

HDP SERIES
CNC PLASMA
PROFILE CUTTER



THE HDP SERIES CNC PLASMA PROFILE CUTTER.

HIGH-PERFORMANCE METAL PROCESSING.



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

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 HYPERTHERM HYPERFORMANCE HPRXD CUTTING TORCHES RESULTS IN THE HIGHEST QUALITY PLASMA PROFILING AVAILABLE.



THE TRUSTED NAME
IN CNC TECHNOLOGY



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 equipment



□ **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.



□ **Optimal 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.



■ **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.



■ **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.



■ **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.



Wireless remote pendant

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.



Optional bevelling head

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.



Optional drilling and tapping head

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.

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.

THIS IS WHAT YOU GET OUT...



THE TRUSTED NAME
IN CNC TECHNOLOGY





■ **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
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
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 - reduce 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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