Air plasma application: Gouging

Examples of plasma uses

Forging and casting
Riser pads, flashing, cracks and imperfections in ferrous and non-ferrous metal parts are gouged for finished product preparation.

System: Powermax 1000, 1250 or 1650

Back-gouging for arc welding
Metal from the reverse side of weld joints are gouged out to create a groove for weld preparation.

System: Powermax 1000, 1250 or 1650

Removal of surplus metal
Excess weld beads, tack welds, welds holding temporary backing strips and brackets are gouged out.

System: Powermax 1000, 1250 or 1650

Maintenance of metal structures and equipment
Various metal structures (bridges, rigging, storage tanks, piping, etc.) and equipment used in construction and repair (earth-moving machines, cranes, etc.) are maintained with plasma gouging. Existing welds and rivet heads are gouged out for replacement part installation or new welds.

System: Powermax 1000, 1250 or 1650

Key advantages of Powermax® systems
- Reduced noise and smoke over other thermal gouging methods.
- Unlike carbon-arc gouging there is no risk of metallurgical problems (e.g. high hardness or cracking) from carbon contamination.
- Long arc, in excess of 2” (5 cm), provides excellent visibility.
- Ease of transition to air plasma cutting — simply change two consumable parts.
- Gouge and cut ferrous and non-ferrous metals.
- System portability offers ease of operation in various locations.
- High metal removal rate of up to 24 lbs. (11 kg) per hour with the Powermax 1650.
- Controlled arc and high metal removal rates reduce metal distortion.
- No vibration unlike with drills, saws, cutting discs and grinders.
- No special power supply or dedicated compressor required unlike with arc-air gouging.