

Ditzler Vulkan

Plastic welding equipment



DR1000 / DR1900

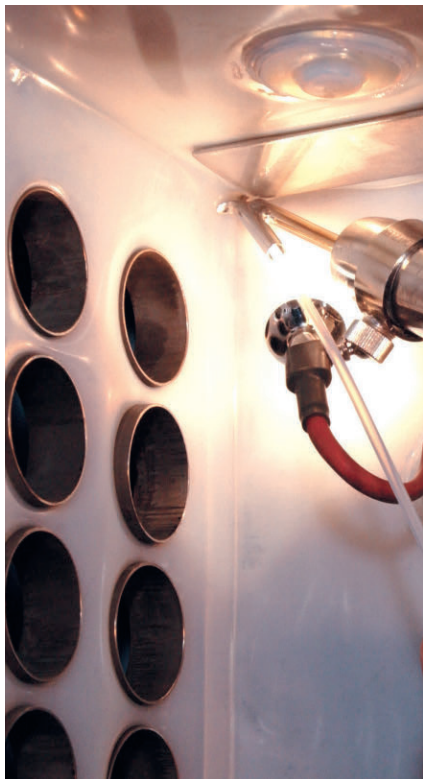
- ultra light and slim
- very easy to handle
- powerful, even in confined spaces
- double protective insulation for safety
- whole device only handwarm, even at max. operating temperature
- electronic system provides high levels of temperature accuracy
- service friendly / low repair costs
- Swiss quality, tested by Electrosuisse

vulkan

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Plastic welding equipment

For efficient, fast and safe work on all the thermoplastic plastics currently recognised, with continuous regulation to 600°C, stabilised to $\pm 2^\circ\text{C}$, independent of the volume of air flow.



The powerful heating element is provided with double electrical insulation so that work can be carried out with greater safety in all areas.



Efficient working is ensured by a multitude of nozzles, especially developed and tested for all the profiles conventionally available.

Protective stainless steel cover

- easy to remove for servicing work
- stays hand hot, even at the highest ventilation temperatures



The slim, compact and outstandingly light construction guarantees precise, efficient working under more difficult conditions, as well as in confined and inaccessible locations.

Standard device with 5m air tube, other lengths (8m/10m, ...) on request

lit by 3D minispot



5101 lit by 24V/20W minispot, consisting of:

5101.1 detachable ring on protective cover to DR1000 (red handle), DR1900 (blue handle)

5101.2 switching ring with 5m cable and special plug, suitable for electrical mains connecting equipment

5101/8m lit by 24V/20W minispot with 8m cable consisting of:

5101.1 detachable ring on protective cover to DR1000 (red handle), DR1900 (blue handle)

5101.2/8m switching ring with 8m cable and special plug, suitable for electrical mains connecting equipment

3D control spot



5102 control spot 24V/20W with handle and miniswitch, 5m cable and special plug, suitable for electrical mains connecting equipment

electrical mains connecting equipment



5120 mains connecting equipment with plug for lighting equipment

- 230 Volt for welding gear DR1000
- 24 Volt protection voltage for lighting
- fault current protection switch, Fi-30mA
- 2,5m power cable

5121 - 120 Volt for welding gear DR1900

5130 nitrogen/air mains connecting equipment with plug for lighting equipment

- 230 Volt for welding gear DR1000
- 24 Volt protection voltage for lighting
- fault current protection switch, Fi-30 mA
- 3-way valve to switch from nitrogen to air
- pressure reduction valve
- air flow meter, with 10-100 NL/min scale
- 2,5m power cable, with plug as required

5140 - 120 Volt for welding gear DR1900

welding air regulator combination



5215 flow meter made of plexiglas, transparent with scale 10-100 NL/min, 3/8" air connection nipple and hose connection

5210 welding air regulator combination comprising pressure reduction station with manometer, oil separator, stop tap, flow meter with scale 10-100 NL/min and hose connection

table stand



5320 special table stand
made of stainless steel
for welding gear
DR1000 / DR1900

stativ with temperature



5330 stativ with temperature display in stainless steel
for welding gear DR1000 / DR1900

- print plate from -10°C to $+50^{\circ}\text{C}$. ($+14^{\circ}\text{F}$ to $+122^{\circ}\text{F}$)
- temperature sensor -40°C to $+1000^{\circ}\text{C}$
- display limits -999.9°C to $+999.9^{\circ}\text{C}$.

compressor



5250 supercharger
50 HZ, 230V, 435W

welding mirrors



welding mirror with / without table stand

- special teflon coating with high abrasion-resistance and non stick qualities
- precise heat distribution
- chemical-resistant against all materials
- temperatur-resistant up to 320°C
- special measurements and designs on request

standard:

- 5240** Ø 190 mm
- 5241** Ø 220 mm
- 5242** Ø 340 mm / hole Ø 160 mm

welding nozzles

round nozzles with lip



- 5020** Ø 3 mm
- 5021** Ø 4 mm
- 5022** Ø 5 mm
- 5023** Ø 6 mm
- 5024** Ø 8 mm

round nozzles without lip



- 5030** Ø 3 mm
- 5031** Ø 4 mm
- 5032** Ø 5 mm
- 5033** Ø 6 mm
- 5034** Ø 8 mm

stitch nozzle (tacking tip)



5040

fast welding nozzles, round



- 5050** Ø 3 mm
- 5051** Ø 4 mm

nozzles with long pre-warming zone for PE, PP, PVC, PVDF, and ECTFE welding

fast welding nozzles, triangular



- | | | | |
|---------------|--------|-------------|---------|
| 5060.1 | △ 2 mm | 5062 | △ 6 mm |
| 5060 | △ 3 mm | 5063 | △ 8 mm |
| 5061 | △ 4 mm | 5064 | △ 10 mm |

nozzles with long pre-warming zone
for PE, PP, PVC, PVDF, and ECTFE welding

flat nozzles for welding band



- | | |
|-------------|---------------------------|
| 5070 | □ 2.5 mm × 15 mm (E-CTFE) |
| 5071 | □ 2 mm × 12 mm |
| 5072 | □ 2 mm × 8 mm |

wide slot nozzles, suitable for cap strips

steep welding nozzles, round/triangular



- | | |
|-------------|------------------|
| 5090 | Ø 3 mm, straight |
| 5091 | Ø 4 mm, straight |
| 5092 | △ 4 mm |

nozzles with short pre-warming zone
for PFA and FEP welding

nozzle extensions



- | | |
|----------------|--------------------|
| 5089.01 | Ø 10/8 mm × 250 mm |
| 5089.02 | Ø 8/6 mm × 250 mm |
| 5089.03 | Ø 6/4 mm × 250 mm |

angled models on request



5310 **triangular scraper**
for various tasks

5311 **special deburring tool**
various blades

5312 **pull scraper** to hollow out
welding grooves

5313 **pull scraper**
with cutting metal insert

5314 **triangular scraper**
with handle

5314.1 **triangular scraper**

5314.2 **handle to triangular scraper**

5314.3 **scraper drop form**

5314.4 **scraper hexagonal form**

5315 **welding nozzle pliers**
to change hot welding nozzles

5316 **side cutting pliers, 145mm,**
for clean cutting of
welding wire

5317 **brush with brass bristles**
to clean welding nozzles

5318 **stainless steel scraper**
to remove the welding wire
before carrying out welding
tasks, with cut-in grooves to
match the welding wire

5319 **stainless steel scraper**
for general removal tasks

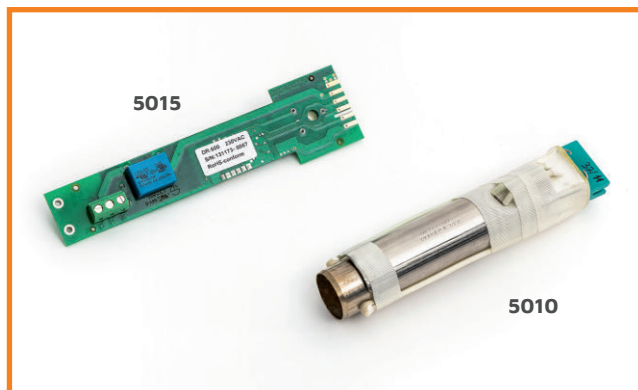
5340 **angle piece 90°** to nozzles

5341 **angle piece 45°** to nozzles



welding gear DR1000, 230V/900W

- | | | | |
|----------|---|---------|---|
| 5012 | heating element | 5002.22 | rotary knob red |
| 5017 | print plate,
compl. temperature electronic | 5002.31 | hose main line
Ø 17,5mm x 12,5mm |
| 5002.1 | protection cover,
stainless steel | 5002.90 | air hose, short line
Ø 15mm x 12,5mm |
| 5002.2 | handle with control button | 5002.41 | air distribution piece |
| 5002.32B | power cable red with plug | | |

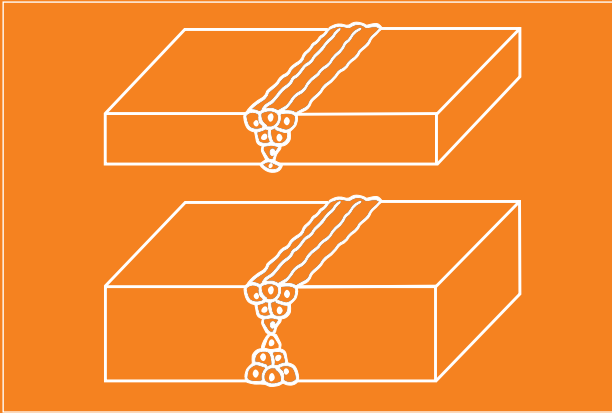


welding gear DR500, 230V/800W (previous model)

- | | |
|------|-----------------|
| 5010 | heating element |
| 5015 | print plate |

weld forms

With a plate thickness of 20mm, it is recommended to connect the plates together, using an extruder or by butt welding. As thicker a plate is, as more „weld layer“ must be done.



The most important types of welds in hot gas welding

examples of welding seam construction

plate thickness (mm)	welding rod number x diameter (mm)
V-seam	
2	1 x 4
3	3 x 3
4	1 x 3 and 2 x 4
5	6 x 3
DV-seam (X-seam)	
4	2 (1 x 4)
5	2 (3 x 3)
6	2 (3 x 3)
8	2 (1 x 3 and 2 x 4)
10	2 (6 x 3)



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