

Plasma cutting application: **Armored vehicle Manufacture and repair**

Specific plasma use

Armor panel fabrication

High-hard steel or titanium plates of various thicknesses, typically 3/16" to 1/2" (5 to 12 mm), are cut to size using hand-held torch or mechanized torches on a CNC table. Panels are then pierced to cut interior holes for windows, gun ports, wiring harnesses, vents, etc.

Systems Powermax600®, 1000, 1250 or 1650

Mounting bracket fabrication

Metal strips are cut to the desired size to make custom brackets for mounting armor panels.

Systems: Powermax30, 600 or 1000

Body panel removal and modification

Welds securing stock body panels, typically 22 gauge to 1/8" (.8 to 3 mm) thick, on standard military or civil vehicles are gouged out or panels are cut away to provide access and space for the installation of custom armored panels and other security items.

Systems: Powermax30 or 600 or 1000

Armored vehicle repair

Welds securing collision or ballistic damaged armored panels are gouged out or sections are cut away for the installation of replacement parts.

Systems: Powermax30, 600 or 1000



Photo courtesy of ISBI



Armored Vehicle Manufacture and Repair

Specific benefits of Powermax systems

- Minimized vehicle production time: Superior speed of plasma cutting results in shorter cut times and greater productivity over conventional processes such as oxyfuel or saws.
- Improved plate points: High cut quality of plasma improves welds in critical joint areas and reduces undesirable overlapping joints which increase vehicle weight. Improved welded joints also result in a more secure armor shell.
- Minimized secondary operations: Cleaner cuts reduce or eliminate the need for such operations as grinding.
- Maintain ballistic steel properties: The controlled arc and high cutting speeds reduce heat-affected zone and does not compromise the strength properties of armor plates.
- Portability: Compact design of the power supply and torch offers ease of cutting at various locations.
- Ease of use: Drag-cutting technology makes it easy to follow a line or template.
- Best finishing on civil vehicle bodies: Use of FineCut™ consumables delivers higher quality cuts as a result of less dross, narrow kerf and smaller heat affected zone on exterior body panels under 10 gauge (3.4 mm).
- Fast and clean weld removal: Gouge capabilities offer ease of removing existing welds with better control, reduced noise and smoke over conventional methods.
- Protects vehicle electronics: Contact start technology does not affect sensitive vehicle electronics unlike plasma models that use high frequency.

Hypertherm®

Hypertherm, Inc.
Hanover, NH 03755 USA
603-643-3441 Tel

Hypertherm (S) Pte Ltd.
417847, Republic of Singapore
65 6 841 2489 Tel

**Hypertherm (Shanghai)
Consulting Co., Ltd**
PR China 200052
86-21 5258 3330 /1 Tel

Hypertherm Europe B.V.
4704 SE Roosendaal, Nederland
31 165 59 69 07 Tel

HYPERTHERM BRASIL LTDA.
Guarulhos, SP - Brasil
55 11 6482 1087 Tel

www.hypertherm.com

Hypertherm, Powermax and FineCut are trademarks of Hypertherm, Inc. and may be registered in the United States and/or other countries.

© Copyright 12/06 Hypertherm, Inc. Revision 1
892070