Plasma Welding Torch
Plasma-Powder Welding Torch

Advantages of Plasma Welding
▪ High energy density of the arc
▪ Very high welding speed, much higher than with MSG- or TIG-processes
▪ Highest quality welding process for homogeneous and pore free welding seams
▪ Spatter free, almost no rework needed
▪ Very reliable ignition
▪ Fusion penetration and intermixture of materials can be influenced precisely (for cladding)

Highly effective 2-circuit cooling system
Small torch neck measurements
Optional use of filler metal powder with PLP-torches

TBi PL 200 Aut
Robotic welding torch assembly with adjustable cold-wire guiding unit

TBI Industries
3.1.0 TBi Plasma-Welding Torches

**TBi PL 200 (S, L, Aut) / PLP 200 Aut**

Plasma- / Plasma-Powder Welding Torch

**Technical data**

- **Voltage type**: DC voltage
- **Operating voltage**: 15 - 40 V
- **Welding current**: 50 - 200 A DC
- **Duty cycle**: 100% (10 min. cycle), with use of an active cooling unit
- **Pilot current**: 5 - 10 A, 100% duty cycle
- **Tungsten electrode**: Ø 2.4 mm
- **Cooling method**: 2-circuit water cooling
- **Technical specification**: according to IEC 60974-7

**Additional technical data for PLP 200 Aut**

- **Filler metal**: Metal powder, carbide powder
- **Powder flow rate**: max. 35 g/min

**Highlights of the TBi PL 200 (S, L, Aut)**

- Optimized useability due to remote control in torch handle
- Very efficient cooling of the plasma nozzle
- S version with very manageable and lightweight design
- Optional cold wire guide

**TBi PLP 300 (Aut)**

Plasma-Powder Welding Torch

**Technical data**

- **Voltage type**: DC voltage
- **Operating voltage**: 15 - 40 V
- **Welding current**: 50 - 300 A DC
- **Duty cycle**: 100% (10 min. cycle) with use of an active cooling unit
- **Pilot current**: 5 - 10 A, 100% duty cycle
- **Tungsten electrode**: Ø 4.0 mm
- **Filler metal**: Metal powder, carbide powder
- **Powder flow rate**: max. 80 g/min
- **Cooling method**: 2-circuit water cooling
- **Technical specification**: according to IEC 60974-7

**Highlights of the TBi PLP 300 (Aut)**

- Optimized useability due to remote control in torch handle
- Very efficient cooling of the plasma nozzle
Options for all torches

• All torches can be equipped with connectors to any kind of machine
• Cold-wire guide

Please note
All torches are operated with DC voltage. The tungsten electrode is connected to minus.

Application example
Plasma-powder hard cladding with powder on ploughshare: after outlining the shape, it will be filled with hard coating (Plasma-powder process).
Advantages of TBi Plasma Welding Torches

• Highly effective 2-circuit cooling system for a long life of torches and spare parts
• Small torch dimensions with high welding capacity allow for good access to the workpiece
• Plasma torches with multiple uses for joining and cladding (without filler metal, with rods, with wires, with powder), in manual or automatic versions