



Plasma cutting application

## Vocational and Technical Schools

### Examples of plasma uses

#### Welding technology

Students learning the metal-working trade are trained in welding, cutting, forming and finishing processes. Fabrication projects range from thin plate ornamental pieces to heavy structural framework where cutting and gouging techniques are developed.

Systems: Powermax45 or 65

#### Automotive body repair

For students learning the auto-body trade, projects include removing corroded or collision damaged body and floor panels. Panels are typically 0,8 mm thick and are cut away for the installation of replacement panels.

Systems: Powermax30 XP or 45

#### Auto mechanics

Auto mechanic student projects include engine repair and transmission rebuilding. Common cutting applications are mounting bracket fabrication and exhaust system replacement.

Systems: Powermax30 XP or 45

#### Metal artwork

Ornamental or metal art students learn to cut a variety of ferrous and non-ferrous metals. Most common are mild steel, aluminum, stainless steel, copper and bronze. The stock and thickness also varies from thin wall tubular metal to thick flat plate.

Systems: Powermax30 XP, 45 or 65

#### Key advantages of Powermax® systems

- Simple controls make setup and operation easy.
- 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.

Hypertherm's Plasma Cutting Technology: Theory and Practice™ is the first commercially available training material specifically for plasma cutting and gouging. (Part number 850730)

