

LEISTER

PLASTIC WELDING

**Process
equipment
manufacturing
with Leister.**

**Quality and
precision.**



Leister delivers top quality tools for precision welding.

Precise welding of plastics in process equipment manufacturing is a MUST. That is the main reason why skilled professionals have relied on Leister products for over 50 years. Leister not only offers a comprehensive range of welding machines and accessories, but also a wealth of plastic processing knowledge. As the worldwide market leader in the hot air plastic welding industry, Leister knows what professionals need to succeed.

Hand extruder

WELDPLAST S4.0 *

Compact and ergonomic. The WELDPLAST S4.0 hand extruder is the first of its type with its brushless, maintenance-free motor for generating preheated air. An output of up to 4 kg/h is possible thanks to its powerful drive system.



- Compact housing design reduces noise and guarantees optimal cooling for the electronics and drive
- Terminal with illuminated graphic display and operating keys suitable for construction sites
- Microprocessor to regulate the welding process
- Menu with function programs
- Air flow up to 450 l/min
- Twist-free welding rod feed for 3 mm or 4 mm rod
- Complies with DVC (German Welding Association) standards

Technical data

Model	Screw extruder with integrated preheat hot air blower (brushless) and barrel heater	
Voltage	V~	230
Power consumption	W	3680
Frequency	Hz	50 / 60
Power	A	16
Output HDPE	kg/h	2.5 – 4.0
Welding rod	Ø mm	3 or 4
Material	PE / PP / (PVC)	
Size L x W x H	mm	560 x 110 x 300 (without welding shoe)
Weight	kg	8.7 (without cord)

* WELDPLAST A4.0 with external air supply

Hand extruder

WELDPLAST EC4.0

World first! The WELDPLAST EC4.0 hand extruder with two brushless motors for drive and preheated air. Advanced features and compact design makes it an ideal partner for professional work in process equipment manufacture and civil engineering.



- Servo-drive with integrated electronics
- Compact housing design reduces noise and guarantees optimal cooling for the electronics and drive
- Terminal with illuminated graphic display and operating keys suitable for construction sites
- Microprocessor to regulate the welding process
- Menu with function programs
- Air flow up to 450 l/min
- Twist-free welding rod feed for 3 mm or 4 mm rod
- Complies with DVC (German Welding Association) standards

Technical data

Model	Screw extruder with brushless drive, integrated preheat hot air blower (brushless) and barrel heater	
Voltage	V~	230
Power consumption	W	3680
Frequency	Hz	50 / 60
Power	A	16
Output HDPE	kg/h	2.5 – 4.0
Welding rod	Ø mm	3 or 4
Material	PE / PP / (PVC)	
Size L x W x H	mm	560 x 110 x 300 (without welding shoe)
Weight	kg	8.7 kg (without cord)

Hand extruder

WELDPLAST S6.0

With an astounding output of 6 kg per hour, WELDPLAST S6.0 is Leister's most powerful hand extruder and therefore the "work horse" in process equipment manufacture and civil engineering.



- Compact housing design reduces noise and guarantees optimal cooling for the electronics and drive
- Terminal with illuminated graphic display and operating keys suitable for construction sites
- Microprocessor to regulate the welding process
- Menu with function programs
- Twist-free welding rod feed for 4 mm or 5 mm rod
- Grid connection 400V
- Complies with DVC (German Welding Association) standards

Technical data

Model	Screw extruder with integrated preheat hot air blower (brushless) and barrel heater	
Voltage	V~	400
Power consumption	W	5680
Frequency	Hz	50 / 60
Power	A	15
Output HDPE	kg/h	3.5 – 6.0
Welding rod	Ø mm	4 or 5
Material	PE / PP	
Size L x W x H	mm	680 x 110 x 310 (without welding shoe)
Weight	kg	11.5 kg (without cord)

Hand extruder

FUSION 3.8

Clever and smart: Despite its simple and symmetrical construction, the FUSION 3.8 hand extruder achieves an output of up to 3.8 kg/h. A single warm air blower is sufficient for heating the plastic filler and preheated air.



- Compact and handy
- Integrated electronics for stepless adjustment of the preheating temperature and output quantity
- Electronic drive protection
- Revolvable welding shoe
- Twist-free welding rod feed for 3 mm or 4 mm rod

Technical data

Model	Screw extruder with on board preheat hot air blower	
Voltage	V~	230
Power consumption	W	3350
Frequency	Hz	50 / 60
Power	A	16
Output HDPE	kg/h	2.5 – 3.8
Welding rod	Ø mm	3 or 4
Material	PE / PP	
Size L x W x H	mm	670 x 90 x 180 (without welding shoe)
Size L x W x H	kg	7.2 kg (without cord)

Hand extruder

WELDMAX

The smallest tool still packs a punch: With separately regulated heating systems for preheated air and filler, the light and compact WELDMAX hand extruder fulfils even the most stringent requirements of the DVS (German Welding Association)



- Extremely compact, handy and low-noise thanks to its non-screw transportation and plastification
- The lightest hand extruder
- Ideal for confined spaces
- Display of nominal and actual values for preheated air and filler temperature
- Complies with the welding requirements of the DVS German Welding Association

Technical Data

Voltage	V~	120	200	230
Power consumption	W	1800	2200	2200
Frequency	Hz	50 / 60		
Air-Temperature	°C	max. 400, steplessly adjustable		
Air flow (20°C)	l/min	300		
Plasticizer-Temperature	°C	270, steplessly adjustable		
Output	kg/h	0.7		
Size L x W x H	mm	443 x 94 x 255, handle Ø 57		
Weight	kg	3.8 (without cable to mains)		
Marking of conformity		CE		
Approval mark		S		
Certification scheme		CCA		
Protection class II		□		

Hand tool

WELDING PEN R

The latest generation of tools presents itself as extremely handy. Because the air supply comes from a separate blower, the Leister WELDING PEN R reaches into the most inaccessible places. It also displays the welding temperature digitally.



- Ultra-compact and flexible to use
- Fatigue-free working thanks to its ergonomic handle
- Heating element protection
- Cooled protective tube
- Air supply via a separate Leister ROBUST blower
- Display for set and actual temperatures

Technical Data			
Voltage	V~	100	120 230
Power consumption	W	450	600 1000
Frequency	Hz	50 / 60	
Temperature	°C	20 - 600, steplessly adjustable	
Air flow (20°C)	l/min	>40	
Pressure dynamic	Pa	max. 10 ⁵	
Size L x W x H	mm	Ø 32 / 43 x 270	
Weight	kg	1.0 with 3 m cord, air hose and y-connection	
Marking of conformity		CE	
Approval mark		S	
Certification scheme		CCA	
Protection class II		□	

Hand tool

WELDING PEN S

With the WELDING PEN S from Leister, you can also weld hard-to-access places, as air is supplied via a separate blower.



- Ultra-compact and flexible to use
- Fatigue-free working thanks to its ergonomic handle
- Heating element protection
- Cooled protective tube
- Air supply via a separate Leister ROBUST blower

Technical Data				
Voltage	V~	100	120	230
Power consumption	W	450	600	1000
Frequency	Hz	50 / 60		
Temperature	°C	20 - 600, steplessly adjustable		
Air flow (20°C)	l/min	>40	>50	>60
Pressure dynamic	Pa	max. 10 ⁵		
Size L x W x H	mm	Ø 32 / 43 x 270		
Weight	kg	1.0 with 3 m cord, air hose and y-connection		
Marking of conformity		CE		
Approval mark		S		
Certification scheme		CCA		
Protection class II		□		

Hand tool

DIODE PID

For the highest quality standards, the specialist turns to the Leister DIODE PID. The welding temperature of this tool is electronically controlled.



- Temperature regulated electronically and digitally displayed
- Electronic heating element protection
- Cooled protective tube
- Slide-on nozzles for round and profile welding rods
- Air supply provided by the Leister ROBUST or Leister MINOR blowers

Technical Data

Voltage	V~	42	100	120	230
Power consumption	W	900	1400	1600	1600
Frequency	Hz	50 / 60			
Temperature	°C	20 - 600, steplessly adjustable			
Air flow (20°C)	l/min	min. 40			
Pressure dynamic	Pa	max. 10 ⁵ (1000 mbar)			
Size L x W x H	mm	265 x 57, handle Ø 40			
Weight	kg	0.425 without, 1.15 with 3 m cord and 3 m air hose			
Marking of conformity		CE			
Approval mark		S			
Certification scheme		CCA			
Protection class II		□			

Hand tool

DIODE S

The Leister DIODE S hand tool is an especially successful combination of easy handling and power with stepless welding temperature control.



- Electronic temperature control
- Overheating protection for heating elements
- Cooled protective tube
- Screw-on draw nozzles for round and profile welding rods
- Air supply provided by Leister ROBUST or Leister MINOR blowers

Technical Data

Voltage	V~	42	100	120	230
Power consumption	W	900	1400	1600	1600
Frequency	Hz	50 / 60			
Temperature	°C	20 - 600, steplessly adjustable			
Air flow	%	min. 40			
Pressure dynamic	Pa	max. 10 ⁵ (1000 mbar)			
Size L x W x H	mm	265 x 57, handle Ø 40			
Weight	kg	0.425 without, 1.15 with 3 m cord and 3 m air hose			
Marking of conformity		CE			
Approval mark		S			
Certification scheme		CCA			
Protection class II		□			

Blowers

MINOR

Don't be deceived by MINORS's small size and low weight: this blower delivers sufficient air to enable quality work with a Leister DIODE PID or DIODE S.



- Lightweight and compact
- Powerful
- Mobile air supply for Leister welding machines

Technical Data

Voltage	V~	42	120	230
Power consumption	W	100		
Frequency	Hz	50 / 60		
Air flow (20°C)	l/min	400		
Pressure static	Pa	4000		
Noise emission level L_{pA}	dB	67		
Size L x W x H	mm	250 x 95, handle Ø 64		
Weight	kg	1.15 with cord		
Marking of conformity		CE		
Approval mark		S		
Protection class II		□		

Blowers

ROBUST

The ROBUST blower is specially designed for continuous operation and supplies the WELDING PEN R, WELDING PEN S or DIODE PID, DIODE S tools with high pressure.



- Small construction with high power
- Sound suppressed
- Connectable to single and dual-phase power supplies

Technical Data

Voltage	V~	3 x 230 - 254	3 x 380 - 440
		1 x 230 - 254 with single phase condenser	
Power consumption	W	250	
Frequency	Hz	50	60
Air flow (20°C)	l/min	1200	1300
Pressure static	Pa	8000	10500
Noise emission level L_{pA}	dB	62	
Size L x W x H	mm	255 x 221 x 221	
Weight	kg	8.0	
Marking of conformity		CE	
Approval mark		S	
Protection class I		⊕	



Rod welding using the compact, powerful WELDING PEN R with digital display for set and actual value and welding temperature. Air supply provided by the high pressure blower ROBUST.



Welding a molded part with TRIAC PID and push-fit speed welding nozzle.



Easy going: the handy and noiseless WELDMAX is ideal for difficult positions.

Hand tool

TRIAC PID

With stepless temperature control and electronic monitoring, the TRIAC PID is the preferred hand tool for welding with high quality.



- Reproducible results thanks to its digital display of set and actual temperature
- Cooled protective tube
- Welding results independent of voltage fluctuations and ambient temperature
- Electronic heating element protection
- Motor shut-off at minimal carbon level
- Suitable for continuous operation
- Multiple replacement of carbon brushes possible

Technical Data						
Voltage	V~	42	100	120	200	230
Power consumption	W	1000	1400	1600	1400	1600
Frequency	Hz	50 / 60				
Temperature	°C	50 - 600, steplessly adjustable				
Air flow (20°C)	l/min	230				
Pressure static	Pa	ca. 3000 (30 mbar), after 24 h operating time				
Noise emission level L _{PA}	dB	65				
Size L x W x H	mm	340 x 90, handle Ø 56				
Weight	kg	1.4 with 3 m cord				
Marking of conformity		CE				
Approval mark		S				
Certification scheme		CCA				
Protection class II		□				

Hand tool

TRIAC S

TRIAC S: the reliable, cost-effective and proven hand tool with steplessly adjustable temperature range.



- Cooled protective tube
- Electronic heating element protection
- Motor shut-off at minimal carbon level
- Suitable for continuous operation
- Multiple replacement of carbon brushes possible

Technical Data						
Voltage	V~	42	100	120	200	230
Power consumption	W	1000	1400	1600	1400	1600
Frequency	Hz	50 / 60				
Temperature	°C	20 - 700, steplessly adjustable				
Air flow (20°C)	l/min	230				
Pressure static	Pa	ca. 3000 (30 mbar), after 24 h operating time				
Noise emission level L _{PA}	dB	65				
Size L x W x H	mm	340 x 90, handle Ø 56				
Weight	kg	1.3 with 3 m cord				
Marking of conformity		CE				
Approval mark		S				
Certification scheme		CCA				
Protection class II		□				

Hand tool

HOT JET S

The most compact hand tool from Leister: HOT JET S' low weight of just 580 grams, incl. cord and slim handle, ensures fatigue-free welding and high power.



- Electronic steplessly adjustable heating power and air flow
- Cooled protective tube
- Independent of voltage fluctuations and ambient temperature thanks to its stepless electronic temperature regulation
- Motor shut-off at minimal carbon level

Technical Data			
Voltage	V~	100	120 230
Power consumption	W	460	
Frequency	Hz	50 / 60	
Temperature	°C	20 – 600, steplessly adjustable	
Air flow (20°C)	l/min	20 – 80, steplessly adjustable	
Pressure static	Pa	max. 1600 (16 mbar)	
Noise emission level L _{PA}	dB	59	
Size L x W x H	mm	235 x 70, handle Ø 40	
Weight	kg	0.580 with 3 m cord	
Marking of conformity		CE	
Approval mark		S	
Certification scheme		CCA	
Protection class II		□	

Hand tool

ELECTRON

The powerful, and yet small and versatile, Leister ELECTRON is a hand tool, perfect for the specialist.



- Powerful
- Compact
- Robust
- Construction site tried and tested

Technical Data				
Voltage	V~	42	120	200 230
Power consumption	W	1000	2700	3000 2300/3400
Frequency	Hz	50 / 60		
Temperature	°C	20 - 650, steplessly adjustable		
Air flow (20°C)	l/min	500, manual air slide		
Pressure static	Pa	3000 (30 mbar)		
Noise emission level L _{PA}	dB	65		
Size L x W x H	mm	320 x 95, handle Ø 64		
Weight	kg	1.5 with 3 m cord		
Marking of conformity		CE		
Approval mark		S		
Protection class II		□		

Tensiometer

EXAMO

Is the welding seam closed and can it withstand the peeling, tensile and shearing forces presented? EXAMO 300 F performs right on the construction site – quick, reliable and uncomplicated.

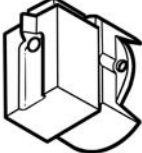
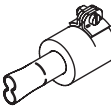
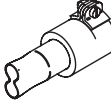
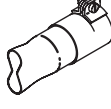
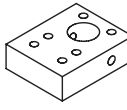
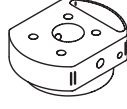
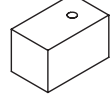
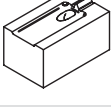
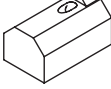


- Designed for construction site conditions
- Handy, robust and light
- Digital display of the process values
- With optional data recording on a memory card
- Optionally for geotextiles
- Digital display of elongation, peak force, tear force, test speed and position




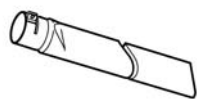




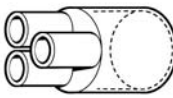

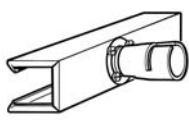

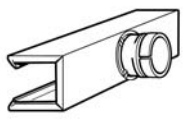
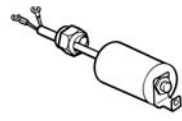







Technical Data

Typ		300 F	600 F
Voltage	V~	120 230	120 230
Power consumption	W	200	200
Frequency	Hz	50 / 60	50 / 60
Tensile load	N	4000	4000
Jaw spacing	mm	5 - 300	5 - 600
Range	mm	300	600
Testing speed	mm/min	10 - 300	10 - 300
Sample thickness	mm	max. 7	max. 7
Sample width	mm	max. 40 (60 optional)	
Force sensor		yes	yes
Memory card recording		optional	optional
Size L x W x H	mm	750 x 270 x 190 (Storage case)	1050 x 270 x 190 (Storage case)
Weight	kg	14	17.5
Marking of conformity		CE	CE
Approval mark		Ⓢ	Ⓢ
Certification scheme		CCA	CCA
Protection class I		Ⓢ	Ⓢ

Accessories for hand extruders

112.621 112.623 112.624 112.625 112.626 112.627 112.628 112.629 112.630 112.830		Welding shoe complete, for fillet weld Welding shoe complete, for fillet weld Welding shoe complete, for fillet weld Welding shoe complete, for fillet weld Welding shoe complete, for overlap 20 mm Welding shoe complete, for V-seam 10 mm Welding shoe complete, for V-seam 5 mm Welding shoe complete, for V-seam 6 mm Welding shoe complete, for V-seam 8 mm Welding shoe complete blank			
		> WELDMAX			
117.053		Preheating nozzle small		118.143	Welding shoe for fillet weld 8 mm or 10 mm > WELDPLAST 4.0 > WELDPLAST 6.0 > Fusion
117.518		Preheating nozzle medium		117.949	Welding shoe for fillet weld 5mm or 6 mm > WELDPLAST 4.0 > WELDPLAST 6.0 > Fusion
117.055		Preheating nozzle large		117.106	Welding shoe for overlap 25 mm > WELDPLAST 4.0 > WELDPLAST 6.0 > Fusion
117.107		Welding shoe support		117.065	Hot air guide > WELDPLAST 4.0
116.871		Welding shoe support		117.795	Hot air guide > WELDPLAST 6.0
118.261		Welding shoe blank 30 mm > WELDPLAST 4.0 > WELDPLAST 6.0 > Fusion		118.259	Handle for landfill > WELDPLAST 6.0
117.104		Welding shoe for V-seam 5 or 10 mm > WELDPLAST 4.0 > WELDPLAST 6.0 > Fusion		118.174	Tool rest > Fusion
118.140		Welding shoe for fillet weld 8 mm or 10 mm > WELDPLAST 4.0 > WELDPLAST 6.0 > Fusion		117.993	Tool rest > WELDPLAST 4.0 > WELDPLAST 6.0
				118.188	Welding ord de-reeler
				112.852	Storage case > WELDMAX

Accessories for Plastic Fabrication

107.144		Tubular nozzle Ø 5 mm push-fit > HOT JET S	107.346		Welding mirror 270 mm push-fit > ELECTRON
100.303		Tubular nozzle Ø 5 mm push-fit > DIODE PID > DIODE S > TRIAC PID > TRIAC S	107.347		Swordshaped nozzle 74 x 12 x 520 mm, PTFE covered push-fit > ELECTRON
107.258		Wide slot nozzle 70 x 10 mm push-fit > ELECTRON	107.331		Folding reflector 72 x 70 mm push-fit > ELECTRON
107.270		Wide slot nozzle 150 x 12 mm push-fit > ELECTRON	107.354		Stainless steel filter > ROBUST
107.281		Hose coupling (Ø 38 mm), 3 outlets > ROBUST	101.681		Air hose Ø 14 mm > DIODE PID > DIODE S > WELDING PEN R > WELDING PEN S
107.326		Shell reflector 25 x 150 mm push-fit > DIODE PID > DIODE S > TRIAC PID > TRIAC S	101.031		Hose clamp for air hose Ø 14 mm
107.340		Shell reflector 45 x 250 mm push-fit > ELECTRON	108.623		Capacitor 12µF / 240V complete (ROBUST 230V) > ROBUST
107.344		Welding mirror 135 mm push-fit > DIODE PID > DIODE S > TRIAC PID > TRIAC S	112.852		Storage case > WELDMAX
Profil A		Endless profiled welding rod PVDF	107.037		Test bundle profiled welding rod 5.7 mm
Profil A		Endless profiled welding rod 5.7 x 3.7mm, 7 x 5mm, in PVC-U (grey), PVC-P (transparent), PE-HD (black), PE-LD (black), PP (beige).			
Profil B					
Profil A		Endless profiled welding rod 5.7 x 3.7 mm, in PC (transparent), PA (black), POM (nature)			

Accessories for Plastic Fabrication

<p>113.666 113.399</p>		<p>High speed draw nozzle \varnothing 3mm with tacking tip. Screw on (without tacking tip on request) High speed draw nozzle \varnothing 4mm with tacking tip. Screw on (without tacking tip on request)</p> <p>> DIODE PID > DIODE S > TRIAC PID > TRIAC S > WELDING PEN R > WELDING PEN S</p>
<p>106.986 113.670</p>		<p>Draw nozzle 7 mm screw on High speed draw nozzle 90 - 5.7 mm with tacking tip. Screw on (without tacking tip on request)</p> <p>> DIODE PID > DIODE S > TRIAC PID > TRIAC S > WELDING PEN R > WELDING PEN S</p>
<p>106.988</p>		<p>Tacking nozzle screw on</p> <p>> DIODE PID > DIODE S > TRIAC PID > TRIAC S > WELDING PEN R > WELDING PEN S</p>
<p>105.622</p>		<p>Tubular nozzle \varnothing 5mm screw</p> <p>> DIODE PID > DIODE S > TRIAC PID > TRIAC S > WELDING PEN R > WELDING PEN S</p>
<p>106.992 106.993</p>		<p>Speed welding nozzle 5.7 mm push-fit on tubular nozzle \varnothing 5 mm Speed welding nozzle 7 mm push-fit on tubular nozzle \varnothing 5 mm</p>
<p>106.989 106.990 106.991</p>		<p>Speed welding nozzle 3 mm push-fit on tubular nozzle \varnothing 5 mm Speed welding nozzle 4 mm push-fit on tubular nozzle \varnothing 5 mm Speed welding nozzle 5 mm push-fit on tubular nozzle \varnothing 5 mm</p>
<p>106.996</p>		<p>Tacking nozzle push-fit on tubular nozzle \varnothing 5mm</p>

Technical data are subject to change without notice.

Nozzles are not included to the hand tools.



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