 14 mm, Cutting range 3.0 - 50 mm

















27-part set (No. 3.5401) includes: Handle with coupling nut (No. 3.5324), welding tips 0.5 - 1 mm (No. 3.5325) / 1 - 2 mm (No. 3.5326) / 2 - 4 mm (No. 3.5327) / 4 - 6 mm (No. 3.5328) / 6 - 9 mm (No 3.5329) / 9 - 14 m (No. 3.5334), wing-lever cutting attachment (No. 3.5338), cutting tips 3-25 mm (No. 3.5341) / 25 - 50 mm (No. 3.5344), heating nozzle 3 - 100 mm (No. 3.5339), 5 m dual-hose package A / S (No. 3.5222), acetylene pressure reducer 1.5 bar (No. 3.5794), oxygen pressure reducer 10 bar (No. 3.5634), 2 each - protective rubber caps, red (No. 51.1428) / blue (No. 51.1427), 10 piece nozzle cleaning set (No. 51.0105), burner spanner (No. 51.0106), safety igniter (No. 3.2077), replacement flints (No. 3.2088), acetylene cylinder 10 l (filled) (No. 3.5179), oxygen cylinder 10 l (filled) (No. 3.5189), Maxigas 400 (No. 3.5570), gas regulating valve Maxigas (No. 3.5723), hose adaptor Maxigas (No. 3.5491), steel case (No. 3.5800), dual-telescoping transport trolley (No. 3.5354)

Including gas cylinders and dual-telescoping transport trolley

- No. 3.5798 as in 3.5401 for cutting range 3.0 - 25 mm
- No. 3.5799 like 3.5401 without cylinders

The bottle colours shown are without obligation!

Model	$\Delta_{kg}\Delta$	No.
RE 17 Universal Three-gas System AMS 10 / 10 RE 17 as in 3.5401, cutting range 3.0 - 25 mm RE 17 without cylinder	65	3.5401 3.5798 3.5799



# **ROFLASH-Set**

Welding and cutting kit
Welding range: 0.5 - 14 mm, Cutting range: 3 - 75 mm











# Exchange of the welding tip

Can be used with all types of gas

Cutting oxygen valve with spring-lever

Enables one-handed use for spray-free cutting, etc.

**22-part** set (No. 51.3300) includes: Handle (No. 51.3010), welding tips 0.2 - 0.5 (No. 51.3030), 0.5 - 1 (No. 51.3031), 1 - 2 (No. 51.3032), 2 - 4 (No. 51.3033), 4 - 6 (No. 51.3034), 6 - 9 (No. 51.3035), 9 - 14 (No. 51.3036), spring-lever cutting attachment (No. 51.3310), cutting tips 3 - 6 (No. 51.3330), 6 - 20 (No. 51.3331), 20 - 75 (No. 51.3332), cutting burner guiding wagon, burner spanner (No. 51.0106), nylon safety goggles (No. 54.0621), 10 piece nozzle cleaning set (No. 51.0105), hose nozzle R 1/4" 4 mm (No. 54.0221), hose nozzle R 3/8" 6 mm (No. 54.0223), coupling nut R 1/4" (No. 54.0210), coupling nut R 3/8" (No. 54.0210), coupling nut R 3/8" (No. 54.0210).

Model	$\sqrt[b]{\log \Delta}$	No.
ROFLASH Set	4.2	51.3300



# **ROFLASH Handle**

Welding kit handle

# **KEY FEATURES**

- The new monoblock valves enable the precise adjustment and accurate control of the flame
- Comfortable one-handed use with the v-formed valve arrangement

Model	$\Delta_g \Delta$	No.
ROFLASH Handle	434	51.3010



# **ROFLASH Spring-lever Cutting Attachment**

# KEY FEATURES

- Less repair costs through the kit system and maintenance-free monoblock valve
- The solid burner is made from forged brass and can withstand the highest thermal demands and also enables use under extreme conditions

Model	$\triangle$ g $\triangle$	No.
ROFLASH Spring-lever Cutting Attachment	582	51.3310



# **ROFLASH Welding Tips**



O2-Consumption	Material thickness (mm)	$\Delta_{g}\Delta$	No.
approx. 401/h	0.2 - 0.5	96	51.3030
approx. 801/h	0.5 - 1.0	96	51.3031
approx. 160 l / h	1.0 - 2.0	104	51.3032
approx. 3151/h	2.0 - 4.0	117	51.3033
approx. 500 l/h	4.0 - 6.0	128	51.3034
approx. 800 l / h	6.0 - 9.0	148	51.3035
approx. 1250 l / h	9.0 - 14.0	171	51.3036

# **Acetylene Brazing Equipment**

# **AIRAC®**

# Acetylene brazing torch up to Ø 60 mm with 2350 $^{\circ}$ C flame temperature

High-performance injection burner - only for acetylene - for brazing /









# **Product Profile**

# KEY FEATURES

 Oxygen from the surrounding air and acetylene are fed without pressure into the burner and with the special construction of the burner produce a flame temperature of 2,350° C with a concentrated, pointed flame for precise and fast work warming up of copper and steel pipes up to Ø 60 mm.

# **KEY FEATURES**

- Scale build-up on the treated surface is prevented by the nitrogen that is introduced into the air flow (shielding gas effect)
- Maximal performance with the turbine and combustion chamber effect
- 2 Shut-off valve prevents uncontrolled gas leaks
- 3 Gas-saving use with the smooth-running economy valve



# **AIRAC® Safety Handle**

Safety handle with economy, regulating and shut-off valve, threaded coupling M  $16 \times 1$ , hose coupling R 3/8" L

Model	∑ <sub>g</sub> ∆	No.
Safety Handle	290	3.4991
Repair kit for shut-off valve, complete	10	3.0101
Repair kit for regulating valve, complete	10	3.0102
Repair kit for economy valve, complete	10	3.0103



# **AIRAC® Brazing Torch**

Made of surface-handled brass, stable and concentrated flame

Model	Pipe Ø	ΔgΔ	No.
Bend with nut (150 mm)		80	3.5110
Size 2	12 - 15	40	3.5022
Size 3	18 - 22	50	3.5023
Size 4	28 - 35	70	3.5024





# **Oxy-Acetylene Hoses**

Top quality in accordance with DIN 8541, with strong inlay, durable and flexible, rubber, mounted with sleeves and nuts



# **Oxygen Hoses**

m	Inlet	Inte Outlet	ernal Ø x wall thicki mm	ness $\sqrt[]{kg}$	No.
5	R 1/4"	R 1/4"	6.0 x 3.5	1.1	3.3311
10	R 1/4"	R 1/4"	6.0 x 3.5	1.9	3.3314

# **Acetylene Hoses**

<mark>⊩_</mark> d m	Inlet	Inter Outlet	nal Ø x wall thickr mm	hess $\sqrt{\log \Delta}$	No.
2.5	R 3/8"	R 3/8" L	6.0 x 3.5	0.5	3.5203
5	R 3/8"	R 3/8" L	6.0 x 3.5	1.1	3.3312
10	R 3/8"	R 3/8" L	6.0 x 3.5	1.9	3.3315

# **Dual Hoses A/S**

m	Coupling Oxygen	Coupling In Outlet	nternal Ø x wall thickne Oxygen / Acetylene	ess $\sqrt{kg}$	No.
2.5	R 1/4"	R 3/8" L	6.0 x 3.5	0.9	3.5221
5	R 1/4"	R 3/8" L	6.0 x 3.5	2.0	3.5222
10	R 1/4"	R 3/8" L	6.0 x 3.5	3.8	3.5223
40*	R 1/4"	R 3/8" L	6.0 x 3.5	9.1	3.5230

<sup>\*40</sup> m hose without sleeves and nuts



Included in delivery for steel cylinders without cap, protective bracket



The bottle colours shown are without obligation!

# **Lightweight Steel Cylinders, filled**

With cylinder valve, base and cap from 5 l, TÜV-tested in accordance with TRGI  $\,$ 



Model	Fill Contents	ing pressure bar	Height mm	Ø mm	$\Delta_{kg}$	No.
Oxygen	0.67	200	400	80	2.5	3.5736
Oxygen	2	200	420	110	4.6	3.5635
Oxygen	5 l	200	595	145	14.0	3.5188
Oxygen	10 l	200	980	145	17.0	3.5189
Acetylene	5	18	595	145	13.0	3.5178
Acetylene	10 l	18	980	145	23.0	3.5179





# **Cylinder Transport Trolley**

Portable and mobile, for 5 and 10 l acetylene / oxygen cylinders, 5 kg and 12 kg propane cylinders can be used with conversion kit (special accessory). Coupling for disposable MAXIGAS 400 cartridges, dual-telescoping for different cylinder heights, brackets for ALLGAS and RE 17 steel cases.

Model	$\Delta_{kg}\Delta$	No.
Transport Trolley for	8.9	3.5354
5 / 10 l acetylene / oxygen cylinders		
Conversion kit for adaption of		3.5342
Propane 0.5 kg / oxygen 5 l and 10 l cylinders		
Propane 5 kg		3.5343

# **Accessories for Gas Welding**

# **Cylinder Pressure Reducer**

Rugged pressed brass construction with large pressure gauge according to **DIN 8549** (Ø 63 mm), with shut-off and safety valves, one-stage design according to **DIN 8546** with test mark

Cylinder conter bar	nts Working pressur bar	e Inlet	Abgang	$\Delta_{kg}\Delta$	No.
Oxygen 0 - 315 / 200	0 - 16 / 10	R 3/4"	R 1/4"	1.4	3.5634
Acetylene 0 - 40	0 - 2,5/1,5	R 3/4"	R 3/8" L	1.6	3.5794



# **Blowback Prevention**

Torch-mounted flashback arrestors, type-tested, with flame trap, flow lock, non-return valve and dirt filter

Model	max. Operating pressure		ΔgΔ	No.
Handle-mounted, oxygen	20 bar	R 1/4"	190	54.0320
Handle-mounted, acetyler	ne 1.5 bar		190	54.0321
Reducer-mounted, oxyger	n 20 bar	R 1/4"	190	54.0360
Reducer-mounted, acetyle		R 3/8" L	190	54.0365



# **Protective Guard for Pressure Reducer**

Impact protection, rugged steel construction, mounts on connection coupling

Model	Colour	$\Delta_g \Delta$	No.
For oxygen pressure reducer For acetylene pressure reducer	blue yellow		3.5146 3.5140





# No. 3.5146

# **Protective Rubber Cap**

With slot, open

Model	Colour	ΔgΔ	No.
For oxygen pressure reducer	blue	50	51.1427
For acetylene pressure reducer	red	50	51.1428







# **Oxygen Refilling Bend**

Model	$\sqrt[4]{g}$	No.
max. 200 bar, cylinder coupling R 3/4"	360	3.5199



# **Safety Igniters**

Powerful spark, wear-free hard alloy friction surface

Model	$\sqrt[4]{g}$	No.
Safety Igniter with rolling file	60	3.2077
Replacement flints, tin with 5 pieces	15	3.2088





No. 3.2077

No. 3.2088

# **Stirrup Lighter**

Description	$\Delta_g \Delta$	No.
Stirrup Lighter, with friction roller and flint stone	50	54.0800
Replacement flints 3 x 20 mm	10	54.0801





# **Hand-held Welding Mirror**

Model	∆ <sub>g</sub> ∆	No.
Steel wire handle with clamp / ball joint Spare steel mirror		54.0850 54.0851

# **Magnet Welding Mirror**

Model	ΔgΔ	No.
With flexible metal tube / ball joint	450	54.0855
Spare steel mirror	50	54.0851



# **Nozzle Cleaner**

Model	∆ <sub>g</sub> ∆	No.
10 piece, in folding case	20	51.0105



# **Burner Spanner**

Model	$\Delta_g \Delta$	No.
With 11 SW	210	51.0106



# **Soldering Flux and Container for Hydrochloric Acid**

Model	∆ <sub>g</sub> ∆	No.
With screw cap retaining band	40	53.0250



# **Salmiakstone**

Mode	I	LxWxH		$\sqrt[]{g}$	No.
Press	ed	65 x 45 x 40 mm	n 1	15	53.0310



# **Soapstone Marker**

Model	LxWxH		ΔgΔ	No.
White, heat-resistant	100 x 10 x 10 mm	10	30	56.1550

**DIN** -Norm



# **Welding Goggles**

With thermal glasses as  $\operatorname{\textbf{per}} \operatorname{\textbf{DIN}}$ 

Model	Glass	∆g∆	No.
Nylon safety goggles	A 4	60	54.0620
	A 5	60	54.0621
	clear, non-splintering	60	54.0622
Replacement glass (pair)	A 4	30	54.0625
	A 5	10	54.0626
	clear, non-splintering	30	54.0627
Screw-ring safety goggles	A 4	90	54.0640
	A 5	90	54.0641
Replacement glass (Ø 50 mm)	) A 4	30	54.0675
	A 5	10	54.0676



# **Accessories for Gas Welding**

# **ROVLIES® Cleaning Pads**

Metal-free, for fast, score-free cleaning of copper pipe soldering surfaces

# **KEY FEATURES**

- Reduced corrosion damage
- No metal abrasion
- Removes oxide layers, corrosion, surface dirt, oil and grease residues
- Flexible
- Can be used wet or dry
- Solvent-resistant

Model			$\Delta_g \Delta$	No.
ROVLIES®	1(10)		80	4.5268
ROVLIES® counter display		36(10)	2180	4.5268D





# **Internal Brushes for Copper Pipe**

For fast cleaning of the soldering surface, rugged plastic handle

mm	ΔgΔ	No.
8	60	85.4179
10	70	85.4180
12	80	85.4181
14	90	85.4182
15	100	85.4183

mm	ΔgΔ	No.
16	120	85.4184
18	120	85.4185
22	140	85.4186
28	140	85.4187
35	160	85.4188



# **External Brushes for Copper Pipe**

For fast cleaning of the soldering surface, tough housing

<b>▶</b>	ΔgΔ	No.
8	80 8	5.4189
10	90 8	5.4190
12	100	5.4191
14	110 8	5.4192
15	120 8	15 4193

mm	$\sqrt{g}$	No.
16	130	85.4194
18	140	85.4195
22	150	85.4196
28	160	85.4197
35	170	85.4198



# **Hand Wire Brushes**

Model	Number of rows	$\Delta_g \Delta$	No.
Standard steel	3 rows	130	56.1351
	4 rows	130	56.1352



# **Welding Blanket**

Offers protection up to 1000 °C from welding flames and heat. Melting point of 840 °C under direct flame contact. Reduced fire hazard, also in case of long working times, protect wall coverings, cables, carpets and other flammable materials. Highly flexible, good formability enables it to be used everywhere, long service life, asbestos-free, no health risk. Packed in plastic cover.

Model	LxWxH	ΔgΔ	No.
Welding Blanket	330 x 500 mm	300	3.1050





# **Electric Soft-Soldering Unit**

# **ROTHERM 2000**

Electric soft-soldering unit up to Ø 54 mm / 2.1/8"









### **Product Profile**

### **APPLICATION AREA**

For simple, safe and time-saving soft soldering without a flame. Particularly suitable for repair and modification work in surroundings or rooms with a fire hazard, as well as in building refurbishment

# **KEY FEATURES**

- 1 Soldering without open flame
- 2 Large working radius, also when working under ceilings
- 3 Comfortable transport and convenient use
- 4 High performance, short soldering times
- **5** Thermal overload protection turns device off automatically
- 6 Handle shell will not overheat
- Problem-free connection on every 230 V outlet, 2 m connection
- Fast return on investment

# **KEY FEATURES**

- No purchasing or handling of gas cylinders necessary
- Complies with all accident prevention / safety regulations and is therefore in accordance with the Device Safety Act

# **TECHNICAL DATA**

Soft soldering of

Copper pipes up to: Ø 6 - 54 mm, 1/4 - 2.1/8"

Power: 2000 Watt Solder gun cable: 4 m

260 x 190 x 200 mm Dimensions (L x W x H):

Power control lamp (red) and operating control lamp (green),

Equipment fuse accessible from the outside



110 V

50/60 Hz

3.6704 V

3.6715

3.6701 V

# **Electric Soft-Soldering Unit**

Fig. ROTHERM 2000 Set

 $\Delta_{kg}\Delta$ 

17.8

13.6

3.5

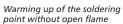
ROTHENBERGER

# **ROTHERM 2000 Soft-Soldering Unit**

# Electric soft-soldering unit up to Ø 54 mm / 2.1/8"

Set (No. 3.6702 / No. 3.6704V) includes: ROTHERM 2000 soft soldering unit 230 V (No. 3.6700), Rosol 3 fittings soldering paste No. 4.5225), fitting solder 3 (No. 4.5255), ROVLIES® (No. 4.5268), Cu. Internal brushes 10 mm (No. 85.4180) / 12 mm (No. 85.4181) / 15 mm (No. 85.4183) / 18 mm (No. 85.4185) / 22 mm (No. 85.4186), steel case (No. 3.6715)

> Particularly suitable for repair and modification work in surroundings or rooms with a fire hazard, as well as in building refurbishment





Rod electrodes for working near to the wall or between parallel running pipes with narrow gaps (can be ordered separately)







Model

Steel case

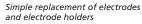






Rotherm 2000 Soft-soldering Set

Rotherm 2000 soft-soldering Unit



230 V

50/60 Hz

3.6702

3.6700

3.6715



## ACCESSORIES















Description	No.	Description	
Flat electrode (pair)	3.6721	ROVLIES®	203
Flat electrode with holder (pair)	3.6711	External brush for copper pipe	203
Rod electrodes (pair)	3.6720	Soft soldering flux	207
Rod electrodes with holder (pair)	3.6710	Solders	206, 211
		Internal brush for copper pipe	203

# **Fitting Soft Solder to DIN EN**

Standard type	Solder composition	Melting range	Suitable for soft soldering in the plumbing industry			Recommended heat source
according to DIN EN 29 453	in weight %	°C	Pipe Material	Fittings material	Recommended Flux according to DIN EN 29454	Cartridge burner, heat resistant solde- ring unit, Propane / induced-air burner,
S -Sn97Cu3	Sn 97 %, Cu 3 %	230 - 250°	Copper	Copper, gunmetal, brass	Part 1 - 3.1.1, 3.1.2, 2.1.2 or ROSOL 3	Acetylene / induced-air burner, Larger pipe diameters above 28 mm with pro-
S -Sn97Ag3	Sn 96.7 %, Ag 3.3 %	221 - 240°	Copper	Copper, gunmetal, brass	Part 1 - 3.1.1, 3.1.2, 2.1.2 or ROSOL 1 S	pane / oxygen burner with dispersion nozzle

# **Standard Solder according to DIN EN**

Standard	Solder	Melting	Working	Suitable for	r soft soldering in	the plumbing industry	Recommended	Recommended heat source
type according to DIN EN 1044	composition in weight %	range °C	temperature °C	Pipe Material	Fittings material	Flux	Flux according to DIN EN 29454	
CP 203	P 5.9 - 6.5 / Cu Rest	710 - 880°	730°	Copper	Copper gunmetal brass	without flux with flux	F-SH 1 or LP 5	
CP 105	Ag 1.5 - 2.5 / P 5.9 - 6.5 / Cu Rest	650 - 810°	710°	Copper	Copper gunmetal brass	without flux with flux	F-SH 1 or LP 5	
CP 104	Ag 4.0 - 6.0 / P 5.7 - 6.3 / Cu Rest	650 - 810°	710°	Copper	Copper gunmetal brass	without flux with flux	F-SH 1 or LP 5	Cartridge burner with MAPP® Gas,
CP 102	Ag 14.0 - 16.0 / P 4.7 - 5.3 / Cu Rest	650 - 800°	710°	Copper	Copper gunmetal brass	without flux with flux	F-SH 1 or LP 5	Propane / induced-air burner,
AG 306	Ag 29 - 31 / Cd 19 - 23 Cu 27 - 29 / Zn Rest	600 - 690°	680°	Steel copper	Steel, copper gunmetal brass	with flux (U = sheathed from 22 mm pipe-Ø)	F-SH 1 or LP 5	Acetylene / induced-air burner,  Larger pipe diameters above 28 mm with propane / oxygen burner with d
AG 106	Ag 33 - 35 / Cu 35 - 37 Sn 1.5 - 2.5 / Zn Rest	630 - 730°	710°	Steel copper	Steel, copper gunmetal brass	with flux (U = sheathed from 22 mm pipe-Ø)	F-SH 1 or LP 5	spersion nozzle
AG 304	Ag 39 - 41 / Cd 18 - 22 Cu 18 - 20 / Zn Rest	595 - 630°	610°	Steel copper	Steel, copper gunmetal brass	with flux (U = sheathed from 22 mm pipe-Ø)	F-SH 1 or LP 5	
AG 104	Ag 44 - 46 / Cu 26 - 28 Sn 2.5 - 3.5 / Zn Rest	640 - 680°	670°	Steel copper	Steel, copper gunmetal brass	with flux (U = sheathed from 22 mm pipe-Ø)	F-SH 1 or LP 5	

Application: For general soldering work on tinplate, copper, brass and for tinning - not suitable for drinking water installations and electronics.





**DIN** -Norm

# **Standard Solder**

Universal soft solder according to DIN EN 29 453 and flux according to DIN EN 29 454-1 2.1.1., S-Pb60Sn40, melting range 183  $^{\circ}$ C-236  $^{\circ}$ C

Solder wire Ø	Description	$\Delta_g \Delta$	No.
2 mm	100 g coil		4.5271
2 mm	250 g coil		4.5270

Application: For all soldering work in electrotechnology and communications - not suitable for drinking water installations.







DIN

-Norm

# **Radio Solder**

Quality soft solder according to DIN EN 29 453 and flux according to DIN EN 29 454-1 1.1.2, S-Pb60Sn40, melting range 183  $^{\circ}$ C - 236  $^{\circ}$ C

Solder wire Ø	Description	√g Å No	
2 mm 2 mm	100 g coil 250 g coil	110 <b>4.5261</b> 6 270 <b>4.526</b> 0	

Application: For soldering work in electro-technology electronics, miniature technology, printed circuits - not suitable for drinking water installations





# **Electronic Solder**

Quality soft solder according to DIN EN 29 453 and flux according to DIN EN 29 454-1 1.1.3, S-Su60, melting range 183  $^{\circ}$ C – 190  $^{\circ}$ C, activated without halogens, non-corrosive, all flux residues can remain on soldered joint without risk of corrosion

Solder wire Ø	Description	$\sqrt{g}$	No.
1.5 mm	100 g coil	110	4.5281
1.5 mm	250 g coil	270	4.5280

# **Soft Solders and Accessories**

# **Fittings Solders**

Quality soft solders in accordance with **DIN EN 29453** for joining copper pipes to copper, gunmetal and brass fittings for hot and cold-water plumbing in accordance with DVGW worksheet GW 2 without flux, for use with corresponding ROSOL fittings solder paste



Quality soft solder S-Sn97Aq3, melting range 221 °C - 240 °C, for use with ROSOL 1 S soldering paste

Solder wire Ø	Description	ΔgΔ	No.
2 mm	250 coil	270	4.5252
3 mm	100 coil	110	4.5251
3 mm	250 coil	270	4.5250





# **Fitting Solder 3**

Quality soft solder, S-Sn97Cu3, melting range 230 °C - 250 °C, for use with ROSOL 3 soldering paste

Solder wire Ø	Description	ΔgΔ	No.
2 mm	250 coil	270	4.5257
3 mm	100 coil	110	4.5256
3 mm	250 coil	270	4.5255





# **ROSOL Soldering Paste**

Quality soft solders according to DIN EN 29453, with flux core DIN EN 29454-1 3.1.1.C, with test mark DVGW Reg.-No. DV-0101AT2247, for joining copper pipes to copper, gunmetal and brass fittings for hot and cold-water plumbing in accordance with DVGW worksheet GW 7, metal content 60% by weight, flux residues are 100% water soluble.







No. 4.5220

No. 4.5225

# **ROSOL 1 S**

# Fittings solder paste

Quality soft soldering flux, metal content: S-Sn97Ag3, only for use with fitting solder 1 S.

Model	$\sqrt[]{g}$	No.
ROSOL 1 S in plastic bottle 250 g	270	4.5220

# **ROSOL 3**

# Fittings solder paste

Quality soft soldering flux, metal content: S-Sn97Cu3, only for use with fittings solder 3

Model	$\Delta_g \Delta$	No.
ROSOL 1 S in plastic bottle 250 g	270	4.5225

# Fittings Soft Solder Flux

According to DIN EN 29454-1 3.1.1.C, flux residues are 100 % water soluble, for joining copper pipes to copper, gunmetal, and brass fittings for hot and cold-water plumbing in accordance with DVGW worksheet GW 2 + GW 7, also suitable for generalpurpose soldering work.

Model	ΔgΔ	No.
Fittings Soft Solder Flux in plastic tube 35 ml	45	4.5266









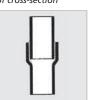




Precise quantity of solder



Simply heat, no dripping, no reduction of cross-section



# **Hard Solder Rings S 5**

High-quality safety solder material with silverphosphorus content, guaranteed according to DIN EN 1044, CP 105

### **KEY FEATURES**

- Ideal for capillary soldering with copper pipe installation in sanitary and heating systems
- No lost material through dripping
- Matched precisely to the inner pipe diameters of brushed pipes and fittings according to EN 1254
- Complete wetting of brushes
- Particularly efficient working through precise solder quantity
- No preparatory or re-work of the soldered joint

### **TECHNICAL DATA**

Alloy (weight %):

Melting range:

Joinable materials:

Use of flux with:

Package size:

Ag 1.5 - 2.5 / P 5.9 - 6.5 / Cu rest

Good C - 810 °C

Copper, gunmetal, brass, bronze

Gunmetal, brass, bronze with
hard solder paste LP 5

250 g plastic bag

Outside Ø mm	approx. Content rings	ΔgΔ	No.
12	395 pieces	260	4.0512
14	268 pieces	260	4.0514
15	244 pieces	260	4.0515
16	228 pieces	260	4.0516
18	186 pieces	260	4.0518
22	106 pieces	260	4.0522
28	79 pieces	260	4.0528



# **Hard Solder Paste LP 5**

Flux for hand soldering at working temperatures above 600 °C according to DIN EN 29454, Type F-SH 1, DVGW tested Reg.-No. DV-0101-AT2245,for gas and water installations with copper pipes, recommended by DVGW in accordance with Worksheets GW 2 and GW 7, hard solders with silver content and usable with any basic materials of steel, copper and copper alloys, brass and gunmetal, working temperature range 550 °C -800 °C, flux residues must be removed carefully

Description	$\sqrt[4]{g}$	No.
LP 5 in plastic bottle 160 g	180	4.0500



# **Hard Solder Powder HKM**

Flux for hard soldering at working temperatures above 800 °C, according DIN EN 29454, Type F-SH 2, working temperature 750 - 1100 °C, for copper and copper alloys, brass, gunmetal gunmetal, nickel silver, bronze, steel and galvanised steel, grey iron and malleable cast iron, for welding copper and brass in dry conditions, can be mixed with clean water to form a paste, flux residues must be removed carefully

Description			ΔgΔ	No.
HKM in plastic	bottle	160 g	180	3.5611



# Flux Brush

Description	Width mm	Length mm	∆ <sub>g</sub> ∆	No.
Flux Brush	13	140	20	53.0261

# **Hard Solders**

# For copper pipe installation

ROTHENBERGER ROLOT special hard solders are particularly suited for copper pipe installations in cold and hot water systems, for open and closed heating systems, for gas installations in accordance with DVGW Worksheet GW 2 (liquid, natural and town gas), as well as for HVAC and refrigeration applications, and oil pipes. ROTHENBERGER ROLOT is especially suited for capillary soldering of copper pipes without fittings. Copper / phosphorus / silver solders are highly formable, and are therefore recommended for joints that are subjected to high thermal and mechanical alternating loads.

# **KEY FEATURES**

- Non-foaming. Heat-resistant up to 200 °C
- No flux required with copper / copper joints
- Flux LP 5 is to be used when joining brass, gunmetal, copper, tin and copper / tin alloys
- Not to be used with materials containing sulphur, with iron / nickel alloys or with copper alloys containing nickel
- Manufactured with new, environmentally compatible technology, corrosion neutral, scale-free, improved flow properties



#### ROLOT® S 94 **CP 203**

Quality hard solder guaranteed according to DIN EN 1044, due to low phosphorus content, the solder has a wide melting range, and gives soldered joints with increased strength. Standard solder for normally-stressed copper pipe installation, especially for capillary soldering with copper pipe installation without fittings

### **TECHNICAL DATA**

P 5.9 - 6.5 Cu rest Alloy (weight %) 710 °C – 880 °C Melting range: Working temperature: 730°C

Copper, gunmetal, brass, bronze Joinable materials: Flux required with: Gunmetal, brass, bronze with LP 5 **Guaranteed according to DIN EN 1044** 

# ROTHENBERGER-ROLOT S94

Contents	Squared section mm	Length mm	$\sqrt{g}$	No.
1 kg carton	2 x 2	500	1025	4.0094
1 kg carton	3 x 3	500	1025	4.0095
5 kg-	2 x 2	500	5025	4.0094A
plastic bag				

# ROLOT® S 94 XN CP 203

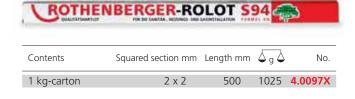
Quality hard solder guaranteed according to DIN EN 1044, due to low phosphorus content, the solder has a wide melting range, and gives soldered joints with increased strength. Standard solder for normally-stressed copper pipe installation, especially for capillary soldering with copper pipe installation without fittings

### TECHNICAL DATA

Alloy (weight %): P 5,9 - 6,5 Cu rest 710 °C - 880 °C Melting range: 730 °C Working temperature:

Joinable materials: Copper, gunmetal, brass, bronze Flux required with: Gunmetal, brass, bronze with LP 5

# **Guaranteed according to DIN EN 1044**



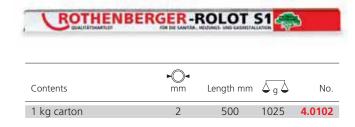
#### **CP 203** ROLOT® S 1

Special quality hard solder, not standardised, similar to DIN EN 1044, CP 203, for normally-stressed copper pipes systems, also for capillary soldering for copper pipe installations without fittings

# **TECHNICAL DATA**

Melting range: 710 °C - 880 °C Working temperature: 730°C

Joinable materials: Copper, gunmetal, brass, bronze Flux required with: Brass, gunmetal, bronze LP 5



Contents	Squared section mm	Length mm	ΔgΔ	No.
1 kg carton	2 x 2	500	1025	4.0202
1 kg carton	3 x 3	500	1025	4.0203

# ROLOT® S 2

## **CP 105**

Special quality hard solder, not standardised, similar to DIN EN 1044, with low silver content, matched to normally-stressed copper pipe system, ideal for capillary soldering

#### **TECHNICAL DATA**

Melting range: Working temperature:

720 °C Joinable materials: Flux required with:

Copper, gunmetal, brass, bronze Gunmetal, brass, bronze with

710 °C - 820 °C

hard solder paste LP 5

# Guaranteed according to DIN EN 1044



Contents	Squared section mm	Length mm	√ <sub>g</sub> √	No.
1 kg carton	2 x 2	500	1025	4.0212
1 kg carton	3 x 3	500	1025	4.0213

ROTHENBERGER-ROLOT S5

Squared section

mm

2 x 2

Lenath

500

∆ g ∆

No.

4.0502

# **ROLOT® S 2**

# **CP 105**

Silver / phosphorus safety hard solder, **guaranteed according to DIN EN 1044**, for higher-stressed copper pipe systems, ideal for capillary soldering in sanitary, heating and gas installations

### **TECHNICAL DATA**

Alloy (weight %): Melting range: Working temperature: Joinable materials:

Ag 1.5 – 2.5 / P 5.9 – 6.5 / Cu rest 650 °C - 810 °C

710 °C

Flux required with:

Copper, gunmetal, brass, bronze Gunmetal, brass, bronze with hard solder paste LP5

# ROLOT® S 5

### **CP 104**

Particularly high quality hard solder, not standardised, similar to DIN EN 1044, with low silver content, ideal for capillary soldering in sanitary, heating and gas installations

# **TECHNICAL DATA**

Melting range: Working temperature: Joinable materials:

Flux required with:

710 °C - 820 °C 720 °C

Copper, gunmetal, brass, bronze Gunmetal, brass, bronze with hard solder paste LP5

# Guaranteed according to DIN EN 1044



Contents	Squared section mm	Length mm	∑ <sub>g</sub> ∆	No.
1 kg carton	2 x 2	500	1025	4.0005
_				

# ROLOT® S 5

# **CP 104**

High-quality silver/phosphorus safety hard solder, guaranteed according DIN EN 1044, for higher-stressed copper pipe systems, ideal for capillary soldering in sanitary, heating and gas installations

# TECHNICAL DATA

Alloy (weight %): Melting range:

Ag 4 – 6 / P 5.7 – 6.3 / Cu rest

650 °C - 810 °C

710 °C

Working temperature: Joinable materials: Flux required with:

Copper, gunmetal, brass, bronze Gunmetal, brass, bronze with hard solder paste LP 5

#### ROLOT® S 15 **CP 102**

Particularly high quality silver hard solder, guaranteed according to DIN EN 1044, especially for capillary soldering subject to high thermal and mechanical alternating loads in HVAC systems, as well as demanding sanitary and gas installations.

# **TECHNICAL DATA**

Alloy (weight %): Melting range: Working temperature: Ag 14.0 - 16.0/P 4.7 - 5.3 / Cu rest

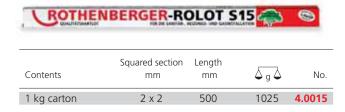
650 °C - 800 °C

710 °C

Joinable materials: Flux required with:

Copper, gunmetal, brass, bronze Gunmetal, brass, bronze with hard solder paste LP 5

Guaranteed according to DIN EN 1044





Contents

1 kg carton

The hard solder Series S 30, S 30 U, S 45, S 45 U contain cadmium and are therefore only permitted outside of drinking water installations for hygienic reasons. Accident Prevention Regulations (e.g.

VBG 15) require that adequate workplace ventilation must be ensured when working with cadmium-containing solders. Harmful vapours can arise due to over-heating. In the case of continuous soldering operations, extraction devices are recommended

# Silver Hard Solders Ag 306 S 30 / S 30 U flux-covered

Contains cadmium, quality silver hard solder, guaranteed according DIN EN 1044, plain (S 30) or flux-covered according to DIN 8511 F-SH 1 (S 30 U) universal application areas for gap soldering, excluding drinking water installations, heat-resistant up to 200 °C

# TECHNICAL DATA

**Alloy (weight %):** Ag 29.0 – 31.0 / Cd 19.0 – 23.0

Cu 27.0 – 29.0 / Zn rest

**Melting range:** 600 °C − 690 °C

Working temperature: 680 °C

Joinable materials: Steel, malleable cast iron, copper, gunmetal, copper and nickel alloys

**Flux required:** for S30 generally with hard solder paste LP 5



## **Guaranteed according to DIN EN 1044**

Contents	mm	ΔgΔ	S 30 No.	S 30 U No.
100 g plastic bag	2	110	4.4901	4.4921
250 g plastic bag	2	260	4.4902	4.4922
1000 g plastic bag	2	1010	4.4900	4.4930

# Silver Hard Solders Ag 106 S 34 Cu / S 34 Cu U flux-covered

Free of cadmium, quality silver hard solder guaranteed according to DIN EN 1044, plain (S 34 Cu) or flux-covered according to DIN EN 29454 F-SH 1(S 34 Cu U), universal application areas for gap soldering, also for drinking water installations, heat-resistant up to 200 °C

# **TECHNICAL DATA**

**Alloy (weight %):** Ag 33.0 – 35.0 / Cu 35.0 – 37.0

Sn 1.5 – 2.5 / Zn rest 630 °C – 730 °C

Melting range: 630 °C

Working temperature: 710 °C

Joinable materials: Steel, malleable cast iron, copper,

gunmetal, copper and nickel alloys

**Flux required:** for S 34 Cu generally with hard solder paste LP 5





### Guaranteed according to DIN EN 1044

Contents	<b>►</b> O	$\sqrt{g}$	S 34 No.	S 34 U No.
100 plastic bag	2	110	4.4910	4.4915
250 plastic bag	2	260	4.4911	4.4916
1000 plastic bag	2	1010	4.4912	4.4917

# Silver Hard Solders Ag 304 S 45 / S 45 U flux-covered

Contains cadmium, quality silver hard solder, **guaranteed according to DIN EN 1044**, plain (S 45) or flux-covered according to **DIN EN 29454 F-SH 1 (S 45 U)**, universal application areas for gap soldering, excluding drinking water installation, heat-resistant up to 200 °C

# **TECHNICAL DATA**

**Alloy (weight %):** Ag 39,0 – 41,0 / Cd 18,0 – 22,0

Cu 18,0 – 20,0 / Zn Rest

**Melting range:**  $595 \degree C - 630 \degree C$ 

Working temperature: 610 °C

Joinable materials: Steel, malleable cast iron, copper,

gunmetal, copper and nickel alloys

**Flux required:** for S 45 generally with hard solder paste LP 5





# Guaranteed according to DIN EN 1044

Contents	<b>▶</b>	ΔgΔ	S 45 No.	S 45 U No.
100 plastic bag	2	110	4.5002	4.5102
250 plastic bag	2	260	4.5007	4.5104
1000 plastic bag	2	1010	4.5004	4.5103

# Silver Hard Solders Ag 104 S 45 Cu / S 45 Cu U flux-covered

Free of cadmium, quality silver hard solder, guaranteed according to DIN EN 1044, plain (S 45 Cu) or flux-covered according to DIN EN 29454 F-SH 1 (S 45 Cu U), universal application areas for gap soldering, excluding drinking water installations, heat-resistant up to 200 °C

# **TECHNICAL DATA**

**Alloy (weight %):** Ag 44.0 – 46.0 / Cu 26.0 – 28.0

Sn 2.5 – 3.5 / Zn rest

**Melting range:** 640 °C – 680 °C

Working temperature: 670 °C

Joinable materials: Steel, malleable cast iron, copper,

gunmetal, copper and nickel alloys

**Flux required:** for S 45 generally with hard solder paste LP 5





# **Guaranteed according to DIN EN 1044**

Contents	<b>►</b> mm	$\sqrt[]{g}$	S 45 No.	S 45 U No.
100 plastic bag	2	110	4.5050	4.5055
250 plastic bag	2	260	4.5051	4.5056
1000 plastic bag	2	1010	4.5052	4.5057