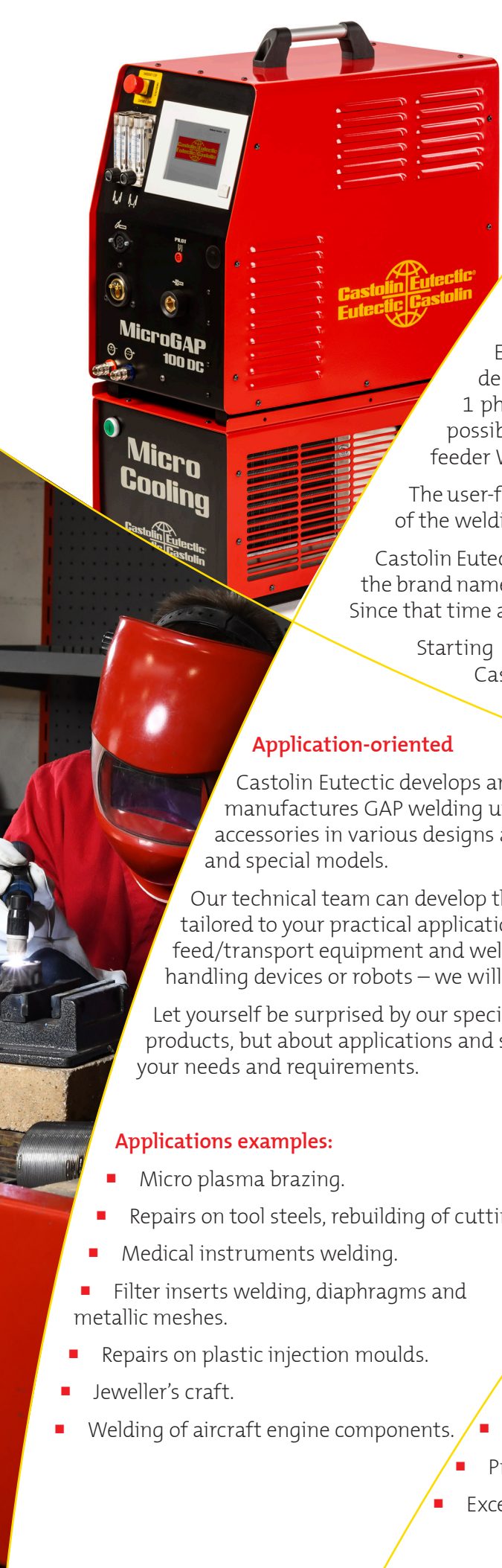




MicroGAP 100 DC

Plasma Transferred Arc Technology

- For manual applications with low welding currents.
- Micro plasma welding, TIG.
- User-friendly touch screen control panel.
- Compact design with external Micro Cooling unit.
- Wide range of additional accessories.



Why MicroGAP 100 DC?

MicroGAP 100 DC is a stand-alone arc welding power supply. The unit is applicable for welding applications that require high precision – ideal for micro-plasma welding and hard-facing with rods even below a diameter of 1.0 mm. The welding current range is from 0-5 to 100 A. Especially for MicroGAP 100 DC, a dedicated cooling unit was designed: Micro Cooling. The system could be power supplied by 1 phase (230 V) or 3 phases (400 V). Additionally there is also the possibility to use an optional motor control card to control the wire feeder WF.

The user-friendly touch panel of the machine allows the easy adjustment of the welding parameters also with protective gloves.

Castolin Eutectic introduced the Plasma Transferred Arc (PTA) process under the brand name EuTronic GAP (Gas Arc Process) to the welding market in 1972. Since that time a lot of developments have taken place.

Starting with Plasma Powder Technology for coating applications, Castolin Eutectic has now nearly all different plasma processes in its range: plasma coating as well as joining and brazing applications.

Application-oriented

Castolin Eutectic develops and manufactures GAP welding units and accessories in various designs and sizes, as both standard and special models.

Our technical team can develop the most cost-effective solution tailored to your practical application. From the power source, through feed/transport equipment and welding torches, up to and including handling devices or robots – we will take care of all the details.

Let yourself be surprised by our specialists - we never talk about products, but about applications and solutions that will meet your needs and requirements.

Applications examples:

- Micro plasma brazing.
- Repairs on tool steels, rebuilding of cutting edges.
- Medical instruments welding.
- Filter inserts welding, diaphragms and metallic meshes.
- Repairs on plastic injection moulds.
- Jeweller's craft.
- Welding of aircraft engine components.

Micro Plasma technology provides a wide range of benefits compared with conventional arc welding processes. Major features are:

- High energy density and extremely focused arc.
- High deposition rates for shorter welding times.
- Homogeneous, porosity and spatter-free coatings.
- Dilution, heat input, distortion and heat-affected zones are lower than for any other arc welding process.
- Maximum purity and performance of the applied alloy even in the first layer.
- Possible multipass overlays.
- Smoother surface for less rework.
- Precise control of the weld deposit thickness.
- Exceptionally good reproducibility.

Castolin Eutectic PTA consumables

TORCH E5N	ESC
Manual torch E5N, 3 m hose package	757807
Machine torch E5N – 70o, 3 m hose package	753606
Machine torch E5N – 180o, 3 m hose package	752899
TORCH E12N	ESC
Manual torch E12N, 4 m hose package	400900
Machine torch E12N – 70o, 4 m hose package	401000
Machine torch E12N – 180o, 4 m hose package	401002
TORCH E15N	ESC
Manual torch E15N, 4 m hose package	260581
Machine torch E15N – 70o, 4 m hose package	260623
Machine torch E15N – 180o, 4 m hose package	260625
ADDITIONAL ACCESSORIES	ESC
Foot controller RC-F	260232
Wire feeder WF	260395

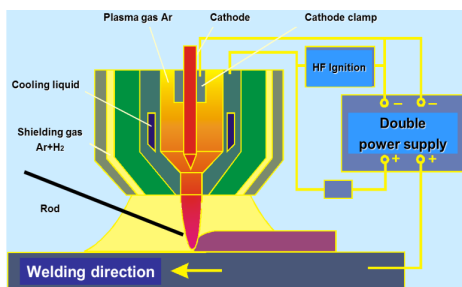


The MicroGAP 100 DC, due to its modular design, can be adapted to any application by just choosing the right accessories.

Mentioned above is an abstract of the available equipment and accessories. Additional equipment, accessories and PTA torches can be developed on request.

MICRO COOLING	ESC
Supply voltage:	230 V, 50/60 Hz
Power consumption:	0,9 A
Delivery capacity:	max. 10 l/min
Max. pump pressure:	4,4 bar
Pump:	Centrifugal pump
Coolant volume:	5 liter
Type of coolant:	ESC 754315 (5 liter) ESC 766870 (25 liter)
NOISE	
Continuous sound-pressure level:	< 70 dB (A)
Dimensions L x W x H	646 mm x 311 mm x 278 mm

MICROGAP 100 DC	ESC
Supply voltage:	230 V
	3x400 V
Supply fuse:	20 A
Max. power consumption:	6 kVA
Effective value of the maximum power supply current:	16 A
Cos phi:	0.9
Max. welding current (15% ED):	100 A
Max. welding current (60% ED):	80 A
Max. welding current (100% ED):	60 A
Amperage range for plasma - welding:	0,5 - 100 A
Amperage range for pilot current:	0,5 - 15 A (30 A)
Open circuit voltage pilot inverter:	80 V DC
Open circuit voltage main inverter:	80 V DC
Protection class:	IP 23
Dimensions L x W x H	560 mm x 311 mm x 541 mm
Total weight:	40 kg



Schematic diagram

*Pioneering
Industrial
Sustainability*

**MicroGAP
100 DC**



Your resource for protection, repair and joining solutions

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