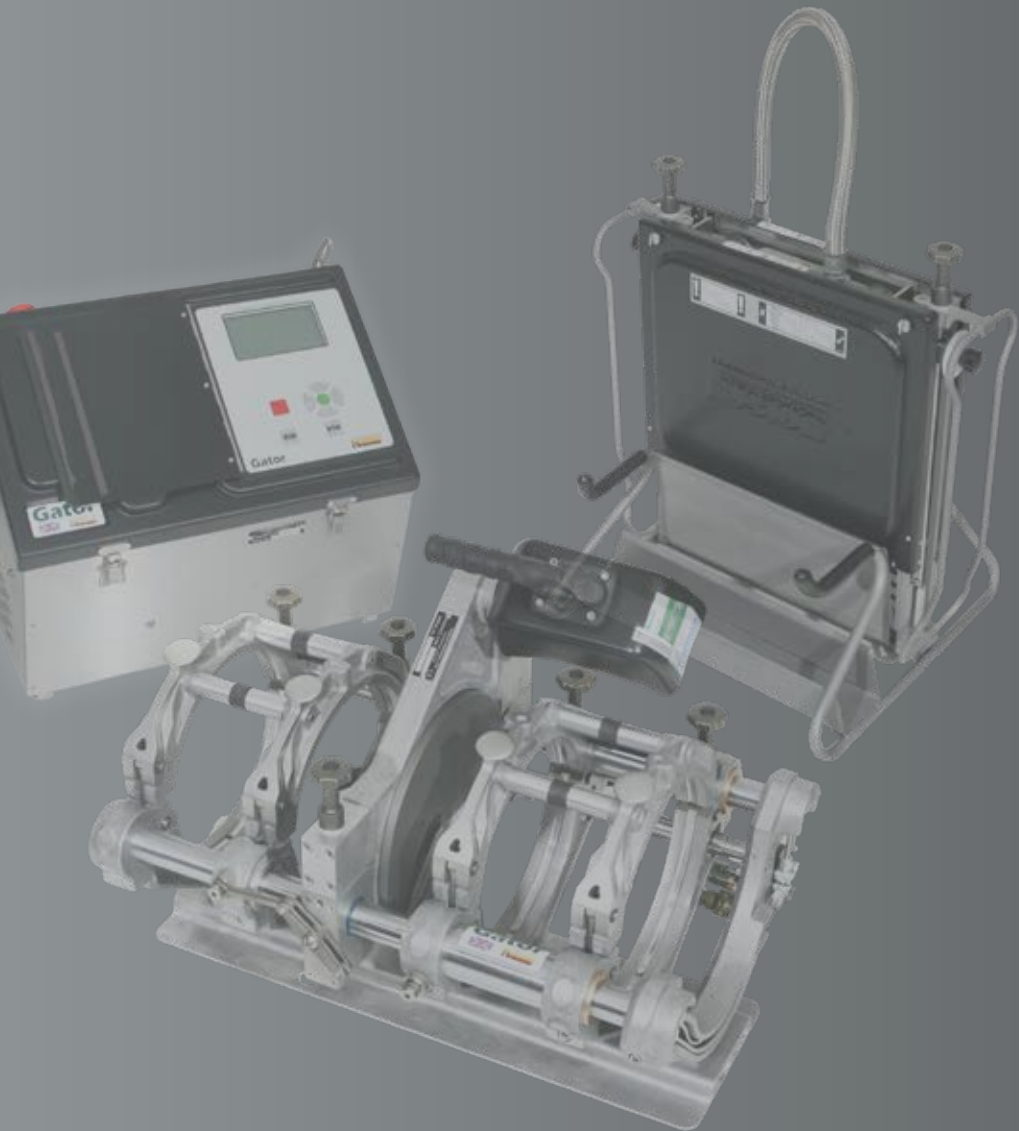
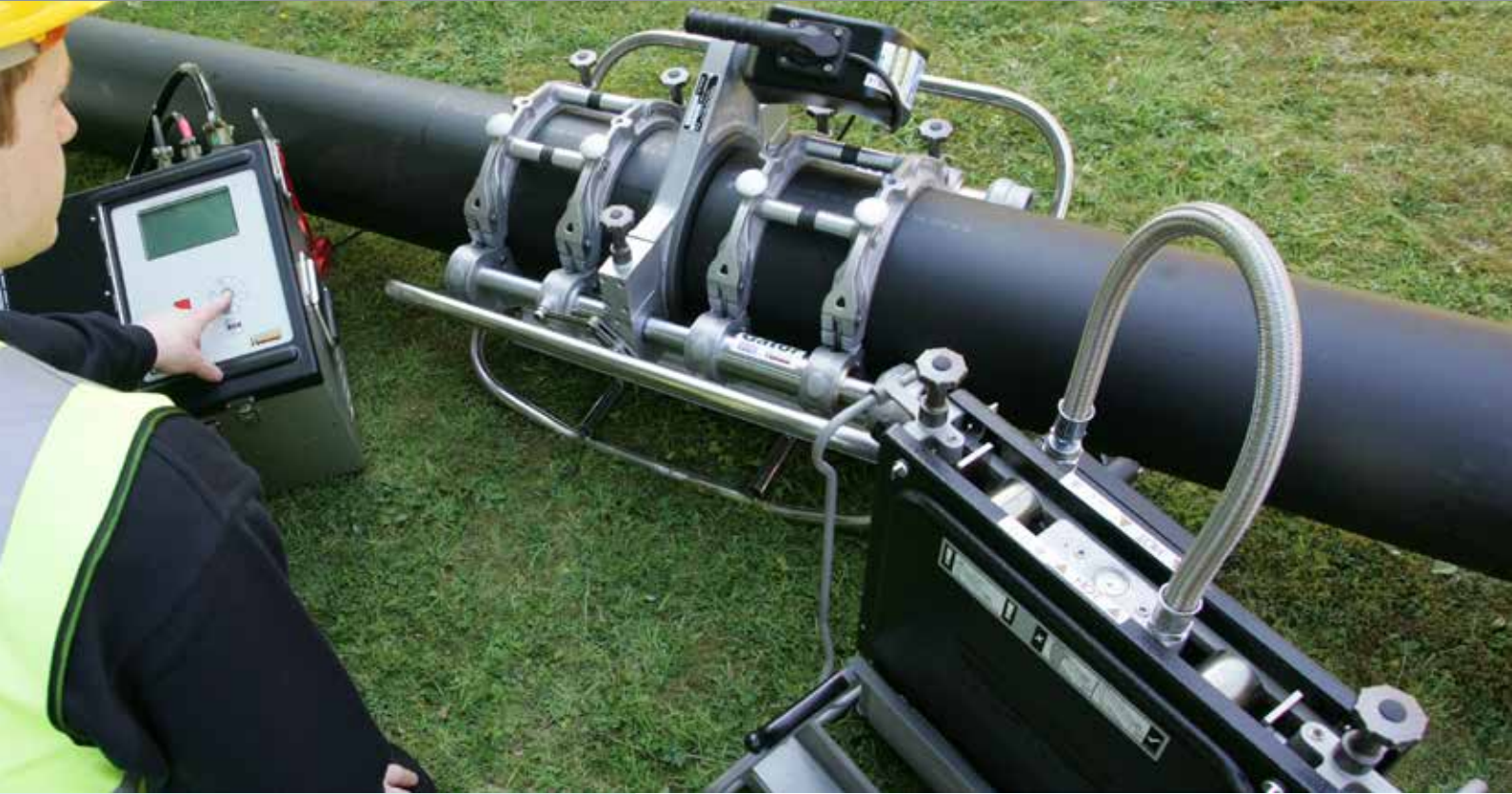


# EQUIPMENT AND AMCILLARIES





# Gator I Automatic Butt Fusion



The gator range of machines have been designed and developed to be used on gas and water pressure polyethylene pipes for distribution networks.

The best possible control of the joining process is achieved through an integral computer which will control and monitor all the joining parameters: time, temperature, pressure, movement and sequence.

The welding process will not continue if any of these parameters are not within the specified limits contained in the selected welding standard.

Designed and manufactured to meet or exceed GIS/PL2-3:2015 and ISO 12176-1:2017.

<b>Features</b>	<ul style="list-style-type: none"> <li>• 21 internationally approved butt welding standards including ISO 21307</li> <li>• Manufactured to ISO 12176 part 3 and part 4 compliant</li> <li>• Electronic trim stops protect against over trimming</li> <li>• Large backlit display with simple user multilingual interface</li> <li>• Fast clamp system to improve productivity</li> <li>• Data recording of 2,000 weld records</li> <li>• High quality electrohydraulic pump, motor, valves and control circuit</li> </ul>
<b>Standards</b>	<ul style="list-style-type: none"> <li>• ISO 12176-1:2017</li> <li>• GIS/PL2-3:2015</li> </ul>
<b>Data Output</b>	<ul style="list-style-type: none"> <li>• Printer - Thermal Paper</li> <li>• USB Memory device - Text file / JointManager</li> <li>• Bluetooth - ControlPoint/BlueBox (upon request)</li> </ul>
<b>Memory</b>	<ul style="list-style-type: none"> <li>• Internal memory capacity - Up to 2,000 records</li> <li>• Back up to SD card - Up to 400,000 records</li> <li>• Via ControlPoint (upon request)</li> </ul>
<b>Available on request</b>	<ul style="list-style-type: none"> <li>• Knife-edge conversion</li> <li>• Stub flange adaptor</li> </ul>
<b>Removable Clamp</b>	The fourth clamp on the Gator can be removed to facilitate the butt fusion of long spigot fittings.



# Gator | Automatic Butt Fusion | Control Panel



Continuously monitored		
Temperature	°C	
Movement	mm	
Pressure	Bar	
Time	Secs	
Trimmer current	Amps	
Heater continuity	Ω	
Pipe slippage	mm	
Oil Level	ml	

## Fully Automatic Features

1. Machine sequencing
2. Trim and feathering cycle
3. Pipe slippage check
4. Static and dynamic drag measurement
5. Heater plate temperature control
6. Initial bead up distance control
7. Heater retraction
8. Pressure control at bead up, soak, fusion, and cool time phases
9. Out of specification early warnings

## Operator Contribution

1. Input pipe and operator details
2. Inspect and approve trim

## Preprogrammed parameters

1. 15 internationally approved welding standards containing specified:
  - Heater temperatures
  - Fusion pressures
  - Soak times
  - Cooling times
2. Data management systems
3. Diagnostic routines




# Gator | Automatic Butt Fusion | Specification

	GATOR 180		GATOR 250		GATOR 315		GATOR 400	
Range	63 - 180		63 - 250		90 - 315		200 - 400	
Nominal Input Voltage (V)	110	220	110	220	110	220	110	220
Input Frequency (Hz)	50-60	50-60	50-60	50-60	50-60	50-60	50-60	50-60
Min. Generator Output (KVA)	3.5	3.5	4.0	4.0	6.0	6.0	6.5	6.5





# Gator | Automatic Butt Fusion | Order Codes

Code	Gator Size	Description	Plug Type	Delivery Code	Gross Price
					£ GBP
G180110AFE	180	110 volt - yellow 3 pin plug		C	POA
G250110AFE	250			C	POA
G315110AFE	315			C	POA
G400110AFE-2	400			C	POA
G180220AFG	180	220 volt - black 2 pin plug		C	70,820.83
G250220AFG	250			C	71,758.33
G315220AFG	315			C	76,182.49
G400220AFG-2	400			C	109,106.19
G180220AFE	180	220 volt - blue 3 pin plug		C	68,842.23
G250220AFE	250			B	70,803.14
G315220AFE	315			B	76,164.73
G400220AFE-2	400			B	109,106.19

## Gator Liners

### Features

- Butt Fusion liners are designed to maximise the size range of the machine.
- All sizes are available in cast aluminium
- Sizes up to 180mm diameter are also available in an engineering plastic called Noryl. Noryl liners are extremely tough and very light.



Aluminium code	Plastic code	Size	To fit machine sizes	Delivery Code	Gross Price	Gross Price
		mm			Aluminium	Plastic
					£ GBP	£ GBP
BFL400355	N/A	400x355	400	B	2,901.02	N/A
BFL400315	N/A	400x315	400	B	1,799.96	N/A
BFL315280	N/A	315x280	400, 315	C	1,353.07	N/A
BFL315250	N/A	315x250	400, 315	B	1,227.43	N/A
BFL315200	N/A	315x200	400,315	C	2,721.58	N/A
BFL250225	N/A	250x225	400,315,250	C	1,024.79	N/A
BFL250200	N/A	250x200	400,315,250	B	1,038.85	N/A
BFL250180	BFL250180PT	250x180	400,315,250	B	1,161.74	548.10
BFL180160	BFL180160PT	180x160	315,250,180	C	1,617.19	217.43
BFL180140	BFL180140PT	180x140	315,250,180	C	1,417.67	332.99
BFL180125	BFL180125PT	180x125	315,250,180	B	1,334.36	260.93
BFL180110	BFL180110PT	180x110	315,250,180	B	1,553.10	304.28
BFL18090	BFL18090PT	180x90	315,250,180	B	1,337.12	292.18
BFL18075	BFL18075PT	180x75	250,180	C	1,265.34	370.98
BFL18063	BFL18063PT	180x63	250,180	C	1,149.49	254.55

# THE GOOD GUIDE TO BUTT FUSION JOINTING



This guide will provide basic information to enable the operative to:

- Understand the equipment required.
- Understand the principles of polyethylene (PE) pipe butt fusion jointing.
- Identify pipe and appropriate fitting markings.
- Site the equipment.
- Carry out pre-jointing machine and equipment checks.
- Make satisfactory butt fusion joints across a range of pipe sizes.
- Inspect for, and identify acceptable quality joints including de-beading.

## Equipment required:



Generator of suitable size to power butt fusion machine - refer to manufacturers' literature for power requirements



Butt fusion machine of suitable size and liners (if required)



Pipe support rollers



Welding tent/shelter and ground sheet



External / Internal de-beading tool



Pipe end covers



Pipe cutter



Indelible marker pen for marking beads



# THE GOOD GUIDE TO BUTT FUSION JOINTING



## Principles

The pipes to be joined are held in clamps which grip and re-round the pipe. Clamps are hydraulically operated by hand pumps or electrically driven pumps. Clamp movement is controlled by the operator in the case of manual / semi-automatic machines, in automatic machines the computer controls clamp movement during the automatic cycle.

Pipe ends are prepared by planing with an electrical driven trimmer, then heated using an electrically powered non-stick heater plate. When molten, the pipe ends are brought together and held under pressure until cooled.

## Pipe Selection ID

Check that both pipes to be joined are of the same size, SDR (standard dimension ratio) and material. Only compatible sizes and material should be joined together. If in doubt, seek advice from the pipe manufacturer. Pipe information is marked on the pipe at approximately one metre intervals.

## Siting Equipment

Wherever possible, the butt fusion machine should be placed on a suitable clean, dry base board or ground sheet inside a tent / shelter to minimise contamination and wind chill.



Arrange the machine so there is enough room to get around the machine to carry out the work, route the cables and hoses so they don't cause a trip hazard.

## Pre-Jointing Checks

- Use only equipment which has been regularly serviced and is in good condition.
- Ensure the correct jointing parameters for the machine and pipe being welded are known and understood.

- Ensure that the generator is maintained and serviced to the manufacturers requirements and has sufficient fuel to carry out the work to be done.
- Ensure that the generator has been suitably earthed to the generator manufacturers requirements.
- Check that the heater plate coating is not damaged and is clean – wash only when cold with clean water and dry with a clean lint-free cloth or paper towel.
- Check that the trimmer is clean and that the blades are not damaged and are in good condition.
- Ensure clamp liners and securing screws of the correct size are available for the size of pipe to be joined. Liners must be clean and sit fully in the pipe clamps thus ensuring correct alignment.
- Check that the heater plate is at the correct temperature. Ensure correct parameters are selected for pipe to be joined.

## Dummy Joint

To make dummy welds follow the jointing procedures or abort the cycle after the full soak time has elapsed then open the machine and remove the heater. The first print out should read 'Error 20: Abort during Fusion.' Alternatively, allow the joint to complete and cut out the joint(s) once cooled. Some welding standards will force one or two dummy welds.

## MAKING THE JOINT

### Automatic Welding Procedure

The welding procedure detailed below has been summarised from the manufacturers comprehensive operating instructions and is only intended as a guide. Always familiarise yourself fully with the manufacturers operating instructions, safety operation and controls before commencing work.

### Stop / Reset Button

In an emergency press the Emergency Stop Button on the back of the controller, when pressed it will immediately cut the generator supply to the machine.

Dummy welds should be made (to remove any fine particles from the heater plate) before every welding session, after changing from one pipe size to another and also if the heater has been allowed to cool.

### Connection and Pipe Selection

1. Connect heater, chassis and trimmer cables to the computer.
2. Ensure the hydraulic connections are clean and then connect to the controller.
3. Start the generator and then connect the controller to the generator.
4. Select the pipe size and type to be jointed.
5. Confirm data.

### Pipe Preparation

1. Load and secure trimmer into machine using the fast clamp system. Push down knobs and turn clockwise to lock.



2. Place pipes to be joined on the pipe support roller to reduce drag.

3. Cover pipe ends that are not being jointed to prevent draughts.
4. Clean pipe ends inside and out (approx. 300mm) then load and position pipes lightly against trimmer discs with writing on pipe uppermost.
5. Position toggle lever into place and use adjustment knob (clockwise to tighten and anti-clockwise to loosen). Snap shut the fast clamps around the pipe.



6. Press 'Green' button on controller. Trimming will continue up to its programmed stop, but as soon as a running swarf strip of full pipe thickness is visible, the 'feathering off' phase can be initiated by pressing the 'Green' button again. Without operator intervention, the machine will automatically enter the 'feathering off' phase of the trimmer cycle.

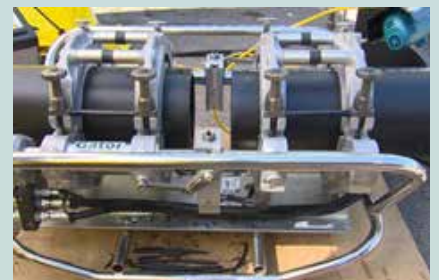


7. When trimming cycle is completed and carriage has opened, remove trimmer and swarf. Pull swarf through the bottom of the frame. Be careful not to touch pipe ends.



## DO NOT PULL SWARF UP THROUGH TRIMMED PIPE ENDS, AS THIS MAY CONTAMINATE THE PIPE FACES

8. Visually check pipe ends for completeness of trimming.



9. Press 'Green' button to close carriage then visually check pipe alignment, adjust clamps removing ONLY one toggle clamp at any one time to adjust alignment if required then re-check and re-trim if necessary.





# THE GOOD GUIDE TO BUTT FUSION JOINTING

## MAKING THE WELD

1. After the 'check' and prior to the 'join' phase secure the heater to the chassis. Push down knob and turn clockwise to lock.
2. Press 'Green' button on computer, this checks heater temperature, if the heater is correct temperature then the chassis will open. The chassis will not open until the correct temperature has been achieved.
3. Insert the heater into the chassis, push home until fully locked.



4. Press 'Green' button again. Fusion cycle will be carried out automatically. Display will give 'relevant' information at all times.
5. When controller display shows 'JOINT COMPLETE', press 'Green' button.



6. Remove the heater from the chassis, place in heater / trimmer stand.
7. Allow pipe to cool properly (in accordance with specification) before releasing from the clamps.
8. Unclamp pipe and remove carefully.

## Quality Checks

- Check visually for excessive irregularity in bead formation and pipe mismatch.
- Externally de-bead the weld.
- Visually check the underside of the removed bead for contamination, then bend back at several positions and inspect for slit defects.
- Check for cleanliness around joint area.
- Print out or download the joint data from the controller using Data Printer, USB stick or MiniTran. Check the results and verify the details for correct compliance.

## BUTT FUSION DO'S

- In cold temperatures the chassis should be opened and closed manually approximately 10 times in quick succession following the automatic warm up routine.
- Always ensure that the equipment is calibrated and properly maintained.
- Always weld inside a shelter on a suitable baseboard or ground sheet.
- Where possible, site the equipment on clear level ground.
- Always ensure pipes are aligned correctly and supported on pipe rollers to minimise drag.
- Cover open pipe ends to eliminate wind chill to the heater and joint interface.
- Clean pipe surfaces (inside and out), pipe ends and clamps before inserting pipe into the machine.
- Position pipes into the clamps with the pipe marking uppermost and aligned.
- Wash the heater plate when cold before every welding session and perform dummy welds when hot to remove fine particles from the heater surface. On pipe sizes above 180mm, two dummy welds should be made at the start of each session.
- Perform dummy welds after changing from one pipe size to another, also if the heater plate has been allowed to cool.

- Clean trimmer discs and blades before use.
- Ensure that when trimming, a continuous ribbon of material, of complete pipe wall thickness is produced from both pipe ends before stopping the trimmer and advancing to the feathering operation.
- Always wait for the trimmer to stop rotating before removing it from the machine.
- Replace the trimmer in the stand provided.
- Remove shavings from pipe ends and chassis. Pull swarf through the bottom of the frame be careful not to touch pipe ends.
- Check visually that both pipe ends are completely trimmed.
- Always check pipes for alignment ensuring no gaps exist between the two pipe ends around the entire circumference of the abutted pipes.
- On completion of satisfactory alignment checks, proceed with the welding cycle without delay.
- Number/code the joint and bead using an indelible marker.
- After FULL cooling time has elapsed, remove either external or internal bead and carry out quality checks.

## BUTT FUSION DONT'S

- Do not attempt to open the computer enclosure – there are no user serviceable parts inside.
- Do not use damaged equipment.
- Do not attempt to weld pipes of different material, diameter or SDR.
- Do not leave shavings inside pipe or on the chassis.
- Do not introduce dirt onto trimmed pipe ends whilst removing swarf.
- Do not touch trimmed pipe or fitting ends.
- Do not remove pipes from the machine before the complete cooling time has elapsed.
- Do not cut corners in any part of the welding cycle.
- Do not attempt to install pipe until fully cooled.



## SAFETY NOTES

Although we make every effort in the design of our products to ensure operator safety, please remember the following precautions:

- Do not touch heater plate when hot.
- Never allow molten or semi-molten polyethylene to come into contact with the skin. However, if this does happen, flush the affected area with cold water and seek expert medical advice.

### **DO NOT UNDER ANY CIRCUMSTANCE ATTEMPT TO PULL THE MATERIAL FROM THE SKIN AS THIS COULD REMOVE THE SKIN AS WELL.**

- Avoid contact with the trimmer blades when cleaning discs and especially when in motion. These can be sharp and cause cuts to fingers etc.
- Do not attempt to operate the trimming device whilst out of the machine chassis or attempt to by-pass the safety switch.
- Keep fingers and hands away from the pipe ends, chassis, trimmers and heaters whilst operating the machine.
- Do not attempt to lift heavy equipment or long lengths of pipe without assistance or mechanical aid.
- An audible alarm is fitted to automatic butt fusion machines to warn of impending movement.
- Remove all traces of polymer from the heater face(s) to prevent the production of fumes from degraded residues (at normal jointing temperatures the production of fumes will be slight, however these will be more pronounced at higher temperatures). Advice regarding Health & Safety in reference to the pipe material can be obtained from the pipe supplier.

- Normal precautions should be observed when handling electrical equipment and for safety reasons, all 110V portable generator sets should be "Centre Tapped" for site use 55V-0V-55V volts.
- To afford protection against unforeseen circumstances occurring during jointing it is advisable to wear protective workwear such as gloves, safety glasses and safety boots.





# Welda 2 | Manual Butt Fusion

## Features

Manual machines are part of the hydraulic range of butt fusion machines. They are suitable for welding polyethylene pipes for gas and water pipeline projects.

- Pipe size range 63-400mm Ø
- Fast clamping
- Lightweight compact machine
- Toolless repositionable 3rd clamp
- Heater pull off mechanism
- Large easy to read pressure gauge
- 150 bar operating system
- Trimmer safety switch
- Electronically regulated heater temperature
- Replaceable heater surface plates



Code	Welda Size	Description	Range	Weight	Min Generator Output	Delivery Code	Gross Price
			mm	Kg	KVA		£ GBP
W180220MFE-2	Welda 2 180	220V Blue 3 pin plug	63-180	99.5	5	C	POA
W180220MFG-2	Welda 2 180	220V Black 2 pin plug	63-180	99.5	5	C	POA
W250220MFE-2	Welda 2 250	220V Blue 3 pin plug	63-250	111	5	C	POA
W250220MFG-2	Welda 2 250	220V Black 2 pin plug	63-250	111	5	C	POA
W315220MFE-2	Welda 2 315	220V Blue 3 pin plug	90-315	138.7	7	C	POA
W315220MFE-2DL	Welda 2 315	220V Blue 3 pin plug with Datalogger	90-315	138.7	7	C	POA
W315220MFG-2	Welda 2 315	220V Black 2 pin plug	90-315	138.7	7	C	POA
W400220MFE-2	Welda 2 400	220V Blue 3 pin plug	200-400	170	8	C	POA
W400220MFG-2	Welda 2 400	220V Black 2 pin plug	200-400	170	8	C	POA

# Welda Liners

## Features

- Butt Fusion liners are designed to maximise the size range of the machine.
- All sizes are available in cast aluminium
- Sizes up to 180mm diameter are also available in an engineering plastic called Noryl. Noryl liners are extremely tough and very light.



Aluminium code	Plastic code	Size	To fit machine sizes	Delivery Code	Gross Price Aluminium	Gross Price Plastic
		mm			£ GBP	£ GBP
BFL400355	N/A	400x355	400	B	2,901.02	N/A
BFL400315	N/A	400x315	400	B	1,799.96	N/A
BFL315280	N/A	315x280	400, 315	C	1,353.07	N/A
BFL315250	N/A	315x250	400, 315	B	1,227.43	N/A
BFL315200	N/A	315x200	400,315	C	2,721.58	N/A
BFL250225	N/A	250x225	400,315,250	C	1,024.79	N/A
BFL250200	N/A	250x200	400,315,250	B	1,038.85	N/A
BFL250180	BFL250180PT	250x180	400,315,250	B	1,161.74	548.10
BFL180160	BFL180160PT	180x160	315,250,180	C	1,617.19	217.43
BFL180140	BFL180140PT	180x140	315,250,180	C	1,417.67	332.99
BFL180125	BFL180125PT	180x125	315,250,180	B	1,334.36	260.93
BFL180110	BFL180110PT	180x110	315,250,180	B	1,553.10	304.28
BFL18090	BFL18090PT	180x90	315,250,180	B	1,337.12	292.18
BFL18075	BFL18075PT	180x75	250,180	C	1,265.34	370.98
BFL18063	BFL18063PT	180x63	250,180	C	1,149.49	254.55





# Welda 500 | Manual Butt Fusion

The Welda 500 is a powerful butt fusion machine packed with quality and safety features enabling a single operator to complete 500mm butt fusion joints with minimum effort.

The fast and controlled ejection of the heater plate and trimmer ensures efficiency and higher quality joints while promoting safe working; and when used with a pipe lifter, minimises manual lifting.

## Features

- Pipe size range 250-500mm Ø
- Swing in/out heater and trimmer
- One person quick and safe operation
- Single unit: No heater and trimmer stands
- Repositionable 3rd clamp
- Heater pull off mechanism
- Large easy to read pressure gauge
- Trimmer safety switch
- Electronically regulated heater temperature
- Replaceable heater surface plates
- Non-drip quick release hydraulic connections



Code	Welda Size	Description	Range	Weight	Min Generator Output	Delivery Code	Gross Price
			mm	Kg	KVA		£ GBP
W500220MFE	Welda 500	220V Blue 3 pin plug	250-500	420	9	C	POA
W500220HFMFE	Welda 500	220V Blue 3 pin plug - High Force	250-500	420	9	C	POA

# Welda 500 Accessories

## Features

The Welda 500 is available with the following accessories:

- Reducing shells, trim set bar, stub flange adaptor
- Compact trolley and winch kit

Code	Size	To fit machine sizes	Delivery Code	Gross Price
	mm			£ GBP
BFL500450X50	500x450	Welda 500	C	POA
BFL500400X50	500x400	Welda 500	C	POA
BFL400315X50	400x315	Welda 500	C	POA
BFL400355X50	400x355	Welda 500	C	POA

Code	Description	Delivery Code	Gross Price
			£ GBP
FES-13408	Stub Flange Adaptor	C	POA
FES-13512	Compact Trolley	C	POA
FES-13496	Trim Setting Bar	C	POA
FES-23136	Winch for Trolley	C	POA



# External Debeader

## Features

Used to remove external beads after butt fusion joint completion. External bead removal plays a key role in establishing joint integrity and is necessary when undertaking slip-lining or swage lining projects.

- Easily adjusts to pipe diameter, allowing the blade to cut under the bead without damaging the surface of the pipe
- High quality heat treated ground cutting blades
- Replacement blades available
- Comes complete with storage box



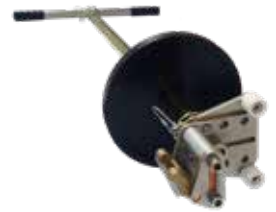
Code	Range	Weight	Spare blade code	Delivery Code	Gross Price
	mm	Kg			£ GBP
EXTDBS	63mm - 125mm	TBA	FES-01-07-521	C	POA
EXTDB	90mm - 400mm	3	EXTDBBLADE	B	1,524.10
EXTDBL	355mm - 630mm	4	EXTDBLBLADE	C	4,731.21
EXTDBXL	400mm - 900mm	5	EXTDBXLBLADE	C	5,052.24
EWBRT60	710mm - 1200mm Bead Width up to 60mm	TBA	TBA	C	POA
EWBRT80	Bead Width up to 80mm	TBA	TBA	C	POA
EWBRT100	Bead Width up to 100mm	TBA	TBA	C	POA

# Internal Debeader

## Features

The internal debeader is a manual kit for the simple and effective removal of internal beads formed during the butt fusion process. The internal debeader can debead polyethylene pipes in the size range 110mm - 400mm (450mm with adaptor).

- Rods can be quickly clipped together to debead pipe lengths up to 13m
- Bead retained in head after removal process for later inspection/archiving
- Robust build quality
- Simple to assemble
- Facilitates quality control procedures from visual bead inspection and bend back test
- Rods come in robust canvas bag
- Heads and ancillary components are housed in a steel box with carry handles



Code	Description	Weight	Delivery Code	Gross Price
		Kg		£ GBP
IBRTKIT	Internal bead removing tool 110 - 400mm	70	C	12,945.96
FES-31681	Spare blade for head 1 and 2	N/A	C	214.46
FES-32187	Spare blade for head 3 and 4	N/A	B	204.96

IBRTKIT Contains	
NOTE: These items are also available as spares	
Code	Description
FES-11769	1 x storage box
FES-11560	1 x drive handle
FES-21459	1 x no. 1 size head
FES-21457	1 x no. 2 size head
FES-21453	1 x no. 3 size head
FES-21451	1 x no. 4 size head
N/A	2 x Allen keys
N/A	1 x set operating instructions
FES-32740	3 x size 1 rod supports
FES-31754	3 x size 2 rod supports
FES-21803	3 x size 3 rod supports
FES-21310	3 x size 4 rod supports
FES-21859	3 x size 4b rod supports
FES-69046	1 x rod bag
FES-21560	6 x 2 meter rods
FES-21618	1 x 1 meter rod

Selection Chart						
SDR	44	32	26	17	11	7.3
O/D (mm)	Head Size					
110				1(B)	1(A)	
125				1(D)	1(C)	1(A)
140				1(A)	1(D)	1(C)
160	2(B)	2(B)	2(B)	2(B)	2(B)	1(D)
180	3(A)	2(C)	2(C)	2(C)	2(B)	2(B)
200	3(A)	3(A)	3(A)	3(A)	2(C)	2(B)
225	3(B)	3(B)	3(B)	3(B)	3(A)	2(C)
250	3(C)	3(C)	3(C)	3(C)	3(B)	3(A)
280	4(B)	4(B)	4(B)	3(C)	3(C)	3(B)
315	4(C)	4(C)	4(C)	4(B)	4(A)	3(C)
355	4(D)	4(D)	4(D)	4(C)	4(C)	4(A)
400				4(D)	4(C)	4(B)
450				4(D)	4(D)	

**Note:** Each debeader head size has multiple settings. These are referred to in the table as A, B, C or D. To select the correct head size you will need to know the outer diameter of the pipe you wish to debead (see first column) and its SDR.





# Pipe Lifter 400

## Features

The Pipe Lifter 400 is a simple, robust and effective device which assists with the ejection and movement of polyethylene pipes during the welding process.

- Simple lever mechanism which improves productivity
- Heavy duty construction
- Folds flat for easy storage and transportation
- Works in conjunction with pipe support rollers
- Compatible with all butt fusion machines from 180mm to 400mm



Code	Description	Range mm	Weight Kg	Delivery Code	Gross Price £ GBP
PIPELIFT400	Pipe Lifter 400	up to 400mm	22	C	2,565.78

# Pipe Support Rollers

## Features

A range of adjustable pipe support rollers, used to assist the butt fusion welding process

- 3 adjustable pipe rollers covering the range 63mm to 630mm
- Rigid construction, with all models supplied as a pair



315 Adjustable roller    400 Adjustable roller    630 Adjustable roller

Code	Description	Range mm	Weight per roller Kg	Delivery Code	Gross Price £ GBP
PSROLL315	315 adjustable roller (pair)	63-315mm	5	C	944.97
PSROLL400	400 adjustable roller (pair)	63-400mm	18	C	1,951.48
PSROLL630	630 adjustable roller (pair)	315-630mm	52	C	6,925.56

# Printer Paper Roll

## Features

Paper roll to be used with portable printer for Gator controller.

Printer and lead available upon request.



Paper Roll



Gator controller with printer in operation

Code	Description	Delivery Code	Gross Price £ GBP
FES-705799	Paper roll	C	9.21



# SBOX Max | Electrofusion Welding Machine









The SBOX Max Electrofusion welding machine gives you functionality, reliability and is capable of welding electrofusion fittings for gas, water and other pressure pipe applications up to 630mm.

## Features

- Fitting size range 20mm to 630mm diameter.
- Fusamatic, barcode and manual entry for input of Fusion data.
- Screen protected by hard-wearing scratch-resistant polycarbonate.
- Pin adaptors included as standard. Welds both 4mm and 4.7mm pin fittings.
- Comes with hard protective carry case; designed to withstand knocks and scratches.
- Multiple language options available.
- Graphics display with adjustable contrast and a wide viewing angle.
- Internal 'Black Box' SD card holds up to 100,000 joint records: a lifetime's joints safely stored.

## SBOX Max | Order Codes

Code	Description	Plug Type	Bar Code Scanner	Delivery Code	Gross Price
					£ GBP
SBOXMAXBCG	SBOX Max 230V Electrofusion Welder with barcode scanner - black 2 pin plug			B	8,769.96
SBOXMAXBCE	SBOX Max 230V Electrofusion Welder with barcode scanner - blue 3 pin plug			B	8,752.20
SBOXMAXG	SBOX Max 230V Electrofusion Welder - black 2 pin plug		X	C	8,072.01
SBOXMAXE	SBOX Max 230V Electrofusion Welder - blue 3 pin plug		X	C	8,120.65

Note - all 220V/230V automatic electrofusion control boxes come with carry case and 4.0mm / 4.7mm lead end adaptors as standard.





# SBOX Max | Features



Only 18kg in tough protective case



Display your logo on screen



Welds fittings between 20mm and 630mm



Cable tidy



USB data download



Multiple languages



Welds 4mm and 4.7mm pin fittings



Mobile Control Available



Barcode, manual and Fusamatic fittings



# SBOX Max | Specification



SBOX-Max / SBOX-MaxBC			
Supply	Minimum	Typical	Maximum
Input Voltage	195v	230v	265v
Input Frequency	40Hz	50Hz	60Hz
Generator Rating	4.2KVA	-	6KVA

SBOX-Max / SBOX-MaxBC			
Output	Minimum	Typical	Maximum
Output 40v Auto Fitting	39.0v	39.5v	40.0v
Output Voltage Barcode and Manual	10.0v	-	48.0v
Output Current	2A	-	60A
60% Duty Cycle output ISO12176-2		60A	
Peak Current <60seconds		80A	

Operating modes	SBOX-Max	SBOX-MaxBC
Fusamatic	20 - 900 Seconds	
Manual	10 - 3500 Seconds	
Barcode	NO	YES

Memory	SBOX-Max / SBOX-MaxBC
Internal Memory Capacity	Up to 2,000 records
Backup to SD Card	Up to 100,000 records
Via ControlPoint	Unlimited

Data output	SBOX-Max / SBOX-MaxBC
USB memory device	YES - text file/weld analyser
Bluetooth	Upon request

SBOX-Max / SBOX-MaxBC		
Environment	Minimum	Maximum
Operating Temperature	-10°C	+40°C
Storage Temperature	-15°C	+55°C
Environmental Protection	IP54	

Weights	SBOX-Max	SBOX-MaxBC
Box with leads	16.8kg	17.0kg

Cable length	SBOX-Max / SBOX-MaxBC
Input Cable	3m
Output Cable	2.5m

Dimensions	Width	Depth	Height
(with cables coiled in cable storage)	30cm	29cm	43cm

Standards	SBOX-Max	SBOX-MaxBC
ISO12176-2 Electrofusion	YES	
ISO12176-2 Classification	P23US2FVKADX	
ISO12176-3 Operator Badge	-	YES
ISO12176-4 Traceability Coding	-	YES





# SBOX Lite 220v | Electrofusion Welding Machine

The SBOX-Lite is a lightweight and versatile electrofusion control box which is capable of welding any brand of electrofusion fittings for gas, water and other pressure pipe applications.

## Features

- Fitting size range 20mm - 125mm (140mm and 160mm couplers can be welded by letting the machine cool down between operations).
- The 220V SBOX-Lite can be used in 2 different modes -
  1. By barcode reading (8 - 48 volts)
  2. Manual entry of fusion voltage and time
- Lightweight - only 8kg
- Joint data memory of 350 welds - downloadable to USB memory stick
- Fusion data transfer CD and USB cable adaptor included
- Ambient temperature compensation is applied when required
- 4.0 - 4.7mm diameter universal collet adaptor
- Multi-lingual selectable display
- Manual scraper included
- Transport bag included



Universal lead ends

I/P Plug

## SBOX Lite 220v | Order Codes

Code	Description	Range	Weight	Delivery Code	Gross Price
		mm	kg		£ GBP
SBOXLITE220BC	SBOX Lite 220 volts	20-125mm	8	A	3,105.76

## SBOX Lite 220v | Specification

<b>Diameter range (OD)</b>	20 - 125mm *
<b>Weldable materials</b>	PE / PP/ PP-R
<b>Dimensions (W x D x H)</b>	200 x 250 x 210mm
<b>Weight</b>	8 kg
<b>Power supply (V)</b>	230V ±15%
<b>Frequency</b>	50 - 60 Hz
<b>Maximum absorbed power</b>	2000W
<b>Nominal absorbed current</b>	8A
<b>Peak output current</b>	60 A
<b>Welding nominal current</b>	23A
<b>Duty cycle 60% (ISO 12176-2)</b>	

<b>Working temperature</b>	- 10 °C to + 40 °C
<b>Welding voltage (V)</b>	8V-48V
<b>Protection degree</b>	IP 54
<b>Barcode scanner</b>	Yes
<b>Pin connector sizes</b>	4mm and 4.7mm universal
<b>Memory capacity</b>	350 joints
<b>Ambient temperature compensation</b>	Yes

\* OD 140mm and 160mm Fusamatic couplers can also be welded but with precaution, wait for the machine to cool off completely after each welding cycle.

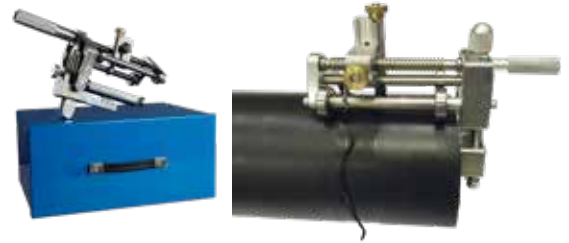


# Uniprep Scraper

## Specification

Uniprep scrapers are high productivity tools, used for preparing pipe ends prior to electrofusion. Suitable for all pipe SDR's and pipe with ovality.

- Fast scraping action
- Heat treated ground steel cutting blade
- Accurately controlled depth of cut
- Quick release after pipe scraping using post locking screw



Code	Description	Weight	Spare Blade Code	Delivery Code	Gross Price
		Kg			£ GBP
UNIPREP250	Uniprep scraper 63mm - 250mm	3	UNIPREP22	B	2,973.44
UNIPREP400	Uniprep scraper 90mm - 400mm	3.5	UNIPREP22	B	3,099.81
UNIPREP500	Uniprep scraper 125mm - 500mm	4	UNIPREP22	C	3,377.34
UNIPREP710	Uniprep scraper 450mm - 710mm	5	UNIPREP22	C	5,505.58

# Universal Scraper

## Specification

The universal scraper provides a convenient means of preparing pipe ends prior to electrofusion jointing. It can operate on all pipe diameters and commonly used SDR sizes from 63mm to 250mm inclusive, and can be used on coiled pipe and pipes with ovality.

- Correct length of scrape is pre-set
- Fixed, serrated blade driven around the pipe using ratchet handle
- Internal roller action holds the cutting blade against the pipe
- Carry case, spare blade and cleaning brush



Code	Description	Weight	Spare Blade Code	Delivery Code	Gross Price
		Kg			£ GBP
UNISCRP	Universal scraper 63mm-250mm	4.5	370300	B	2,917.47



# Multiscrape Kit

## Features

Multi Scrape is a versatile pipe scraper designed specifically with coiled pipe in mind. Mandrels support the pipe ends and a spring loaded blade, ensures that the optimum depth of cut is achieved.

- For pipe sizes 20-63mm
  - Comes with choice of solid or expandable mandrels
  - Hardened steel blade design, indexable with two cutting edges
  - Blade design ensures a consistent depth of cut
  - Sprung loaded arm facilitates use on coiled and oval pipe
  - Mandrels aid pipe re-rounding, cover a variety of pipe sizes and SDR's
- Spare parts available upon request



Code	Description	Delivery Code	Gross Price
			£ GBP
MULTISCRAPKIT	Tool including complete set of solid mandrels and spare blade in case	B	1,781.11
MULTISCRKITEM	Tool including 20mm and 25mm solid mandrels and small, medium and large expanding mandrels in case	C	1,204.95
MULTISCRAPE	Tool only	C	468.06

Diameter range	SDR Range	Case dimensions	Weight complete kit
			Kg
20, 25, 32, 40, 50, 55 and 63mm	11 and 17	275 x 225 x 90mm	2.5





# Multi Clamp

## Features

The multi-clamp kit has been specifically designed for easier alignment and restraint of a whole range of electrofusion fittings and suits narrow trenching techniques.

- Facilitates full rerounding and restraint during electrofusion
- Top clamp hinges facilitates use in narrow trenches
- The dovetail assembly allows complete rotation through 360° to suit any pipe and fitting configuration (large diameter tees require extra base, ring and liners)
- Extruded lightweight base



Basic			
Code	Weight	Delivery Code	Gross Price
	Kg		£ GBP
MCKIT180B	9.5	C	1,829.10
Contents			
<ul style="list-style-type: none"> <li>• 1 x carrying bag</li> <li>• 2 x basic 180mm rings + slide blocks</li> <li>• 4 x 180mm x 125mm liner segments</li> <li>• 4 x 125mm x 90mm liner segments</li> <li>• 4 x 125mm x 63mm liner segments</li> <li>• 1 x 600mm base</li> <li>• 1 x allen key</li> </ul>			

Universal			
Code	Weight	Delivery Code	Gross Price
	Kg		£ GBP
MCKIT180	13.5	B	2,195.59
Contents			
<ul style="list-style-type: none"> <li>• 1 x plastic container</li> <li>• 2 x basic 180mm rings + slide blocks</li> <li>• 4 x 180mm x 125mm liner segments</li> <li>• 4 x 125mm x 90mm liner segments</li> <li>• 4 x 125mm x 63mm liner segments</li> <li>• 2 x 460mm bases</li> <li>• 1 x allen key</li> <li>• 1 x spanner</li> <li>• 1 x 'T' connector</li> </ul>			

# Multi Clamp | Optional Extras and Spare Parts

Code	Description	Delivery Code	Gross Price
			£ GBP
FES-12390	180mm ring	C	718.40
FES-132000	125 - 180mm base	C	94.69
FES-148500	180mm extended base	C	132.02
FES-22541	180mm x 160mm liner segments	B	47.05
FES-22540	180mm x 140mm liner segments	C	65.18
FES-21607	180mm x 125mm liner segments	C	41.62
FES-31784	160mm x 110mm liner segments	B	34.58

Code	Description	Delivery Code	Gross Price
			£ GBP
FES-33812	160mm x 75mm liner segments	C	41.62
FES-33354	125mm x 90mm liner segments	C	18.71
FES-33356	125 x 63mm liner segments	C	12.18
FES-33358	T-connector	C	107.08



Couplers and reducers



90° Electrofusion Elbows  
(1 base / 2 Rings)



45° Electrofusion Elbows  
(1 base / 2 Rings)



E/F tees and reducing tees  
(3 bases / 3 rings / 1 'T' connector)



Electrofusion of Seamless Bends  
(2 bases / 4 rings)

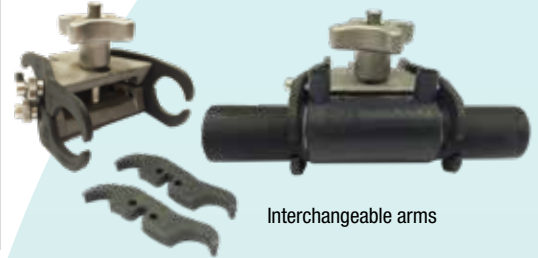


# Mini Clamp

## Features

Mini clamps are designed to restrain and align pipe and fittings for service connections during the electrofusion process. The mini clamp is suitable for pipe sizes 20, 25 and 32mm.

- Interchangeable arms for each pipe size
- Reducers, couplers and tapping tee outlets can be accommodated
- Robust construction with cast aluminium body
- Promotes re-rounding and restraint during electrofusion



Code	Description	Weight	Delivery Code	Gross Price
		Kg		£ GBP
MINICLAMP	20, 25 and 32mm mini clamp	1	C	273.47

# Versaclamp

## Features

A range of clamps that can be used on 90° and 45° elbows and straight connections. Available for use on 20, 25 and 32mm diameter pipe.

- Pocket size and ultra lightweight design
- Manufactured from a tough engineering plastic (Noryl)
- Works in tight spaces with Flextee and Multiseal electrofusion tapping tees



Code	Description	Weight	Delivery Code	Gross Price
		Kg		£ GBP
VERSACLAMP20	20mm multi angled clamp	0.2	C	POA
VERSACLAMP25	25mm multi angled clamp	0.2	C	124.92
VERSACLAMP32	32mm multi angled clamp	0.2	C	98.96



Straight Connections



90° Elbows



45° Elbows



# Elbowclamp

## Features

A simple and effective hand tool for clamping either 20, 25 or 32mm service pipe when fusing 90° elbows giving stress free joints.

- Pipe range 20-32mm
- Compact lightweight design
- Manufactured from a tough engineering plastic (Noryl)



Code	Description	Weight	Delivery Code	Gross Price
		Kg		£ GBP
ELBOWCLAMP20	Elbow clamp 20mm	0.1	C	128.83
ELBOWCLAMP25	Elbow clamp 25mm	0.1	C	154.72
ELBOWCLAMP32	Elbow clamp 32mm	0.1	C	147.97



90° Elbow clamp - 20mm pipe



90° Elbow clamp - 32mm pipe



90° Elbow clamp - 25mm pipe

# Mini and Maxi Posi Clamp

## Features

Two lightweight versatile electrofusion clamps working in the range 20 - 40mm and 32 - 63mm.

- Can be used for couplers, reducers, end caps, equal tees, reducing tees and 45° and 90° elbows.
- Can be used on multiseal tapping tees where couplers are connected to the outlet
- Aligns, and secures the pipe to prevent movement of fittings during fusion and cooling
- Made from a tough engineering plastic (Noryl)
- All nuts and adjustments are fully captive and therefore cannot be lost



Code	Description	Range	Weight	Delivery Code	Gross Price
			Kg		£ GBP
MINIPOSI	Couplers, reducers, end caps, equal and reducing tees, 45° and 90° elbows	20mm, 25mm, 32mm and 40mm	0.5	C	452.69
MAXIPOSI	Couplers, reducers, end caps, equal and reducing tees, 45° and 90° elbows	32mm, 40mm, 50mm and 63mm	1.0	B	723.77



Maxi Posi clamp 90° Elbow



Maxi Posi clamp on Multiseal tapping tee



Maxi Posi clamp coupler



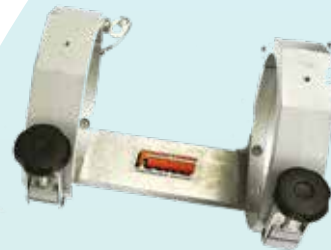


# Alignment Clamp

## Features

Heavy duty alignment clamps, used for jointing 250mm electrofusion couplers.

- Hinged with pins for ease of pipe positioning in trench - facilitates use in narrow trenches
- Offers full rerounding and restraint of pipe and fitting during welding
- Fixed clamp position
- Robust construction
- Liners available for smaller sizes



Code	Description	Weight	Delivery Code	Gross Price
		Kg		£ GBP
FES-01-15-014	250mm alignment clamp	14	C	2,894.13

# Top Load Clamp

## Features

A lightweight universal strap clamp for use on top loaded saddles.

- Ideal for use in confined spaces



Code	Description	Weight	Delivery Code	Gross Price
		Kg		£ GBP
TLOADCLAMPA	63mm - 500mm top load clamp	1	B	554.63



## Quality Check

When the indicator at the top of the clamp is flush this shows that the correct clamping force is applied to the fitting.



# Strap Clamp 200 Straight

## Features

Alignment clamps for use on 40mm - 200mm pipe. Used on couplers only.

- Lightweight construction
- Fast acting 'tug and tension' straps
- Works above, below or alongside the joint
- Compact design
- No liners required



Code	Description	Range	Weight	Delivery Code	Gross Price
		mm	Kg		£ GBP
SC200-2-S	Straight runner bar with 2 clamps	40 - 200	2.5	C	944.53
SC200-2-S-4	Straight runner bar with 4 clamps	40 - 200	4.6	C	1,734.93

**Note:** to use the strap clamp 200 straight to clamp tees, a T-Adaptor is required.

# Strap Clamp 200 Knuckle

## Features

Alignment clamps for use on 40mm - 200mm pipe. A centrally located adjustable knuckle allows the SC200-2-K to be used for 22.5°, 45° and 90° elbows, reducers and couplers.

- Lightweight construction
- Fast acting 'tug and tension' straps
- Works above, below or alongside the joint
- Compact design
- No liners required



Code	Description	Range	Weight	Delivery Code	Gross Price
		mm	Kg		£ GBP
SC200-2-K	Knuckle bar with 2 clamps	40 - 200	2.7	B	1,339.08
SC200-2-K-4	Knuckle bar with 4 clamps	40 - 200	4.6	B	1,988.89

**Note:** to use the strap clamp 200 knuckle to clamp tees, a T-Adaptor is required.



# Strap Clamp Titan 200

## Features

Alignment clamp for use on 40mm - 200mm pipe. Used on couplers only. The Titan clamp pulls the pipe into position with minimal effort using a rack and pinion system.

- Ratchet handle included
- Lightweight construction
- Fast acting 'tug and tension' straps
- Works above, below or alongside the joint
- Compact design
- No liners required



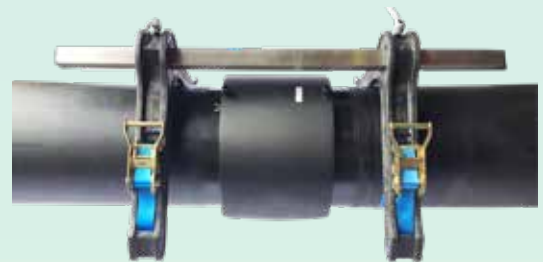
Code	Description	Range	Weight (kg)	Delivery Code	Gross Price
		mm	Kg		£ GBP
SC200T	Straight ratchet runner bar with 4 clamps	40 - 200	6.5	C	2,634.65

# Strap Clamp 500 Straight

## Features

Fast set up alignment clamp, for use on 160mm - 500mm pipe. Used on couplers only.

- Lightweight robust construction
- Fast acting 'tug and tension' straps
- Works above, below or alongside the joint
- Compact design
- No liners required



Code	Description	Range	Weight (kg)	Delivery Code	Gross Price
		mm	Kg		£ GBP
SC500	Plain runner bar with 2 clamps	160mm - 500mm	8	B	1,537.65
FES-12799	V block clamp assembly	160mm - 500mm	1.5	B	781.33

**Note:** to use the strap clamp 500 straight to clamp tees, a T-Adaptor is required.





# Strap Clamp Titan 500

## Features

Alignment clamp for use on 160mm - 500mm pipe. Used on couplers only. The Titan clamp is capable of pulling 12m lengths of pipe into position, using a rack and pinion system.

- Ratchet handle included
- Fast acting 'tug and tension' straps
- Works above, below or alongside the joint
- Compact design
- No liners required



Code	Description	Range	Weight	Delivery Code	Gross Price
		mm	Kg		£ GBP
SC500T	Straight ratchet runner bar with 4 clamps	160-500	20	C	4,922.68

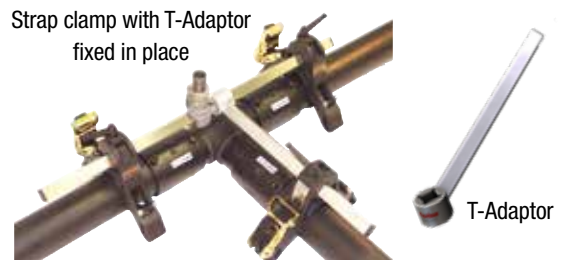
# T-Adaptor

## Features

The T-adaptor is an add-on tool enabling strap clamps to be used for clamping tees. To use the T-Adaptor a further V-Block clamp needs to be purchased.

- The T-adaptor can either be used on the SC200 or SC500 range

Strap clamp with T-Adaptor fixed in place



Code	Description	Range	Weight	Delivery Code	Gross Price
		mm	Kg		£ GBP
SC200ADT	T-Adaptor for strap clamp 200	40 - 200	0.3	C	239.83
SC500ADT	T-Adaptor for strap clamp 500	160 - 500	3.4	C	659.61
FES-34989	V block clamp assembly for 200 T-Adaptor	40 - 200	0.6	C	338.43
FES-12799	V block clamp assembly for 500 T-Adaptor	160 - 500	1.5	B	781.33



# Hydraulic Pipe Clamp

## Features

Hydraulically powered re-rounding and positioning clamps for supporting and restraining large diameter pipes and couplers throughout the electrofusion process.

- Made from fabricated steel construction
- Hydraulic power provided by 2 hand pumps
- Excellent re rounding capability
- 3 segment pipe clamps, disassemble for ease of transportation
- Available with straight base only
- Can be used as alignment kit
- Steel reducing liners available on request
- Single clamp available on request



Code	Description	Weight (kg)	Delivery Code	Gross Price
		Kg		£ GBP
HRR400KIT	Hydraulic rerounding clamp 400mm	50	C	POA
HRR500KIT	Hydraulic rerounding clamp 500mm	68	C	POA
HRR630KIT	Hydraulic rerounding clamp 630mm	79	C	POA
HRR710KIT	Hydraulic rerounding clamp 710mm	89	C	POA
HRR800KIT	Hydraulic rerounding clamp 800mm	125	C	POA
HRR900KIT	Hydraulic rerounding clamp 900mm	155	C	POA

**Note:** Each kit is supplied with two clamps, two hand pumps, two hydraulic cylinders, and two alignment bars.

# Rerounding | Post Squeeze Off Clamp

## Features

Designed for re rounding pipes after squeeze off has been applied.

- Available in pipe size range 50 - 250mm
- Rerounds the pipe effectively covering a large surface area



Code	Range	Weight (kg)	Delivery Code	Gross Price
		Kg		£ GBP
RRC50	50mm	2.9	C	POA
RRC63	63mm	3	C	172.99
RRC75	75mm	3.5	C	181.47
RRC90	90mm	3.5	C	192.42
RRC110	110mm	5.8	C	233.02
RRC125	125mm	5.5	C	249.62
RRC140	140mm	5.5	C	272.02
RRC160	160mm	7.5	C	321.83
RRC180	180mm	6.8	C	326.83
RRC200	200mm	9.3	C	437.90
RRC225	225mm	11.5	C	POA
RRC250	250mm	12	C	507.57



# Rerounding Tool

## Features

A range of re rounding tools for use on polyethylene coiled or oval pipe prior to electrofusion.

- Available in pipe size range 20 - 250mm
- Quick and simple to use



Rerounding tool  
20mm - 32mm



Rerounding tool  
40mm - 90mm



Rerounding tool  
110mm - 250mm

Code	Range	Weight (kg)	Delivery Code	Gross Price
		Kg		£ GBP
RRT20	20mm	0.5	C	327.34
RRT25	25mm	0.5	C	359.67
RRT32	32mm	0.5	C	359.67
RRT40	40mm	1.5	C	461.03
RRT50	50mm	1.3	C	359.02
RRT63	63mm	1.3	C	389.47
RRT75	75mm	1.5	C	594.28
RRT90	90mm	1.5	C	548.46
RRT110	110mm	2.0	C	663.81
RRT125	125mm	2.0	C	559.19
RRT160	160mm	2.3	C	757.48
RRT180	180mm	3.0	C	1,029.50
RRT200	200mm	3.0	C	1,071.55
RRT225	225mm	3.0	C	POA
RRT250	250mm	3.0	C	POA





# Mini Squeeze Tool

## Features

The mini squeeze tool is designed solely for use on SDR 11 service pipes in the range 16mm to 32mm diameter.

- Manufactured from cast stainless steel
- Compact robust design
- User friendly
- Unique design incorporates built-in safety stops to prevent damage to the pipe



Code	Description	Weight (kg)	Delivery Code	Gross Price
		Kg		£ GBP
SQT32	16mm - 32mm mini squeeze tool	1	B	167.69

# Service Squeeze Tool

## Features

The service squeeze tool is for flow stopping on 16, 20, 25, 32, 40, 50 and 63mm pipes.

- Cast steel construction
- Hand indexable stops



Code	Description	Weight (kg)	Delivery Code	Gross Price
		Kg		£ GBP
SQT63	16mm - 63mm service squeeze tool (UK)	6	C	295.51
SQT63X10	16mm - 63mm service squeeze tool (Export)	6	A	325.82
SQT63X10-BEAM	16mm - 63mm service squeeze tool (Export) - Bottom Beam	6	C	POA

# Mechanical Squeeze Tool

## Features

Mechanical squeeze off tool for pipe 63mm-125mm diameter

- Can be used on SDR 11 pipe between sizes 63 and 90mm
- Can be used on SDR17.6 pipe between sizes 90, 110 and 125mm.
- Fabricated steel construction
- Hand indexable stops



Code	Description	Weight (kg)	Delivery Code	Gross Price
		Kg		£ GBP
SQT125M	63 - 125mm mechanical squeeze tool	9	B	824.33



# 200 Hydraulic Mains Squeeze Tool

## Features

Hydraulic mains squeeze tool used as a flow stop on 63mm - 200mm diameter pipes.

- High quality hydraulic jack
- Spring return after squeeze off
- Fabricated steel construction
- Controlled release through hydraulic shut off valve
- Integral safety relief valve



Code	Description	Weight (kg)	Delivery Code	Gross Price
		Kg		£ GBP
SQT200	200mm squeeze tool with stops for SDR 11 and 17	39	A	2,638.71

# 250 Mains Squeeze Tool

## Features

The 250 mains squeeze tool can be used for flow stopping on 180mm-250mm pipe. Tool supplied with 4 beam sets

- 'A' frame design, robust construction for in-trench work
- The 'A' frame can be detached and used with an additional beam set which allows up to four squeeze-off points to be carried out efficiently with one tool.
- Controlled release through hydraulic shut off valve

Pipe stops need to be ordered separately for each diameter and SDR rating (contact us for further details)



Code	Description	Weight (kg)	Delivery Code	Gross Price
		Kg		£ GBP
SQT250A-2	SQT250 auto hydraulic squeeze off tool 1 beam set	180	C	15,877.50
SQT250A-2AI	SQT250 auto hydraulic squeeze off tool 1 beam set with air intensifier	190	C	22,380.75
SQT250A-2HP	SQT250 auto hydraulic squeeze off tool 1 beam set with hand pump	190	C	20,342.49

# 400 Mains Squeeze Tool

## Features

The 400 mains squeeze tool can be used for flow stopping on 250mm-400mm pipe. Tool supplied with 4 beam sets

- Robust construction
- The cylinders can be detached and used with other beam sets which allows up to four squeeze off points to be carried out efficiently with one tool
- Controlled release through hydraulic shut off valve

Pipe stops need to be ordered separately for each diameter and SDR rating (contact us for further details)



Code	Description	Weight (kg)	Delivery Code	Gross Price
		Kg		£ GBP
SQT400AI	SQT400 auto hydraulic squeeze off tool, 4 beam set with air intensifier	430	C	91,733.67
SQT400E	SQT400 auto hydraulic squeeze off tool, 4 beam set with electric pump	430	C	114,901.19



# Generators

## Features

Fusion supplies a range of generators which are specifically manufactured for powering both electrofusion control boxes and automatic butt fusion machines.

Generators are tailored to suit your own specific requirements, please contact us for further details.

- High quality, smooth, regular power output
- Comply with the Tin12 (EC3) specification
- Available in petrol or diesel engines
- Meet the current EC regulations.



Code	Description	Delivery Code	Gross Price
			£ GBP
P501WF	Generator 5KVA on wheeled frame	C	7,313.44
P750WF	Generator 7.5KVA on wheeled frame	B	9,535.71

Please state output voltage and socket at the time of ordering.

Butt fusion power requirements			
Machine description	Select generator output voltage (V)	Minimum generator output	
	220V single phase	Gator (kVA)	Welda (kVA)
GATOR / WELDA 180	YES	3.5	5
GATOR / WELDA 250	Yes	4.0	5
GATOR / WELDA 315	Yes	6.0	7
GATOR / WELDA 400	Yes	6.5	8
WELDA 500	Yes	N/A	9

Electrofusion power requirements			
Machine description	Select generator output voltage (V)	Minimum power required	
	220V single phase	kW	kVA
SBOX LITE 220	Yes	2.2	2.8
SBOX-MAX	Yes	4.8	6.0





# Hand Scraper

## Features

Lightweight hand scraping tool used for scraping pipe areas prior to electrofusion



Code	Description	Weight	Spare blade code	Delivery Code	Gross Price
		Kg			£ GBP
HARRIS	1.5" hand scraper	0.1	60122	A	20.74
HARRISLGE	2.5" hand scraper	0.1	60233	A	24.36

# Secateurs

## Features

A range of secateurs for cutting pipe in sizes ranging from 16mm to 63mm



Code	Description	Weight	Delivery Code	Gross Price
		Kg		£ GBP
PCS2032M	16mm - 42mm small secateur cutter	0.3	C	31.32
PCS2063	20mm - 63mm large secateur cutter (long handle)	2	B	85.70

# Jumbo Pipe Cutter

## Features

Jumbo pipe cutter for cutting pipe in sizes ranging from 160 - 800mmmm



Code	Description	Weight	Spare Blade code	Delivery Code	Gross Price
		Kg			£ GBP
PCJ355	160mm - 355mm jumbo pipe cutter	24	PCJBLADE	C	7,231.88
PCJ630	355mm - 630mm jumbo pipe cutter	28	PCJBLADE	C	9,135.00
PCJ800	355mm - 800mm jumbo pipe cutter	31	TPCJBLADE	C	11,625.30



# Guillotine Cutter

## Features

A range of guillotine cutters for cutting pipe in sizes ranging from 63 - 315mm



Code	Description	Weight	Spare blade code	Delivery Code	Gross Price
		Kg			£ GBP
PCG125	63mm - 125mm guillotine cutter	7.5	60449	C	3,520.82
PCG200	63mm - 225mm guillotine cutter	15	11774	B	5,174.76
PCG315	63mm - 315mm guillotine cutter	33	11923	C	16,540.88

# Cutter Keys

## Features

A range of drive key tools for service / tapping tee integral cutters with 12mm hexagonal drives.



Code	Description	Weight	Delivery Code	Gross Price
		Kg		£ GBP
CUTKEY12	Universal tapping tee cutter key (with cutter key and wrench)	0.6	B	103.46
CUTTERKEYEXL	Universal tapping tee cutter key extended length - 1000mm	1.3	C	249.40

# Test Caps

## Features

A range of reusable caps for the pressure testing of Fusion manufactured service / tapping tee fittings



Code	Description	Weight	Delivery Code	Gross Price
		Kg		£ GBP
FES-22869	63mm aluminium multiseal test cap	0.4	C	245.78
FES-34571	63mm multiseal test cap	0.1	C	87.94
FES-34263	32mm multiseal test cap	0.1	C	87.36



# Fastcut Drill



## Features

Fusion's range of large diameter electrofusion branch saddles provides the gas and water installer with a simple alternative to the high cost of by-pass systems or the inconvenience and associated costs of supply interruptions. Under pressure drilling provides the operator with a simple, safe and cost-effective method of branch installation.

- Modular construction ensures ease of handling and assembly
- Hydraulic operation of cutter head helps the operator with cutting through the pipe
- Can be used with plate or gate valves
- Dedicated cutter drive prevents penetration beyond centre line of main
- Swarf and coupon retained inside cutter
- Drill comes complete with 3 heads as standard - 250, 200 and 150 NP16
- ANSI standard version available upon application
- Rotational/adjustable jack to aid alignment
- Pendant cutter control with timer to allow single operator cut through



Code	Description	Branch Saddle Range	Weight	Delivery Code	Gross Price
			Kg		£ GBP
FCDRILL220V	Fastcut drill complete with power pack	250mm-500mm	197	C	105,138.99



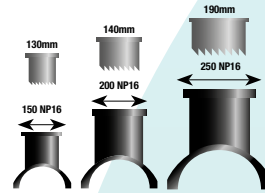


# Large Diameter Branch Saddles | Specification

## Features

- Complete with sacrificial under parts - no additional tooling needed
- Minimal pressure drop due to large bore through fitting
- Large electrofusion area ensures integrity of weld
- 39.5 volt fittings
- Tested in accordance with industry specifications

See page 42 for the full range of Large Diameter Branch Saddles



Outlet sizes available: 150, 200, 250 NP16



Branch Saddle Size mm	Pipe Material	UK GAS APPLICATIONS (GIS)				UK / EUROPEAN WATER APPLICATIONS				EUROPEAN GAS APPLICATIONS						
		Maximum Operating Pressure	Pipe SDR				Maximum Operating Pressure	Pipe SDR				Maximum Operating Pressure	Pipe SDR			
			11	17.6	21	26		11	17.6	21	26		11	17.6	21	26
250x150 NP16	PE80	5.5 bar	✓	✓	✓	-	16 bar	✓	✓	✓	-	10 bar	✓	✓	✓	-
	PE100		-	✓	✓	-		✓	✓	✓	-		✓	✓	✓	-
250x200 NP16	PE80	5.5 bar	✓	✓	✓	-	16 bar	✓	✓	✓	-	10 bar	✓	✓	✓	-
	PE100		-	✓	✓	-		✓	✓	✓	-		✓	✓	✓	-
280x150 NP16	PE80	5.5 bar	✓	✓	✓	-	16 bar	✓	✓	✓	-	10 bar	✓	✓	✓	-
	PE100		-	✓	✓	-		✓	✓	✓	-		✓	✓	✓	-
280x200 NP16	PE80	5.5 bar	✓	✓	✓	-	16 bar	✓	✓	✓	-	10 bar	✓	✓	✓	-
	PE100		-	✓	✓	-		✓	✓	✓	-		✓	✓	✓	-
315x150 NP16	PE80	7 bar	✓	✓	✓	✓	16 bar	✓	✓	✓	✓	10 bar	✓	✓	✓	✓
	PE100		✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓
315x250 NP16	PE80	7 bar	✓	✓	✓	✓	16 bar	✓	✓	✓	✓	10 bar	✓	✓	✓	✓
	PE100		✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓
355x150 NP16	PE80	7 bar	✓	✓	✓	✓	16 bar	✓	✓	✓	✓	10 bar	✓	✓	✓	✓
	PE100		✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓
355x250 NP16	PE80	7 bar	✓	✓	✓	✓	16 bar	✓	✓	✓	✓	10 bar	✓	✓	✓	✓
	PE100		✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓
400x150 NP16	PE80	5.5 bar	✓	✓	✓	✓	16 bar	✓	✓	✓	✓	10 bar	✓	✓	✓	✓
	PE100		-	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓
400x250 NP16	PE80	5.5 bar	✓	✓	✓	✓	10 bar	✓	✓	✓	✓	6 bar	✓	✓	✓	✓
	PE100		-	✓	✓	✓		-	✓	✓	✓		-	✓	✓	✓
450x150 NP16	PE80	5.5 bar	✓	✓	✓	✓	10 bar	✓	✓	✓	✓	6 bar	✓	✓	✓	✓
	PE100		-	✓	✓	✓		-	✓	✓	✓		-	✓	✓	✓
450x250 NP16	PE80	5.5 bar	✓	✓	✓	✓	10 bar	✓	✓	✓	✓	6 bar	✓	✓	✓	✓
	PE100		-	✓	✓	✓		-	✓	✓	✓		-	✓	✓	✓
500x150 NP16	PE80	5.5 bar	✓	✓	✓	✓	10 bar	✓	✓	✓	✓	6 bar	✓	✓	✓	✓
	PE100		-	✓	✓	✓		-	✓	✓	✓		-	✓	✓	✓
500x250 NP16	PE80	5.5 bar	✓	✓	✓	✓	10 bar	✓	✓	✓	✓	6 bar	✓	✓	✓	✓
	PE100		-	✓	✓	✓		-	✓	✓	✓		-	✓	✓	✓
630x150 NP16	PE80	5.5 bar	✓	✓	✓	✓	16 bar	✓	✓	✓	✓	10 bar	✓	✓	✓	✓
	PE100		-	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓
Flow stop 315x150 NP16	PE80	2 bar	-	✓	✓	✓	-	-	-	-	-	10 bar	✓	✓	✓	✓
	PE100		-	✓	✓	✓	-	-	-	-	✓		✓	✓	✓	
Flow stop 355x150 NP16	PE80	2 bar	-	✓	✓	✓	-	-	-	-	-	10 bar	✓	✓	✓	✓
	PE100		-	✓	✓	✓	-	-	-	-	✓		✓	✓	✓	
Flow stop 400x150 NP16	PE80	2 bar	-	✓	✓	✓	-	-	-	-	-	10 bar	✓	✓	✓	✓
	PE100		-	✓	✓	✓	-	-	-	-	✓		✓	✓	✓	