

PLASTIC PIPE WELDING TECHNOLOGY

ROTHENBERGER TOOLS Southern Africa Range

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ROTHENBERGER TOOLS South Africa branch on request

ROWELD





Innovation, Quality and Services: Welcome to the World of ROTHENBERGER

Pipelines conveying energy and water are the world's lifelines. Just like the veins in the human body, they guarantee that warmth, fuels and lifebringing fluids reach their recipients – an important contribution to the overall quality of human life.

For more than 70 years now, ROTHENBERGER has been supporting all those whose daily work helps not only to ensure that these lifelines reach more and more people, but also to maintain them in an excellent condition: by supplying innovative and reliable highest quality pipetools and machinery that can be found in the hands of excellent skilled craftsmen and on construction sites all around the globe.

Plastic pipe welding

Electrofusion welding

ROWELD ROFUSE Sani 160/315

Universal electro-fusion welding unit for drainage pipe with welding sockets up to Ø 315 mm



Product profile

APPLICATION AREA

Universal electrofusion welding unit for PE drainage pipe fittings. For the following makes:

- 40 - 160 mm:** Geberit, Akatherm-EUR, Coes, Valsir, WAVIN-Duo, Aquatherm and Vulcathene-Euro
- 200 - 315 mm:** Valsir, Akatherm, Eurofusion, Geberit and Coes

KEY FEATURES

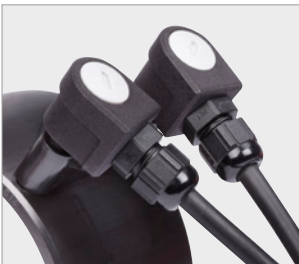
- Microprocessor controlled welding unit with automatic temperature and voltage compensation
- Icon-based software for intuitive and easy operation
- Visual monitoring of the welding process via large illuminated display
- Robust and impact-resistant housing (IP 54)
- Automatic welding parameter detection

TECHNICAL DATA

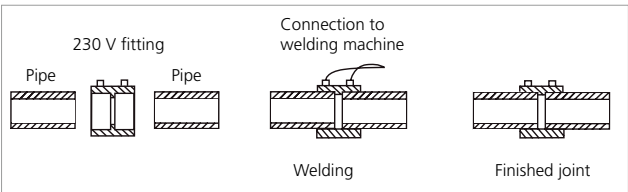
Input voltage:	180 - 280 V (230 V)
Frequency:	40 - 70 Hz
Output voltage:	5 A controlled
Protection class:	IP 54
Working range:	up to Ø 160 mm (Sani 160) up to Ø 315 mm (Sani 315)
Temperature range:	-5 °C up to + 40 °C
Weight:	2.4 kg (Sani 160) 3.9 kg (Sani 315)
Dimensions:	110 x 200 x 80 mm
Welding cable:	3 m



90° angled plugs



Robust packaging in RO CASE



Model	kg	No.
ROWELD ROFUSE Sani 160 in RO CASE	2.4	1000002630
ROWELD ROFUSE Sani 315 in RO CASE	3.9	1000002631

Plastic pipe welding

Electrofusion welding



ROFUSE 400 / 1200 TURBO

Universal electrofusion welding units for PE- and PP-pressure fittings up to 400 and up to 1,200 mm diameter

Product profile

KEY FEATURES

- **Safety:** The **Heat-Control (HC)** function evaluates based on ambient temperature, device temperature and fitting and checks if the next fitting can be welded completely. This process is fully automated and indicated through a green or a red light shown on the display. This prevents any emergency shut-off of the unit due to overheating.
- **Performance:** Due to the **Active-Cooling (AC)** function, the unit is ideally fitted for continuous use since the heat removal is maximised by the installed ventilator.
- **Complete solution:** All cables are securely stowed away inside the robust housing. The housing also offers sufficient space for accessories, tools or fittings.
- **Professional documentation:** All saved welding sequences can be transferred to a computer with a USB drive. From the computer the data can be archived and printed using the read out programme "RODATA 2.0".
- **Barcode generator:** "RODATA 2.0" offers also the possibility to encrypt the name of the welder and the name of the construction site as a barcode. This barcode can then be scanned at the job site.

TECHNICAL DATA:

Mains voltage:	230 V
Frequency:	50/60 Hz
Power:	3,000 VA, 70 % ED
Output current (nominal output):	80 A
Welding voltage:	8 - 48 V
Ambient temperature:	-10 °C up to 60 °C
Working range	
ROFUSE 400 TURBO:	Fittings up to 400 mm
ROFUSE 1200 TURBO:	Fittings up to 1,200 mm
Protection class:	IP 54
Transmission interface:	USB v. 2.0
Storage capacity:	2,000 welding logs
Weight incl. welding cable:	approx. 21.5 kg
(Basic unit without accessories)	

Language neutral instruction manual

Easy to operate

Practical pocket

for the welder's name and scan site-code

USB

Simple data transmission

Height-adjustable cover

Can be used as a sun shield

Clear display

Allows intuitive operation.
The program sequence can be adapted individually

Robust housing

The cable can be stowed away securely

Wireless scanner

Simple and unlimited handling



Model	kg	No.
ROFUSE 400 TURBO	21.5	100000999

Model	kg	No.
ROFUSE 1200 TURBO	21.5	100001000

Plastic pipe welding

Butt welding

ROWELD P 160 SANILINE

Plastic sanitary pipe welding machine from Ø 40 - 160 mm



Product profile

APPLICATION AREA

For butt welding of PP, PB and PVDF pipes and fittings, especially suitable for 45° branches and tight elbows. For use on building sites or in the workshop

KEY FEATURES

- Versatile for difficult situations with the removable heating plates
- Secure clamping of pipes, fittings, tight 45° branches and 90° elbows
- Protects against unintentional starting and derailing of the trimmer unit
- Precise pressure adjustment

KEY FEATURES

- Minimum drag force
- 40% higher stability with simultaneously optimised force distribution
- All common sanitary installation fittings can be clamped

TECHNICAL DATA

Pipe diameter:	Ø 40 - 110 mm	(SDR 41 - 7.25)
	Ø 40 - 140 mm	(SDR 41 - 11)
	Ø 40 - 160 mm	(SDR 41 - 17.6)
Weight:	34.4 kg	
Heating plate:	800 W	
Trimmer unit:	1,050 W	

Multi-faceted options for clamping

All commonly used moulded bodies installed in a sanitary installation can be clamped

Anti-slip Ø 40 - 140 mm reduction clamping inserts with clamping force regulation

Secure mounting of pipes, moulded bodies, tight 45° forks and 90° bends

ROCASE 4414

Additional storage for accessories and tools

P 160 SANILINE complete
(No. 1000002964)



Trimmer attachment
(No. 54040) (special accessories)



Basic clamping set
(No. 54082) (special accessories)



Set (No. 1000002964) includes: Basic unit with electric trimmer, electrically adjustable heating element, removable. Pipe support Ø 160 mm, reducer clamp and support set for Ø 40, 50, 63, 75, 90, 110 and 125 mm in ROCASE 4414 (No. 1000002970), installation tools, mobile work and transport frame (No. 1000002971)



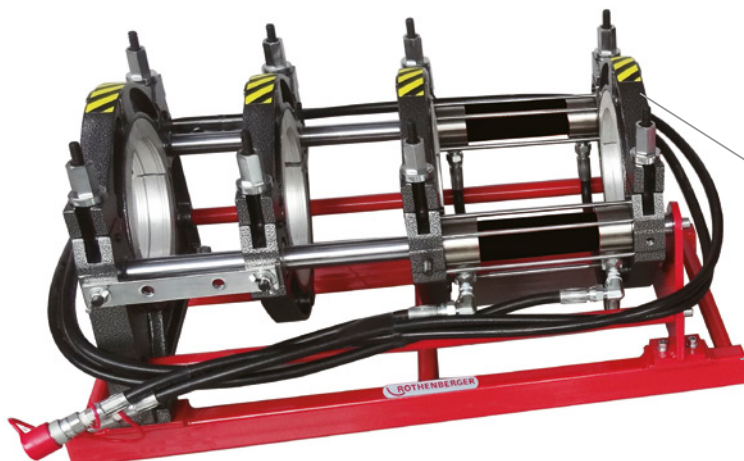
Model	Working range Ø mm	Temperature control	kg	230 V 50 Hz
ROWELD P 160 SANILINE	40, 50, 63, 75, 90, 110, 125, 160	electronically	57.4	1000002964

Plastic pipe welding

Hydraulic butt welding

SHD160-I / SHD250-I / SHD315-I / SHD355-I

Suitable for butt welding of plastic pipes and fittings made of PE, PP and PVDF material. The latest design for basic frame, enclosed hydraulic unit, planning tool and heating plate. Low starting pressure ensures reliable welding quality of small pipes. Meter with high shockproof pressure, the big face of meter indicates clearer readings. Preinstalled datalog connections, international brand of electrical controls.



Simple operation

Ideally matched components allow precise start-up of the pressure



Safe

Perfect parking for trimmer and heating plate

Flexible

The 3rd basic clamping element can be moved flexibly

Robust, torsionally rigid frame

Allows reliable weldings in virtually any environment

Supply of power for heating element and trimmer unit over Professional Hydraulic.



Professional Hydraulic with large, easily legible manometer as well as a pressure limiting and pressure relieving valve. Temperature controller integrated in the hydraulic unit.



The pull-off fixture allows rapid lifting out of the heating element (SHD 315-I Special use).



Model	SHD160	SHD250	SHD315	SHD355
Pipe Size(mm)	63,75,110,125,140,160	63,75,110,125,140,160, 180,200,225,250	90,110,125,140,160,180, 200,225,250,280,315	90,110,125,140,160,180, 200,225,250,280,315,355
Heating Plate Max. Temp.	270°C	270°C	270°C	270°C
Temp. Deviation in surface(170-250°C)	±5°C	±5°C	±5°C	±5°C
Pressure Adjustable Ranges	0-6.3Mpa	0-6.3Mpa	0-6.3Mpa	0-6.3Mpa
Working Voltage	220V, 50Hz	220V, 50Hz	220V, 50Hz	220V, 50Hz
Heating Plate Power	1KW	2KW	3KW	4KW
Planing Tool Power	0.7KW	1.1KW	1.1KW	1.1KW
Hydraulic Unit Power	0.75KW	0.75KW	0.75KW	0.75KW
Total Power	2.45KW	3.85KW	4.85KW	5.85KW
Weight	106KG	143KG	216KG	260KG
Packing Cases	3 Plywood Cases	3 Plywood Cases	3 Plywood Cases	3 Plywood Cases
Volume	0.58CBM	0.70CBM	1.07CBM	1.07CBM

Model	Working range Ø mm	kg	230 V 50 Hz
ROWELD E-SERIES 160/63 HYDRAULIC BUTT WELDING MACHINE incl Sandwich Inserts & Stub Device	63-160 mm	57.4	SHD160 W12
ROWELD E-SERIES 250/63 HYDRAULIC BUTT WELDING MACHINE incl Sandwich Inserts & Stub Device	63-250 mm	82.2	SHD250 W20
ROWELD E-SERIES 315/90 HYDRAULIC BUTT WELDING MACHINE incl Sandwich Inserts & Stub Device	90-315 mm	124.4	SHD315 W18
ROWELD E-SERIES 355/90 HYDRAULIC BUTT WELDING MACHINE incl Sandwich Inserts & Stub Device	90-355 mm	140.7	SHD355 W15

Plastic pipe welding

Hydraulic butt welding

SHD450-I / SHD500-I/ SHD630-I



Simple operation

Ideally matched components allow precise start-up of the pressure

Safe

Perfect parking for trimmer and heating plate



Robust, torsionally rigid frame

Allows reliable weldings in virtually any environment

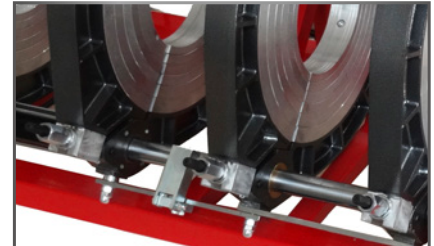
Flexible

The 3rd basic clamping element can be moved flexibly

Supply of power for heating element and trimmer unit over Professional Hydraulic.

Professional Hydraulic with large, easily legible manometer as well as a pressure limiting and pressure relieving valve. Temperature controller integrated in the hydraulic unit.

The pull-off fixture allows rapid lifting out of the heating element.



Model	SHD450	SHD500	SHD630
Pipe Size(mm)	200,225,250,280,315,355, 400,450	200,225,250,280,315,355,400,450,500	315,355,400,450,500,560,630
Heating Plate Max. Temp.	270°C	270°C	270°C
Temp. Deviation in surface(170-250°C)	≤±7°C	≤±7°C	≤±7°C
Pressure Adjustable Ranges	0-8Mpa	0-8Mpa	0-8Mpa
Working Voltage	380VAC, 3P+N+PE, 50Hz	380VAC, 3P+N+PE, 50Hz	380VAC, 3P+N+PE, 50Hz
Heating Plate Power	5.38KW	6.5KW	9.35KW
Planing Tool Power	1.5KW	1.5KW	1.5KW
Hydraulic Unit Power	1.5KW	1.5KW	1.5KW
Crane Power	1.1KW	1.1KW	1.1KW
Total Power	8.38KW	9.5KW	12.35KW
Weight	560KG	700KG	780KG
Packing	Cases / Volume	Cases / Volume	Cases / Volume
	4 Plywood Cases / 3.16CBM	4 Plywood Cases / 4.43CBM	4 Plywood Cases / 4.43CBM

Model	Working range Ø mm	kg	230 V 50 Hz
ROWELD E-SERIES 450/200 HYDRAULIC BUTT WELDING MACHINE incl Sandwich Inserts & Stub Device	200-450 mm	327	SHD450 W14
ROWELD E-SERIES 500/280 HYDRAULIC BUTT WELDING MACHINE incl Sandwich Inserts & Stub Device	200-500 mm	482	SHD500 W08
ROWELD E-SERIES 630/315 HYDRAULIC BUTT WELDING MACHINE incl Sandwich Inserts & Stub Device & Crane	315-630 mm	502	SHD630 W14

Plastic pipe welding

Hydraulic butt welding

SHD800-I / SHD1000-I

Suitable for butt welding of plastic pipes and fittings made of PE, PP and PVDF material. The latest design for basic frame, enclosed hydraulic unit, planing tool and heating plate. Low starting pressure ensures reliable welding quality of small pipes. Meter with high shockproof pressure, the big face of meter indicates clearer readings. Preinstalled datalog connections, international brand of electrical controls.



Flexible

The 3rd basic clamping element can be moved flexibly



Simple operation

Ideally matched components allow precise start-up of the pressure

Support

Perfect parking for planing tool and heating plate



Robust, torsionally rigid frame

Allows reliable weldings in virtually any environment

Supply of power for heating element and trimmer unit over Professional Hydraulic.



Professional Hydraulic with large, easily legible manometer as well as a pressure limiting and pressure relieving valve. Temperature controller integrated in the hydraulic unit.



The pull-off fixture allows rapid lifting out of the heating element.



Model	SHD800	SHD1000
Pipe Size(mm)	450,500,560,630,710,800	630,710,800,900,1000
Heating Plate Max. Temp.	270°C	270°C
Temp. Deviation in surface(170-250°C)	≤±7°C	≤±7°C
Pressure Adjustable Ranges	0-16Mpa	0-16Mpa
Working Voltage	380VAC, 3P+N+PE, 50Hz	380VAC, 3P+N+PE, 50Hz
Heating Plate Power	12.5KW	17.5KW
Planing Tool Power	2.2KW	3.0KW
Hydraulic Unit Power	3.0KW	3.0KW
Crane Power	0.5KW	0.5KW
Total Power	18.2KW	24.0KW
Weight	1360KG	2600KG
Packing	Cases / Volume	Cases / Volume
	5 Plywood Cases / 8.39CBM	5 Plywood Cases / 15CBM

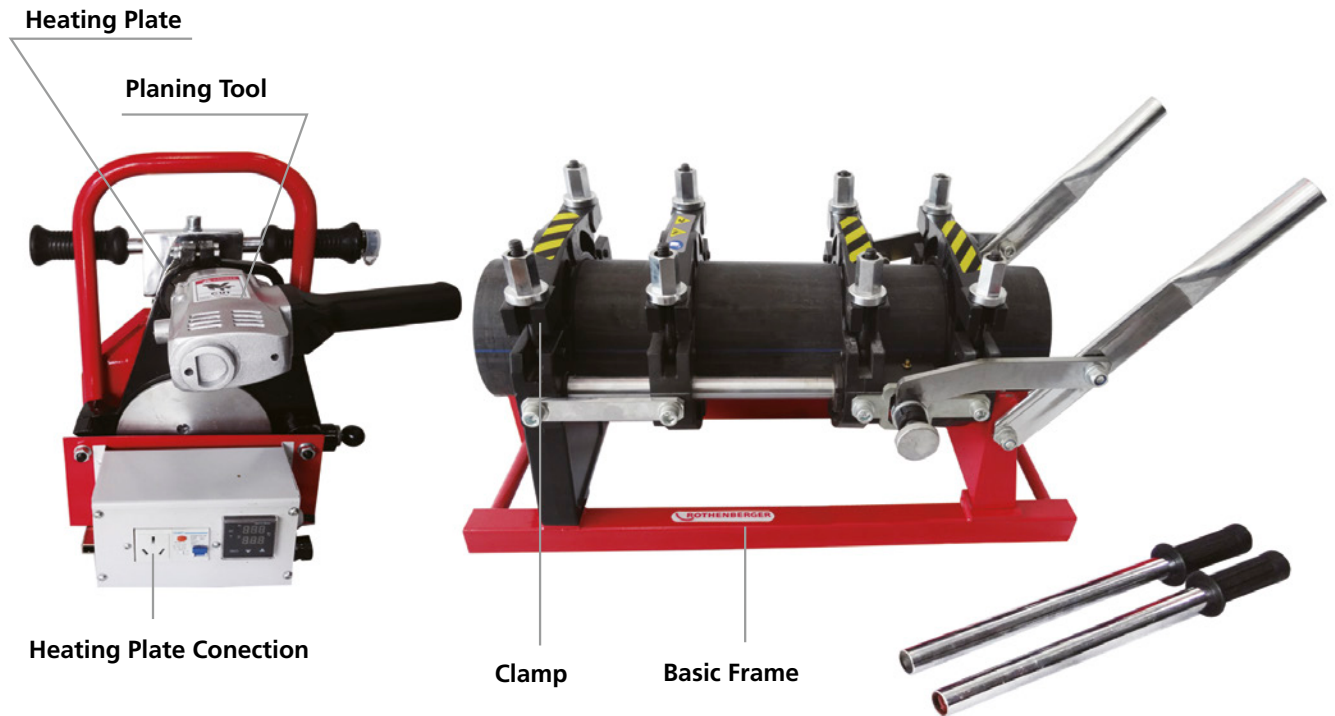
Model	Working range Ø mm		
ROWELD E-SERIES 800/450 HYDRAULIC BUTT WELDING MACHINE incl Sandwich Inserts & Stub Device & Crane	450-800 mm	-	SHD800.W09
ROWELD E-SERIES 1000/630 HYDRAULIC BUTT WELDING MACHINE incl Sandwich Inserts & Stub Device & Crane	630-1000 mm	-	SHD1000.W05

Plastic pipe welding

Manual butt welding

SHDS160A4 / SHDS200A4

Suitable for butt welding of plastic pipes and fittings made of PE, PP and PVDF material. Consists of basic frame, planing tool, heating plate, basket & optional parts. Removable PTFE coated heating plate with separate temperature. Electric planing tool. Be made of lightweight and high strength material; simple structure, small and delicate, user friendly.



Planing Tool



Heating Plate



Support



Layer Clamps



Heating Plate Connection

Model	SHDS160A4	SHDS200A4
Pipe Size(mm)	50,63,75,90,110,125,140,160	63,75,90,110,125,140,160,180,200
Heating Plate Max. Temp.	270°C	270°C
Temp. Deviation in surface(170-250°C)	≤±5°C	≤±5°C
Working Voltage	220VAC, 50Hz	220VAC, 50Hz
Heating Plate Power	1.0KW	1.5KW
Planing Tool Power	0.7KW	0.7KW
Hydraulic Unit Power	1.7KW	2.2KW
Weight	46KG	69KG
Packing	Cases / Volume	2 Plywood Cases / 0.9CBM

Plastic pipe welding machines type Professional

Description	Ø Basic unit	Working range	Voltage	Frequency	Total Power	Basic	Heating Plate		Planing Tool		Support	
						kg	Power	kg	Power	kg		kg
SHDS160A4	160 mm	50-160 mm	220 V	50 Hz	1.7 KW	54	1.0kw	4.2	0.7KW	7.9	7	
SHDS200A4	200 mm	63-200 mm	220 V	50 Hz	2.2 KW	59	1.5kw	5	0.7KW	8	7	

Clamp Inserts

Model	Ø mm	 kg
SHDS160A4	50-160mm	2.4
SHDS200A4	63-200mm	7.4

Spare Blade

Model	Ø mm	 kg
SHDS160A4	160mm/6"	0.06
SHDS200A4	200mm/6"	0.07

Reducer Clamp Inserts

SHDS160A4	
Ø Inch	 kg
1.5	3
2	2.9
3	2.8
4	2.6
5	2

SHDS200A4	
Ø Inch	 kg
3	8
4	7.7
5	7.4
6	7.1

Socket welding units & Heating plates

Socket welding

ROWELD Socket Welder CR-RJQ-63

For simple welding of PP, PB, PE and PVDF plastic pipes and sleeves.

Product profile

APPLICATION AREA

For butt welding of PP, PB, PE and PVDF plastic pipes and sleeves.

KEY FEATURES

- Thermostatically constant controlled
- Temperature setting with digital display



TECHNICAL DATA:

Power:	800 W
Working temperature:	260°C ± 5 %
Rated voltage:	220 / 230 V
Frequency:	50 / 60 Hz
Pipe diameter:	Ø 20, 25, 32, 40, 50, 63 mm
Weight:	1.68 kg
Dimensions:	370 x 135 x 50 mm

Included:

- 6x Nonstick heating mandrels and sleeves (20 mm, 25 mm, 32 mm, 40 mm, 50 mm, 63 mm)
- 1x Solid carrying case made of metal
- 1x Stable table stand
- 1x Retaining bolts
- 1x Allen key
- 1x Table vice for horizontal and vertical use
- 1x Nonstick heater
- 1x VDE-checked construction cable H07RN-F 1.5 mm

Model	kg	No.
ROWELD Socket welder CR-RJQ-63	1.68	36052

ROWELD Socket Welder CR-ZRJQ-110T

For simple welding of PP, PB, PE and PVDF plastic pipes and sleeves.

Product profile

APPLICATION AREA

For butt welding of PP, PB, PE and PVDF plastic pipes and sleeves.

KEY FEATURES

- Thermostatically constant controlled
- Temperature setting with digital display



TECHNICAL DATA:

Power:	1.300 W
Working temperature:	200°C – 279°C ± 5 %
Rated voltage:	220 / 230 V
Frequency:	50 / 60 Hz
Pipe diameter:	Ø 75, 90, 110 mm
Weight:	2.00 kg
Dimensions:	380 x 155 x 60 mm

Included:

- 3x Nonstick heating mandrels and sleeves (75 mm, 90 mm, 110 mm)
- 1x Solid carrying case made of metal
- 1x Stable table stand
- 1x Retaining bolts
- 1x Allen key
- 1x Table vice for horizontal and vertical use
- 1x Nonstick heater
- 1x VDE-checked construction cable H07RN-F 3G 1.5 mm

Model	kg	No.
ROWELD Socket welder CR-ZRJQ-110T	2.00	36063

ROWELD Socket Welder P75 ECO

For simple welding of PP, PB, PE and PVDF plastic pipes and sleeves. Ø 20 - 75 mm

Product profile

APPLICATION AREA

Socket welding unit for use with heating spigots and heating sockets Ø 20 - 75 mm with three simultaneously usable combinations for welding sockets, pipes and fittings up to Ø 75 mm

KEY FEATURES

- Increased flexibility and combination options for every day use
- Long service life
- All important information at a glance
- Safe operation. Metal transport box!
- Light and handy for fatigue-free use
- Simple to use even in confined spaces
- Floor stand is available at all times



TECHNICAL DATA:

Power:	1.500 W
Rated voltage:	220 / 230 V
Frequency:	50 / 60 Hz
Pipe diameter:	Ø 20, 25, 32, 40, 50, 63, 75 mm

Model	kg	No.
ROWELD Socket welder P75 ECO	-	1099819

Plastic pipe welding

Electrofusion welding

ROWELD D4/15 Extrusion Welder

For simple welding of PP, PB, PE and PVDF plastic pipes and sleeves.



Product profile

APPLICATION AREA

compact - lightweight extrusion welder available for plastic welding multiple plastic materials from 4mm up to 15mm.

Used for the fabrication and repair of plastic tanks, vessels, containers, as well as commercial vehicle bodies, portable buildings and logistical containers made from thermoplastic sandwich panels, consisting of polypropylene-honeycomb and fibre-glass reinforced polypropylene-face sheets.

The welder incorporates dual temperature controls for both the air and extrudate - cutting edge extrusion welding technology in a small lightweight easy to handle unit

KEY FEATURES

- 360° Rotatable Welding Shoe
- Integral air supply
- Pre-set (adjustable) digital temperature controls for PP/PE/PVDF
- Safety cut out - prevents cold start of the extruder
- 12 months warranty
- CE approved

TECHNICAL DATA:

Welding materials	PP, PE, PVDF
Welding rate, approx.	Ø 3 mm: 1,1 kg/h PP/PE Ø 4 mm: 1,8 kg/h PP/PE
Welding rod	Welding rod Ø 3 and 4 mm
Application range	Wall thicknesses 4-15 mm and film/sheeting welds
Weight	4,8 kg
Drive	230 V or 120 V AC with speed control
Extruder heating system	400 W / 120 V
Air preheater	2300 W / 230 V , 1750 W / 120 V
Air supply	Integrated air supply
Protection type	IP 20 according to DIN EN 60529
Cold start protection	Start temperature interlock and startup timer for melt and preheat air



Model	kg	No.
ROWELD D4/15 EXTRUSION WELDER	4.80	55502



ROCUT UKS 160 / 355

High-performance orbital circular saw Ø 160 - 355 mm

Product profile

APPLICATION AREA

For cutting of plastic pipes made of PE, PP and PVC.
For use on the building site or in the workshop

KEY FEATURES

- Right-angled cuts with no misalignment
- Efficient and economical operation with high cutting speed
- Safe operation with saw blade guard
- Optimum pipe centering

TECHNICAL DATA

Voltage: 230 V, 50/60 Hz
Power: 1,750 W
Outer pipe diameters: 160 - 355 mm
Wall thickness pipe: 8 - 40 mm

Transport box without saw (No. 1200000526)



Four rubberised clamping and guide rollers ensure right-angled cuts with no misalignment



Secure clamping and optimum pipe centring are guaranteed by the central trapezoidal clamping device



Saw blade guard

Safe operation

Central clamping

Optimum pipe centring



Rubberised guide rollers

Right-angled cuts with no misalignment

No. 55505



Model	kg	No.
ROCUT UKS 160 / 355, complete with HM saw blade (No. 55505), without transport box	12.9	1000000532
Spare HM saw blade 180 x 30 mm	0.6	55505
Transport box 700 x 350 x 500 mm	16.8	1200000526

ROWELD

PLASTIC PIPE
WELDING
TECHNOLOGY



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