



Plasma cutting application

Sign manufacturing

Examples of plasma uses

Match plate fabrication

Used to support the weight of the sign cabinet on a pole, match plates are cut to size from typically 12 mm (1/2") thick aluminum or steel plates.

Systems: Powermax30® XP, 45 XP, or Powermax65 SYNC™

Structural frame fabrication

Sign frames are made by cutting square or rectangular steel stock, typically 3 to 6 mm (1/8 to 1/4") wall thickness, to the required lengths. The pieces are then bolted or welded together to form the frame.

Systems: Powermax30 XP or 45 XP

Sign cabinet fabrication

Aluminum sheets, typically 1.2 mm (.04") thick, are cut to size to form the backing of the sign. Holes are then cut for posts, wiring or light fixtures.

Systems: Powermax30 XP or 45 XP

Post fabrication

Typically square or rectangular steel tubing of various sizes and wall thicknesses are cut to the required lengths. Holes are often cut in the sides for electrical wiring.

Systems: Powermax30 XP, 45 XP, Powermax65 SYNC, or 85 SYNC

Letter or faceplate fabrication

Metal lettering or faceplates are cut from steel or aluminum sheets by following a line or tracing a template with a hand torch. Letters and shapes are also cut using a machine torch on a CNC cutting table.

Systems: Powermax30 XP, 45 XP or Powermax65 SYNC

Key advantages of Powermax systems

- Easy to set up and operate.
- Piercing capability makes starting interior cuts easy.
- High cut quality reduces or eliminates secondary operations, such as grinding.
- Drag-cutting technology makes it easy to follow a line or template.
- Gouging process efficiently removes existing welds with reduced noise and smoke over conventional methods.
- System portability offers ease of use at various locations.
- Controlled arc and high cutting speeds reduce heat-affected zone and warping.
- Cut a variety of ferrous and non-ferrous metals including mild steel, stainless and aluminum – painted or rusted.
- Pilot arc control feature enables uninterrupted cutting on expanded metal.
- Machine torches are available for use on cutting machines such as X-Y tables, robots and track cutting systems.
- FineCut® consumables deliver higher quality cut with less dross, narrower kerf and smaller heat-affected zone.

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