

2.13 CONSTRUCTION - Plastic Fusion



LEISTER WELDING TOOLS:



PLASTIC FUSION MACHINES FOR:

Vehicle Repair	Shrinking	Paint Removal	Moulding	Roofing
Joining Fabrics	Covers	Plastic Tanks	Pipe welding	Signs and Banners
Inflatable Boat	Inflatables	Pools	Sun & Wind Protect	Truck Tarpaulins
Tents	Ponds	Fabrication	Floors	Fish Farming
Reservoirs	Tunnels	Mining	Construction	Landfills
CODE	Product	Advantages	Aplication / Useage	WEB SITE

580000

TRIAC ST



Triac ST 230V/1600W w/h UK-plug, push-fit nozzle

- Extremely precise
 - Free adjustable temperature up to 700C
 - Extremely reliable
 - Long lifetime of elements all aptrs available
 - Lifetime for many years if maintained and repaired properly
 - SWISS MADE
- > Welding advertising banners PVC
 - > Welding tents of PVC
 - > Welding Geomembranes
 - > Welding small diameter pipes
 - > Weld PVC Vinyl floorings
 - > Shrink cables
 - > Repair weld plastic products (water tanks, chairs, farming food crates ..)
 - > Welding sunshades



<https://www.leister.com/en/plastic-welding/hand-tools/products/hot-air-hand-tools/triac-st>

580350 Twinny S (230V/2900 W)



- Lightest geomembrane welder
- Very easy to use
- Hot air technology blows dirt and humidity prior to welding
- Lifetime for many years if maintained and repaired properly
- High welding speed up to 4m/m (depending on version)

Welding GEOMEMBRANES for:

- >Water ponds agriculture
- >Chemical ponds for mines
- >Roofing waterproofing
- >Tunnel waterproofing
- >Secondary containment oil tanks
- >Waterproofing for basement buildings



<https://www.leister.com/en/plastic-welding/civil-engineering/products/automatic-welders/twinny-s>

580380 GEOSTAR G5



- Fastest machine in the market for geomembrane welding**
Smartest machine:
- Showing all parameters on screen
 - showing current voltage
 - Alarm if problem occurs on wedge
 - Data recording incl GPS and reporting (LQS version)
 - Wedge replacment in less than 2mn
 - Lifetime for many years if maintained and repaired properly
 - SWISS MADE



Welding geomembranes for:

- >Water ponds agriculture
- >Chemical ponds for mines
- >Roofing waterproofing
- >Tunel water proofing
- >Secondary containment oil tanks
- >Water proofing basement buildings



https://www.leister.com/en/plastic-welding/product/automatic-welders/hot-wedge-welder/geostar-g5_g5-lqs

**580360 FUSION 3,
3C,
WELDPLAS
T S4 S6**



Most reliable extruders in the market

Comfortable weight and length depending on application
High plastic output
Cold start protection
double sided rod intake
welding shoe rotatable 360°
SWISS MADE

Weld geomembranes for:
>Water ponds agriculture
>Chemical ponds for mines
>Tunnel waterproofing
>Secondary containment oil tanks
>Waterproofing basement buildings



<https://www.leister.com/en/plastic-welding/product/extrusion-welders/fusion-3/fusion-3>

**FUSION 2,
FUSION 3C,
WELPLAST
S1 & S2**



Most reliable extruders in the market -
Comfortable weight and length depending on application
High plastic output
Cold start protection
double sided rod intake
welding shoe rotatable 360°
SWISS MADE

Plastic fabrication -
Welding inside of Galvanization tanks
Repair weld plastic products (water tanks, chairs, farming food crates ..)
Pipe customization welding



<https://www.leister.com/en/plastic-welding/product/extrusion-welders/fusion-2>

**UNIPLAN,
VARIANT T1
& HEMTEK
ST**



Very reliable and precise machine to weld PVC fabrics
>Repetitive result with each weld
>Fast welding

Weld advertising banners PVC
Weld tents of PVC
Weld sunshades
Weld reinforcement tapes on truck covers
Weld and insert cord
Weld advertising banners PVC
Weld tents of PVC
Weld sunshades
Weld zodiacs inflatable boats
Weld clothing of plastic (fishermen overalls etc.)
Weld maritime products (buoys etc.)
Weld Advertising arches



<https://www.leister.com/en/plastic-welding/product/automatic-welders/varimat-v2/varimat-v2>



**580370 Uniplan E,
30mm,
230V/2300
W , with
Schuko-plug**



The small, lightweight and handy hot-air welder produces perfect welding results. UNIPLAN E is electronically controlled for reproducible results.

Signs and Banners
Architecture
Covers
Fluids and Gas Containers
Flat Hoses and Filters
Inflatables
Pools
Protective Clothing
Sun and Wind Protection
Truck Tarpaulins
Tents



<https://www.leister.com/en/plastic-welding/product/automatic-welders/hot-air-welder/uniplan-e>

580450 WELDY ENERGY HT1600



Simple good Affordable Simple good Affordable Extremely precise Free adjustable temperature up to 700C Extremely reliable Long lifetime of elements all parts available Lifetime for many years if maintained and repaired properly

Weld advertising banners PVC Weld tents of PVC Weld geomembrane Weld small diameter pipes Weld PVC Vinyl floorings shrink cables Repair weld plastic products (water tanks, chairs, farming food crates ..) Weld sunshades

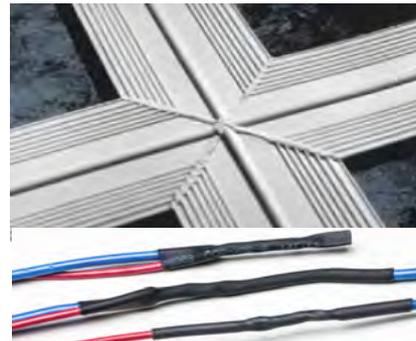


<https://www.weldy.com/en/product/s/hot-air-hand-tools/energy-ht1600/energy-ht1600>

580455 WELDY ENERGY 3400



Simple & Affordable - Welding Waterbars - Shrinking work on cable manufacturing



<https://www.weldy.com/en/product/s/hot-air-hand-tools/energy-ht3400/energy-ht3400>

ELECTRON



Extremely precise Free adjustable temperature up to 700C Extremely reliable Long lifetime of elements all parts available Lifetime for many years if maintained and repaired properly

Shrinking work on cable manufacturing - Welding Waterbars



<https://www.leister.com/en/plastic-welding/product/s/hot-air-hand-tools/electron/electron-st>

WELDY MINI GEO 2



Simple, reliable & Affordable Weld geomembranes for: water ponds agriculture roofing waterproofing



<https://www.weldy.com/en/product/s/welding-machines/miniwelder-geo2>

580460 Welding rod, HPDE, Diam 4, Black (5kg)



SEAMTEK 900 AT



Voltage V~
230
Power W
3000
Temperature °C
120 - 700
Drive Speed m/min
0.1 - 30.0
Weld seam width mm
13 - 64
Size (L x W x H) mm
1700 x 702 x 1500
Weight kg
238
Weight (fully loaded) kg
268

innovative – Welding with variable welding speeds in the welding process. The speed is adjusted with a foot pedal – like a sewing machine. The welding temperature is controlled automatically when welding.
fast – High quality seams are welded up to 30 meters per minute.
efficient – High degree of efficiency due to the direct power supply to the wedge which can be seen in the low consumption of energy.
low costs – A spare part cost less than USD 25.
economical – The new technology does not have to be preheated. This means that the SEAMTEK W-900AT used virtually no energy when in standby mode. Despite this, it can reach the desired target temperature in under 1 second.
safe – The wedge cools down swiveled out. This means that the user is protected from being burnt.
low maintenance requirements – There is no need for tiresome grinding-in like with a conventional wedge. This saves time and effort.
precise welding zone – The welding zone is defined exactly. This means that the surrounding material is not damaged.



<https://www.leister.com/en/plastic-welding/product-s/welding-machines/seamtek/seamtek-w-900-at>

HEMTEK ST



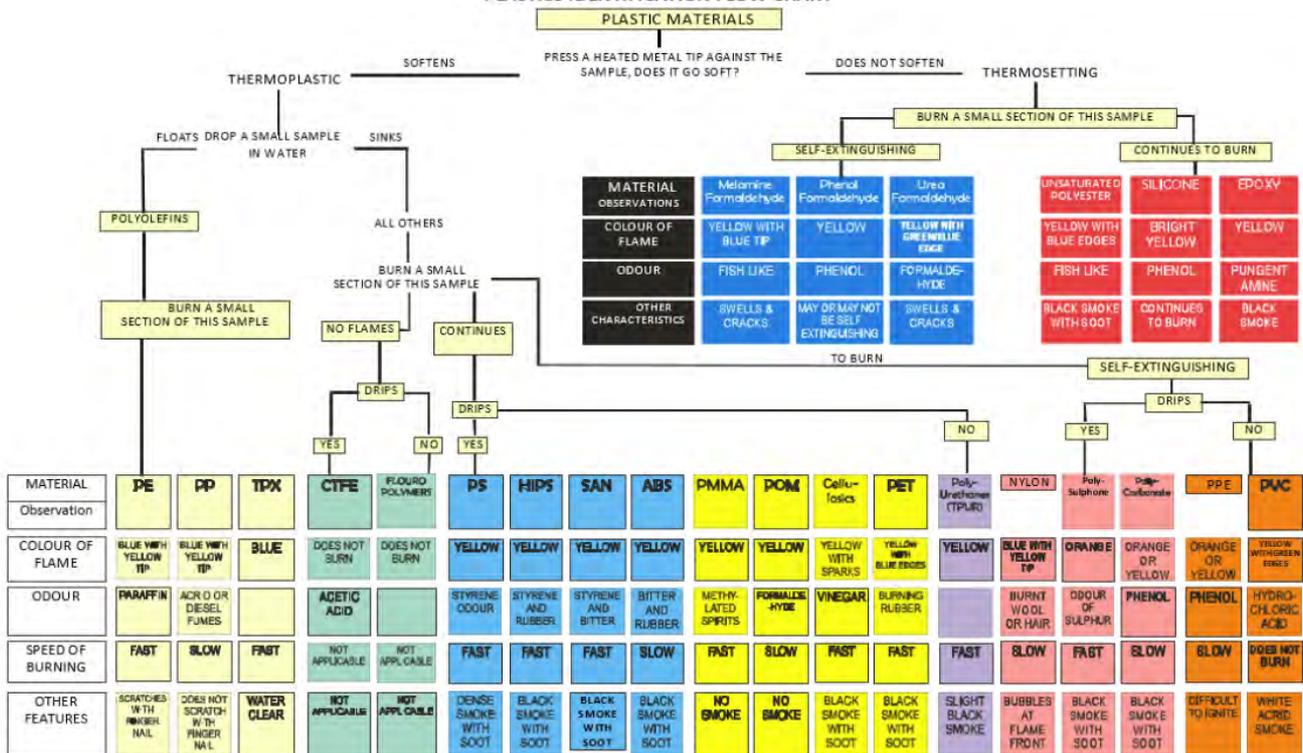
The HEMTEK ST is designed for a wide range of applications and is particularly intuitive to use. Once the machine is mounted, you can start welding immediately. Preparing or finishing with hot-air hand tools is no longer necessary. From now on, you can quickly weld promotional banners or tarpaulins from corner-to-corner with ease.

- Thanks to the foot pedal, you can use both hands to guide the material. High welding quality and a stress-free welding experience are guaranteed.
- Welding speeds of up to 12 m (39 ft.) per minute
 - Very strong blower motor
 - Tool-free setting of the hem guide
 - One hem guide – three applications:
 - Hem: Closed 20/30/40 mm (0.8/1.2/1.6 inches);
 - Pole pockets: up to 100 mm (4 inches); Hems with rope
 - Easy-to-use: Thanks to the foot pedal, your hands are free to guide the material
 - Everything in a single step: No need to weld with hot-air hand tools afterward
 - All welding parameters are adjustable
 - Cooldown mode
 - Can be mounted onto almost any table: freely-adjustable quick-clamp lock



<https://www.leister.com/en/plastic-welding/technic-al-textiles-and-industrial-fabrics/products/welding-machines/hemtek-st>

PLASTICS IDENTIFICATION FLOW CHART



Useful welding parameter for HD-PE, LD-PE and PVC Membranes

Please note: The indicated welding parameter may vary depending on the ambient temperature and the material configuration. Test welds need to be done and the parameter aligned accordingly! Leister takes no responsibility for poor quality welding!

PLASTIC WELDING

Wedge	HD-PE						LD-PE						PVC						
	0.3	0.5	1.0	1.5	2.0	2.5	3.0	0.3	0.5	1.0	1.5	2.0	0.8	1.0	1.5	2.0	2.5	3.0	
COMET	Copper	95 mm			380° C 3.2 m/min 600 N	420° C 3.0 m/min 800 N	420° C 2.8 m/min 1000 N	420° C 2.5 m/min 1000 N					400° C 3.2 m/min 600 N	400° C 3.0 m/min 800 N					
		70 mm			380° C 2.5 m/min 600 N	420° C 2.5 m/min 800 N	420° C 2.2 m/min 1000 N	420° C 2.0 m/min 1000 N					400° C 2.8 m/min 600 N	400° C 2.5 m/min 800 N					
	Copper	50 mm		380° C 2.3 m/min 500 N	420° C 2.2 m/min 600 N	420° C 2.0 m/min 800 N						380° C 2.5 m/min 500 N	420° C 2.5 m/min 600 N						

