ABOUT **ESAB**

ESAB's premium blend of time tested design and modern innovation is the result of integrating advanced technology into real world applications to deliver solutions that enhance customer productivity.

ESAB is a world leader in the production of filler metals and welding equipment. With operations accross the globe, ESAB offers a market leading product portfolio which includes:

- Standard Welding & Cutting Equipment
- Automatic Welding Equipment
- Automated Cutting Equipment
- Filler Metals
- Personal Protective Equipment (PPE) & Welding Accessories
- Gas Welding & Cutting Equipment

We have a team of dedicated salesmen and process specialists throughout the UK who can offer direct support with any sales enquiries, technical assistance or other requirements. Our Process Centre based in Waltham Cross, Hertfordshire, is a welding technology centre available to support our customers with practical application research and equipment demonstrations.

Value Added Engineering

ESAB developed the Value Added Engineering (VAE) process to give our customers an edge. When you choose VAE, you get access to the only team of welding and cutting experts - industry-wide - who come to you, analyse your production processes, and make recommendations based on factual data collected at your shop. Our recommended modifications to your process have the potential to quantifiable improve quality, enhance productivity, and boost profits. We'll reveal untapped revenue opportunities through capacity growth, increased product sales, and improved employee productivity.

ESAB
Warlies Park House, Horseshoe Hill, Upshire, Essex. EN9 3SL. UK
E-mail: info@esab.co.uk
esab.co.uk

Buddy Arc 145/180
Buddy Tig 160

2 YR WARRANTY

230V 1ph Portable Welding Inverters

Buddy series systems are compact, competetively priced machines for MMA and TIG welding. Buddy systems feature a simple, intuitive analogue panel and easy-to-use functions, making the machine ideally suited for both shop or offsite fabrication.
Buddy Arc 145 welds MMA electrodes up to Ø2.5mm.
Buddy Arc 180 welds MMA electrodes up to Ø3.2mm.

Buddy Tig 160 welds MMA electrodes up to Ø3.2mm and offers HF TIG welding. Features include adjustable slope-down time, adjustable arc force control and 2T/4T trigger modes.

3 YR WARRANTY

Caddy® Tig 2200i AC/DC

230V 1ph AC/DC TIG Welding System

The Caddy® Tig 2200i AC/DC can weld aluminium up to 5.5mm and mild and stainless steels up to 7.3mm. When used with a water-cooer, a smaller sized water-cooled torch can be used, ideal for those difficult to access welds.

Durability – The design in combination with the robust, composite and metal housing offer IP23 classification making the machines suitable for outdoor use. Sturdy OKC 50 cable connectors ensure efficient current transfer with minimum power loss.

Technical Data	Buddy™ Arc 145	Buddy™ Arc 180	Buddy™ Tig 160	Caddy® Tig 2200i
Mains Supply	1 ph 50/60HZ, 230V			
Fuse, slow A	16			
Setting Range	10-145A	5-180A	5-160A	3-220A (TIG) 4-170A (MMA)
Dimensions, LxWxH, mm	280x120x220	310x140x230	310x140x230	418x188x208
Weight, kg	3.6	6.0	6.0	9.4
Application class	S			
Duty Cycle - MMA	70A @ 60%	125A @ 60%	105A @ 60%	130A @ 60%
Duty Cycle - TIG	-	130A @ 60%	105A @ 60%	150A @ 60%

Origo™ Mag C171, C201, C251

230V 1ph Compact MAG Systems

Compact and competitively priced Origo™ Mag machines with built-in wire feeder are designed for the workshop environment. A two-wheel drive wire feed mechanism also make these machines ideal for repair and maintenance applications.

3 YR WARRANTY

Technical Data	Origo™ Mag C171	Origo™ Mag C201	Origo™ Mag C251
Mains Supply		3 ph 400V	
Fuse, slow A	16	20	35
Setting Range	30-170A	30-200A	40-250A
Dimensions, LxWxH, mm		860x420x730	
Weight, kg	59	68	94
Application class		S	
Voltage Steps	8	12	12
Duty Cycle	98A @ 60% 76A @ 100%	115A @ 60% 90A @ 100%	140A @ 60% 110A @ 100%

3 YR WARRANTY

Caddy® Mig C160i, C200i

230V 1ph Compact MIG Inverters

These portable 230V, 1ph MIG/MAG packages feature built-in wire feeders and an intuitive control panel to reduce set up time. The machines are optimised for welding solid wire. Polarity can easily be reversed enabling the use of self-shielded wires. This eliminates the need for shielding gas, making the machine truly portable.

Technical Data	Caddy® Mig C160i	Caddy® Mig C200i
Mains Supply	1 ph 230V	
Fuse, slow A	16	
Setting Range	30-160A	30-200A
Dimensions, LxWxH, mm	449x198x347	
Weight, kg	11.4	11.5
Application class	S	
Duty Cycle	150A @ 35% 100A @ 100%	180A @ 25% 100A @ 100%

Caddy® Mig C160i

- Automatic settings
- Convenient single-knob heat adjustment
- Analogue panel
- Optimised for welding mild and stainless steel plates from 0.5 - 4.0mm

Caddy® Mig C200i

- QSet™ - Intelligent welding system
- Automatic settings
- Convenient single-knob heat adjustment
- MIG brazing capability
- Digital panel for exact settings of current and voltage
- Optimised for welding mild/stainless steel and aluminium plates from 0.5 - 6.0mm

Warrior™ 400i/500i CC/CV

400V 3ph Heavy-Duty Multiprocess Inverter Welding System

Available in 400 and 500 amp configurations, the heavy-duty Warrior multiprocess system provides versatility and performance in a single, highly efficient package that helps future-proof production requirements.

- Multi-process package - MIG/MAG, MMA, Carbon Arc Gouging and LiveTIG
- Digital display (V/A) in the feeder provides accurate readings close to the weld
- Digital display (V/A) in the power source for MMA and Gouging and LiveTig welding
- TrueArcVoltage™ system - Measures the correct arc voltage at the contact tip

Technical Data	Warrior 400i CC/CV	Warrior 500i CC/CV
Mains Supply	3 ph 50/60HZ, V 380-415, +/-10%	
Mains cable, Ø mm2	4 x 6	
Fuse, slow A	25	32
MIG/MAG, MMA	16-400A	16-500A
TIG	5 -400A	5-500A
Open circuit voltage, V	54	
Idle Power, W	120	
Efficiency at max. current %	88	
Power factor at max current	0.91	
Enclosure class	IP23	
Dimensions, LxWxH, mm	712x325x470 (without cooling unti) 712x325x700 (with cooling unit)	
Weight, kg	59 (without cooling unti) 74 (with cooling unit)	
Operating Temperature, °C	-10 - +40	
Application class	S	
60% duty cycle, A/V, 3ph	400/36	500/40
100% duty cycle, A/V, 3ph	300/32	400/36

- TrueArcVoltage system
- Continuous inductance setting
- Creep start
- Short Circuit Termination (SCT)
- Built-in digital V/A meter
- Wire inching & gas purge
- 2-stroke/4-stroke trigger modes

3 YR WARRANTY

Origo™ Mig C280 PRO

400V 3ph PRO MIG Package

Designed for production welding with up to 1.0 mm solid wire at the lowest investment cost. The machine features a tack welding setting between 0.2-2.5 seconds and is ideal for car repair applications.

Origo™ Mig C340 PRO

400V 3ph PRO MIG Package

For production welding with up to 1.2mm solid wire, a 40-step voltage setting and two inductance outlets makes it easy to achieve the optimal welding parameters. The machine features creep start functionality where the wire speed starts slowly, creating a soft start which reduces spatter.

The machine features a 2-stroke/4-stroke trigger mode. For longer welds the 4-stroke mode ("push & release" to start – weld – "push & release" to stop) is commonly used. The 2-stroke mode ("push" to start – weld – "release" to stop) is applied to shorter welds such as tack welding.

Origo™ Mig L405

400V 3ph Air-Cooled MIG Package

- Low investment costs
- Robust, step-controlled MIG/MAG unit
- 40 voltage steps
- Choice of 2- or 4-rolls wire feed mechanism
- Internonnection cables up to 10 m
- Galvanized sheet steel housing

Technical Data	Origo™ Mig C280 PRO	Origo™ Mig C340 PRO	Origo™ Mig L405
Mains Supply		3 ph 400V	
Fuse, slow A	16	16	20
Setting Range	30-280A	40-340A	50-400A
Dimensions, LxWxH, mm	840x425x830	840x425x830	812x552x925
Weight, kg	97	120	142
Application class		S	
Voltage Steps	10	40	40
Duty Cycle	280A @ 30% 150A @ 100%	340A @ 630% 195A @ 100%	400A @ 50% 280A @ 100%

WARRIOR™ Tech with PAPR Combination

The WARRIOR™ Tech helmet has been designed to meet the needs of a variety of welders, providing a high tech lightweight shell to protect from heat, sparks and spatter, The welding lens gives a high clarity of view, resulting in an excellent optical quality utilising the latest ADF technology. The WARRIOR™ Tech helmet provides ideal functionality, performance and comfort to the occasional welder, maintenance and construction workers through to the professional welder.

The WARRIOR™ Tech is now CE approved for use with the Eco Air powered respiratory (PAPR) unit. The WARRIOR™ Tech & Eco Air system has achieved a TH2P combined protection rating in accordance with European standard EN 12941.

WARRIOR™ Tech Prepared for Air

- Enhanced lens performance with four arc detection sensors providing wider coverage for better arc field response in both downhand and positional welding applications.
- Increased comfort respiratory system – the ergonomic headband and comfort face seal, combined with the Eco Air's large comfort pad, reduce fatigue and muscle strain.
- Wide application range with the option of P2, P3 & carbon filters for applications involving nuisance odours.
- Extremely robust system combining the tried and tested design of the Eco Air power unit and the B impact rating of the WARRIOR™ Tech helmet.
- Large viewing area – 98mm x 48mm – offers a wider field of vision.
- Adjustable 9-13 shade level with an optical class of 1/2/1/2 offering protection from harmful UV and IR radiation

NEW GAS EQUIPMENT
AVAILABLE JUNE 2015

ESAB is proud to introduce a new range of advanced gas equipment that combines robust reliability with the highest levels of safety.

- EDGE™ ESS3 Single Stage Regulators
- EDGE™ ETS4 Multistage Regulators
- G Series Regulators and Flowmeters
- Nozzle Mix Style Straight Cutter and Combination Torch
- Full Range of Accessories

Speak to your distributor today and discover how our new gas equipment range can benefit your business.

Available to order from **June 2015.**

ESAB Welding & Cutting Products / esab.co.uk / 01992 768515

HARDFACING

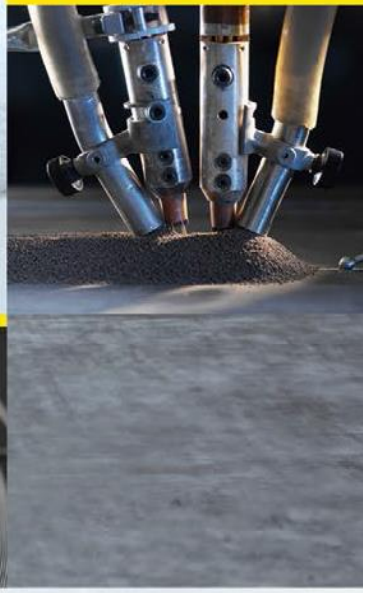
REPAIR AND MAINTENANCE

ALUMINIUM TIG RODS

LOW ALLOY

MILD STEEL

SUB ARC FLUX



NON ALLOYED WIRE

WELL **EQUIPPED.**

Your insight drives our innovation. For 110 years, ESAB has listened to metal fabricators to develop solutions that give you a distinct advantage. We offer a comprehensive range of CE marked filler metals ready for EN1090 qualified fabricators. Our range includes filler metals suitable for an extensive range of alloys and processes, designed to cut costs and increase your productivity.

ESAB Welding & Cutting Products / esab.co.uk / 01992 768515

110 1904 ESAB 2014

Welders and Welding Equipment

STICK WELDERS (SMAW)
Stick welders for welding a range of materials and thicknesses in the shop or field.
Stick Welders (SMAW)

TIG WELDERS (GTAW)
Designed and engineered for durability. AC and DC TIG welders from Lincoln Electric are portable and ideal for critical applications.
TIG Welders (GTAW)

MIG AND FLUX-CORED WELDERS
Industrial power sources recommended for heavy duty applications.
MIG Welders (GMAW)

MULTI-PROCESS WELDERS
Versatile multi-process welders are ideal for heavy fabrication applications.
Multi-Process Welders

ADVANCED PROCESS WELDERS
Power Wave® power sources offer discrete waveforms for optimal arc performance on a variety of materials.
Advanced Process Welders

ENGINE DRIVEN WELDERS
Engine driven welders combine AC and/or DC welding with AC generator power for even the toughest environments.
Engine Driven Welders

SEMIAUTOMATIC WIRE FEEDERS
Wire feeders with two or four roll drives systems deliver miles of arc welding wire in the shop or at the construction site.
Semiautomatic Wire Feeders

SUBMERGED ARC EQUIPMENT
Submerged arc welders are beam-mounted, portable tractor or semi-automatic for heavy fabrication environments.
Submerged Arc Equipment

PLASMA CUTTERS
Plasma cutters for cutting conductive material in seconds. Choose a model just right for your typical material thickness.
Plasma Cutters

WELDING GEAR
Personal protection apparel for welders including welding jackets, gloves, safety glasses, and welding helmets.
Welding Gear

WELDING GUNS AND TORCHES
Welding guns for MIG, flux-cored, aluminum, robotic, and self-shielded special process applications.
Welding Guns and Torches

AUTOMATION SOLUTIONS
Take a minute to see all that Lincoln Electric has to offer. Our comprehensive automation offering is unmatched in the industry.
Automation

WELD FUME CONTROL
Weld fume extraction solutions from portable and stationary models to plant-wide environmental systems.
Weld Fume Control

ACCESSORIES
Welding accessories include rugged optional features for your Lincoln Electric equipment, including undercarriages, covers, and kits.
Accessories

TRAINING EQUIPMENT
Train welders faster, reduce material cost and make welding education fun with the VRTEX® 360 virtual reality arc welding training system.
Training Equipment

WIRE DELIVERY ACCESSORIES
Lincoln Electric provides a complete line of weld wire dispensing and weld cell support equipment.
Wire Delivery Accessories

Background on Lorch GmbH

 ith a heritage o more than ears o producing welding machines Lorch is a amil owned compan based near Stuttgart

 ll o our welding machines ha e been designed and manu actured b ourselves at our production acilit in uenwald German nlike some manu acturers we ha e no other manu acturing acilities outside o German and we do not bu in technolog rom others so when we sa ualit Made in German we reall mean it

Lorch has man proud milestones we were also the in entors o TwinPulse which is the facility which enables a "tig" like finish to mig welding h we began our masters o speed campaign e launched Speed processes to market which would help deli er increased weld integrit and producti it b as much as SpeedPulse Speed rc Speed p Speed oot and Speed old ha e trans ormed the producti it o 1 s o abricators across urope and the number grows each month

 ll Lorch machines are hand built in German and come with a - r arrant

The MicorMig

The MicorMig from Lorch is arguably the most advanced Mig/Mag welding machine available in the world today. It has a revolutionary inverter module (Micor Inverter) which delivers superb welding results as well as electrical cost savings over and above conventional Transformer type machines.

Aside from the excellent welding characteristics, the MicorMig utilises RFID technology. Each front panel comes equipped with a RFID reader which delivers higher weld quality and quality assurance by ensuring un-authorised adjustments to the welding parameters is not possible. RFID technology also allows simple, easy process upgrades which guarantee that the MicorMig can grow and be adapted to suit welding challenges of the future.

- Available in 300-350-400-500 amp variants
- Choice of 3 front panels, to suit individual preference and application
- Significantly lower electrical running costs
- Improved weld quality, weld integrity and up to 30% higher productivity, thanks to SpeedArc
- NFC enabled
- Fully upgradeable
- Receive up to £500 trade in for your old machine

Lorch "new for old" Allowance

The MicorStick and MobilePower1

The MicorStick, is another world innovation from Lorch. It is the first 230v MMA inverter, with a simple **and sa□el□ detachable mains cable□This means that unit can be run □rom a con□entional □□□□ mains suppl□□a Generator □□ □rom our MobilePower1□**

MobilePower1 is a □ull□ rechargeable Lithium-□on Batter□□This means that □ou can now weld completely "off grid". The Micor160 in-conjunction with the MobilePower1 can weld around 22 x **□□□mm □lectrodes □rom a single charge□**

The combined weight o□the two units is less than 11kg□which means that □ou now ha□e a reall□ □unctional and transportable alternati□e to welding □rom a Generator□

- Micor160, high power unit, which can burn up to 4.0mm Electrodes
- Can be used with up to 200m of Primary power cable/extension leads
- CEL Capable
- Low weight, less than 5kg, MobilePower1, less than 6kg.
- Can withstand falls of 80cm in height
- Green Technology, with Standby mode
- Test this amazing technology for free, just speak to your local Elmdale Rep

The Lorch SpeedPulse-Saprom

The Saprom is the flagship of the Lorch range, this machine can increase your welding quality and **also □our producti□it□ b□ up to □□□ □**

Speak to □our local □lmdale rep about organising a no obligation trial□to see what the Lorch Saprom can do □or □ou and □our business□

□hoose a □ree Lorch SpeedProcess so□tware upgrade □or each machine □ou purchase□

Hypertherm

A cut above the rest

TEST THE BEST

Test the world's best plasma cutters for free!

Hypertherm®

Cut and gouge all types of metal quickly, cleanly and at low cost. Contact us now for a free, no obligation trial of the best plasma cutters in the world.

Sign up now with your local Elmdale branch

	Powermax30® XP	Powermax45®	Powermax65®
Recommended handheld capacity	10 mm	12 mm	20 mm
Severance	16 mm	25 mm	32 mm
Maximum mechanized pierce capacity	Not applicable	12 mm	16 mm
Output current	15-30 A	20-45 A	20-65 A
	Powermax85®	Powermax105®	Powermax125®
Recommended handheld capacity	25 mm	32 mm	38 mm
Severance	38 mm	50 mm	57 mm
Maximum mechanized pierce capacity	20 mm	22 mm	25 mm
Output current	25-85 A	30-105 A	30-125 A

Dedicated to support your operation with high quality consumables!

Elmdale is dedicated in supporting your operation with genuine consumables for better performance:

- **CopperPlus**™ electrodes for use on all Duramax torches. Delivers at least 2 times longer life over standard consumables
- **FineCut**® **consumables** deliver significantly improved cut quality on thin-plate metals
- **SpringStart**™ **electrode** technology ensures consistent, reliable starting
- **Gouging consumables** for plasma systems provide a more efficient process than grinding
- **HyAccess** consumables give you the ability to cut in hard to reach places.

Hypertherm®

Powermax30® AIR, operate it anywhere with the internal compressor!

Contact us now for a demonstration

Recommended capacity: 8 mm
Severance: 16 mm
Output current: 15 - 30 A
Weight: 13,5 kg

Hypertherm®
Cut with confidence®

Alexander Binzel (UK) Limited was founded in late 1987. For the last twenty years the company has operated from a purpose built sales, service, training and logistics facility in Warrington.

MIG/MAG
- Welding Torches
- Automatic and Special Torches
- Push-Pull Welding Torches
- Fume Extraction Torches
- Central Adaptor System

TIG
- Welding Torches
- Automatic and Special Torches

PLASMA
- Cutting Torches
- Welding Torches
- Automatic and Special Torches

Robotic Equipment
- Robot Torches
- MIG/TIG/Plasma
- Robot Mount System
- ATS-Rotor
- Tool Change System WWS
- Wire Cutting Station DAV
- Torch Cleaning Station
- BRS-LC, BRS-CC and BRS-FP
- Wire Feeding Station MFS-V2

Welding Accessories
- Cooling Device
- Welding Cable Plug and Socket
- Anti-Spatter Spray and Paste

and so on...

Every product from ABICOR BINZEL should represent state-of-the-art technology - worldwide.

BINZEL Quality

Quality is the essential basis for a good partnership.

ABICOR BINZEL's belief in "assured quality" applies in various aspects: -

- To the innovative power of our research and development activities and the resulting high level of technology of our products.
- To all materials used and the way they are processed.
- To intermediate as well as final inspection processes.
- To our service from quick delivery of spare parts to the provision of emergency assistance for plant break-downs.

And..

- To reliability and dependability in all business processes as well as support for our distribution partners and OEM customers all over the world.

Technology for the Welder's World.

ABICOR BINZEL®

MB *EVO* MIG/MAG Welding Torches

Excellent Ergonomics & Flexibility!

The Ergo Has Evolved.

- The Ergonomic handle with 'GRIP' – positive handling even in extreme circumstances.
- Ball joint for air and liquid cooled torches – optimal handling.
- Air cooled up to 320 A.
- Liquid cooled up to 500 A.
- Optimum cooling of the torch – extending torch life.
- BIKOX® R air cooled torches – high flexibility even at low temperatures, extremely UV-resistant, considerably increased temperature stability and tensile strength.
- Time-saving torch change-over due to the ABICOR BINZEL central connector.
- Ergonomically and technically mature and reliable.
- Leading quality recognised worldwide.

Ball jointed cable assembly, wide excursion range.

MB ***EVO*** 'GRIP' handle, moulded 2K material.

Same consumables as industry standard MB ***ERGO*** range.

AIR COOLED

MB EVO 15 AK

Technical Data (EN 60 974-7)

Rating	Duty Cycle	Wire Size
180 A CO^2 150 A Mixed Gas	60%	0.6 - 1.2 mm

Torch	3 Metre	4 Metre	5 Metre
MB EVO 15 AK	002.0604	002.0605	002.0606

AIR COOLED

MB EVO 25 AK

Technical Data (EN 60 974-7)

Rating	Duty Cycle	Wire Size
230 A CO^2 200 A Mixed Gas	60%	0.8 - 1.2 mm

Torch	3 Metre	4 Metre	5 Metre
MB EVO 25 AK	004.0510	004.0511	004.0512

AIR COOLED

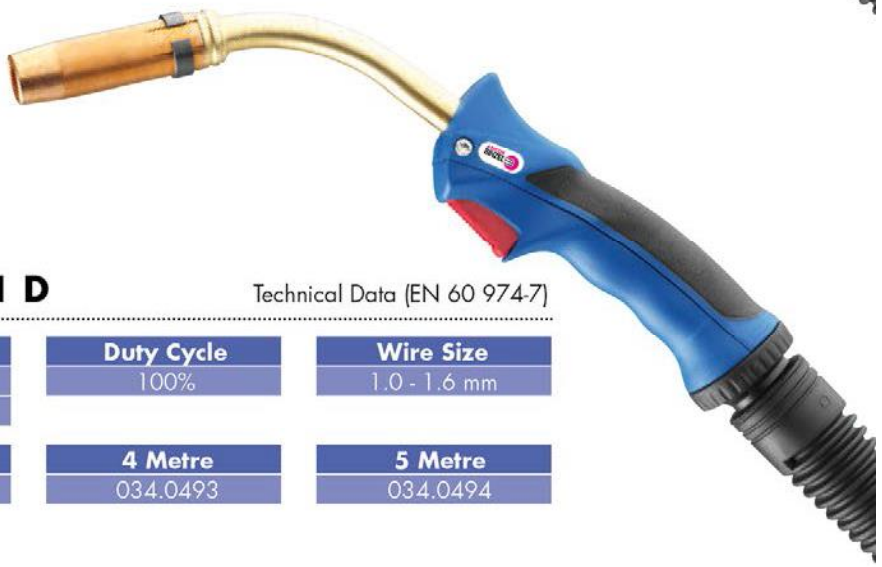
MB EVO 36 KD

Technical Data (EN 60 974-7)

Rating	Duty Cycle	Wire Size
320 A CO^2 290 A Mixed Gas	60%	0.8 - 1.2 mm

Torch	3 Metre	4 Metre	5 Metre
MB EVO 36 KD	014.0334	014.0335	014.0336

LIQUID COOLED



MB EVO 501 D

Technical Data (EN 60 974-7)

Rating	Duty Cycle	Wire Size
500 A CO^2 450 A Mixed Gas	100%	1.0 - 1.6 mm

Torch	3 Metre	4 Metre	5 Metre
MB EVO 501 D	034.0492	034.0493	034.0494

Fume Extraction Torches

RAB GRIP Air & Liquid Cooled

W3 Certified

Without
Fume Extraction

With
Fume Extraction

Fume Extraction at source - for optimum protection

Every welding job generates fumes & smoke that could be hazardous if inhaled. The RAB GRIP Fume Extraction Torches offer efficient fume extraction directly at its source without affecting the protective gas shield. Special design solutions guarantee highly efficient smoke removal

Torch Type	Part No. 3 Metre	4 Metre	5 Metre
RAB GRIP 15 AK	602.3014.1	602.3015.1	602.3016.1
RAB GRIP 25 AK	604.3013.1	604.3014.1	604.3015.1
RAB GRIP 25 AK *HD*	604.3016.1	604.3017.1	604.3018.1
RAB GRIP 36 KD	614.3015.1	614.3016.1	614.3017.1
RAB GRIP 501 D	634.3037.1	634.3038.1	634.3039.1

Mobile, powerful & easy to handle!

The fume extraction unit FES-200 in combination with fume extraction torches provides the best possible welding fume extraction directly at the source.

The new **W3** version is licensed for all **CrNi steels**!

E3® Purple Tungstens

Longer lasting, Non-Radioactive

E3® - Purple

	1.6mm	2.4mm	3.2mm	4.0mm	4.8mm
Part Number	700.0297.10	700.0299.10	700.0301.10	700.0302.10	N/A

E3®*

Electrodes with rare earth (mixed oxides). In comparison to thoriated electrodes this electrode is less harmful to the environment and not radioactive. The electrodes offer excellent ignition characteristics and consistent welding properties. They are universal and suitable for all applications in the whole range of DC and AC welding for non-alloyed and high-alloyed steel, aluminium, titanium, nickel, copper and magnesium alloys. Because of their great ignition properties they are also suitable for automated welding. Due to the low electrode temperature, they offer an increased current carrying capacity and longer service life than thoriated electrodes.
Colour-coding: **E3® = purple**