THE HDP SERIES CNC PLASMA PROFILE CUTTER.
HIGH-PERFORMANCE METAL PROCESSING.
THE TRUSTED NAME IN CNC TECHNOLOGY

ART BRINGS YOU THE LATEST ADVANCEMENTS IN CNC PLASMA PROFILE CUTTING. FASTER FEEDS, HIGHER ACCELERATION AND ADVANCED MOTION CONTROL ALGORITHMS COMBINE TO PROVIDE THE ULTIMATE PROFILING MACHINE. COMBINED WITH HYPERTERM HYPERFORMANCE HPRXD CUTTING TORCHES RESULTS IN THE HIGHEST QUALITY PLASMA PROFILING AVAILABLE.

IF PRODUCTIVITY IS YOUR GOAL, LET ART SHOW YOU HOW TO ACHIEVE IT.

Hypertherm XPR power unit:
• World leader in plasma
• Fast, clean cutting
• Liquid-cooled for long life

Automatic gas console:
• Automatically adjusts flow
• Switches between gases
• Adjusts for steel, stainless and aluminium

Easy connect torch:
• Liquid cooled torch tips
• Pierce extra thick plate
• Long consumable life

Full diagnostics screens:
• View pressures, voltages, flows
• Real English status messages
• Automated test procedures
**Standard features**

- **Optional 5 Axis Bevel Head** allows weld preps and bevels to be cut on any part. Programming the bevels is extremely easy and very automated. Supports 5 axis g-code, or simply add leaders in DXF parts drawing to add bevels.

- **Optional Auto Tool Change Drill head with clamping plate** is available in 3.7Kw (5HP) and 7.5Kw (10HP). This allows drilling with conventional and carbide tipped indexing bits. Tool holders with BT40 tapers are used for automatic tool change-over.

- **Optional Inkjet printhead.** The static model allows horizontal text as well as line marking in any direction. The rotating model allows text to be printed at any angle, even around arcs. Ink dries instantly and sticks to all metals. Part numbers, fold lines and assembly instructions are all possible.

- **Optional Rigid tapping** is available as an upgrade to the drill head (left). This involves an encoder-based servo spindle motor and detailed setup for all tapping parameters. Controller automatically controls all parameters for rigid tapping.

- **Wireless pendant controller** allows the operator to get close to the action for optimal view during manual operations. Machine can be stopped remotely from anywhere in the factory.

- **Conveyors remove dross, dust and fallen parts** so no more cleaning out under the machine. All dross is deposited in a bin for disposal. The conveyors also dramatically reduce time spent recovering and cleaning parts that fall through the deck.

- **XPR diagnostics screen** gives readouts on internal information. Displays gas selections, inlet pressures, flow settings, temperature and coolant flow. Real English pop-up messages and automatic tests help to verify correct operation.

- **Camfil Fume Extraction & Filtration Units** keep the workplace free of fumes. Essential for workplace health and safety as well as employee comfort.

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**Optional equipment**

- **Camfil Fume Extraction & Filtration Units** keep the workplace free of fumes. Essential for workplace health and safety as well as employee comfort.
THIS IS WHAT WE PUT IN.

At ART, we create dynamic machines that will surprise you with quick acceleration, consistent cut quality and excellent reliability. We are also busy finding innovative solutions and technologies that help reduce waste and pollution, while delivering outstanding performance. This is what we refer to as “State of the ART technology.” This goal led to the partnership between ART and Hypertherm, the world leader in thermal cutting technology.

Over the last decade, ART has introduced a range of world-beating developments for the metal processing industry. High torque servo drives, active dry fume extraction and filtration, intelligent torch height control, monocoque chassis design, auto sensing drill tools and rigid tapping are just a few of the developments that increase productivity and performance with reduced emissions. And now, ART’s ProfileShop V3 touchscreen controller combines ease of use with advanced features to automate all cutting settings, resulting in optimum cut quality. At ART, we are driven to do better every day.

**Ease of use**
Pendant hand controller gives access to most functions when the operator is away from the main controller. Start, stop, recover, digitise, align plate, change tools, override feed rate and much more. New wireless pendant gives ultimate freedom with over 200 range.

**Intelligent controller**
ART ProfileShop V3 touchscreen controller gives ultimate control over every job. User log-in enables functions suitable to each operator’s capabilities. Modify nests on the machine, start, stop, adjust parameters and more with a touch of the finger.

**Integrated height control**
Accurate pierce height and cut height are essential for high-quality cutting and long consumable life. Automatic voltage sensing, multi-height piercing, lockout for cornering and holes, speed-proportional tracking and many more features give excellent results.

**Monocoque chassis construction**
A one-piece, fully-welded chassis allows for fast installation and easy relocation. Stability and strength are inherent in the construction through the use of solid modelling and finite element analysis during the design process. All fabricated components are fully powder-coated for wear and corrosion resistance.

**High torque servo drives**
The HDP series comes with precision AC servomotors coupled to German-made planetary gearheads and smooth helical rack and pinion drive. High power means fast, agile cutting. AC servo control means accurate positioning without loss of position.

**Active fume extraction & conveyors**
Follows the torch motion to remove fumes at their source - under the cut. The motorised extraction unit is coupled to an external reverse pulse filtration system. The integrated conveyor dumps all dross into a bin and fallen parts are easily retrieved. No more sludge to clean out as with water beds.

**Precision guide ways**
German-made linear bearings provide smooth movement to ensure accurate cutting. Wiper seals on all bearing surfaces keep bearings dust free for long service life.

**Comprehensive database**
The controller knows exactly how to cut each material. Pierce and cut height, feed rate, gas selection and flow, height settings, dwell and more are all set automatically.

**Optional drilling and tapping head**

**Optional bevelling head**

**Automatic True Hole™**
Full True Hole™ processing is automatically applied to holes. The machine automatically changes gases, lead-ins, offsets, and feeds without the need for special software.
On-site training is provided as a standard feature. Step by step instruction is given on drawing parts, tool path and nesting, and machine operation. Optional extended training is also available on request for existing or new operators. This ensures that you always have qualified operators on hand.

ART Factory based training is also available in a classroom style setting at the ART factory. This is often a favourable option because students are not interrupted during training. This results in a better learning experience and can be done prior to machine delivery. As this can be a more cost effective option it is also good for updating existing operator skills or training new staff.

Standard Features | Advantages | Benefits
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Touchscreen controller | Simple to learn but very powerful | Start producing product faster
ART ProfileShop software | Graphical editing of nests, tooling and all parameters | Quickly modify and adjust parameters at machine
Handheld pendant | Excellent control over manual functions, start/stop jobs etc. | Faster job alignment and setup
High definition cutting | Precise cutting, excellent edge quality, minimal dross | Better quality - close to laser in most applications
True Hole™ technology | Virtually eliminates taper for excellent hole quality | Bolts fit easily with accurate hole sizing
Power Pierce™ technology | Liquid cooled tips to pierce extra thick plate | Increases capacity and extends consumable life
Etch marking | Engrave part numbers and lines using plasma torch | Identify parts - remove confusion - save time
Ducted fume trough | Follows torch under deck to catch parts and remove fumes | Easier to retrieve parts and empty slag
AC brushless servo motors | High power with accurate positioning | Full torque at high speed means faster production
DSP based motion controller | Smooth control and extreme flexibility in control | Increases cut quality with precise control
Helical rack and pinion | Smooth and accurate for high precision and cut quality | No cogging means smoother, quieter motion
Wireless networking | Connects to office network for file transfer | Easy interfacing to existing computer systems
Remote access | Technicians can adjust, diagnose and assist remotely | Get help if you need it - where you need it

Optional features | Advantages | Benefits
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Wireless remote controller | Monitor machine progress, remote stop, full control | Convenient, safe and efficient - save time
Laser alignment pointer | Align and rotate job to plate | Less hassle - faster plate loading
5 axis bevel plasma head | Bevel parts and perform weld preps | Reduce post processing - parts are ready-to-weld
Digitising module | Trace patterns and parts and export to CAD | Simplifies migration to CNC
Fixed print head | Prints horizontal text and marks lines | Identify parts - remove confusion - save time
Rotating print head | Prints text at any angle or around curves, marks lines | Add instructions for fabrication - save time
Engraver | Engrave part numbers etc. using carbide cutter | Deep engraving visible through coatings
Drill head 3.7Kw (5HP) | Drills holes up to 25mm dia in mild steel | Reduce double handling - better quality holes
Drill head 7.5Kw (10HP) | Drills holes up to 38mm dia in mild steel | Increased capacity for larger hole drilling
Rigid tapping upgrade | Cuts threads using conventional taps | Remove the need for manual tapping - save time
Fume extraction fan | Remove fumes from workshop | Better environment for workers
Fume extraction & filtration | Remove fumes and filters air | Protect the environment from dust and fumes
Auto remote start unit | Control extraction or other accessories automatically | Saves time and electricity
Refrigerated air dryer/booster | Filters and dries air, boosts pressure | Improves consumable life and cut quality

Backup and support
Extended warranties, telephone support, remote technical assistance and on-site servicing are all standard features.

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