

NC SOLUTIONS

# **Metaltek** PORTABLE 5 AXIS CNC WELD PREPARATION MACHINE HIGH-PERFORMANCE CNC PLASMA CUTTING

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Metaltek is a wholly owned subsidiary of Advanced Robotic Technology

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

ART BRINGS YOU THE METALTEK PORTABLE 5 AXIS CNC WELD PREPARATION MACHINE. THIS NEW BREED OF MACHINE IS FULLY PORTABLE AND IS ABLE TO PROCESS BOTH CURVED AND FLAT SURFACES. THE LATEST ADVANCEMENTS IN PORTABLE CNC PLASMA PROFILE CUTTING GIVES YOU FASTER FEEDS, HIGHER ACCELERATION AND ADVANCED MOTION CONTROL ALGORITHMS. INNOVATIVE 5 AXIS TECHNOLOGY PROVIDES THE ULTIMATE WELD PREPARATION PROFILING MACHINE. COMBINED WITH HYPERTHERM HYPERFORMANCE HPR800XD CUTTING SYSTEM RESULTS IN THE HIGHEST QUALITY PLASMA PROFILING AVAILABLE.



HyPerformance Plasma HPRx



### Hypertherm HPR800XD enables up to 160mm thick cutting in stainless



Hypertherm XD power unit: •HPR800xd 800amp plasma

- 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



Power Pierce 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



## 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.

Modular chassis construction An innovative modular chassis design 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 components are fully powder-coated for wear and corrosion resistance. Integrated 5 axis 3D torch control Precise 5 axis motion control enables hole cutting and weld preparation on curved or flat surfaces.

Accurate pierce height and cut height are essential for high-quality cutting and long consumable life. Automatic surface tracking along with the ART 3D motion controller enable previously unheard of capabilities in the field,

NART metaltek

High torque servo drives The Metaltek series comes with precision AC servomotors coupled to precision gearheads and smooth helical rack and pinion drive. High power means fast, accurate cutting. AC servo control means accurate movements without loss of position, even when mounted in the vertical plane.



Controller Interface Intelligent controller ART ProfileShop V3 touchscreen

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

#### Ease of use

Optional 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. Precision guide ways Precision dual linear bearings on each chassis rail ensures alignment between rails at all times. These also provide stable guidance and smooth movement and ensure accurate cutting. This Wiper seals on all bearing surfaces keep bearings dust free for long service life.

**Optional wireless** 

remote pendant

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<sup>™</sup> Full True Hole<sup>™</sup> processing is automatically applied to holes. The machine automatically changes gases, lead-ins, offsets, and feeds without the need for special software.

ORTABLE CNC SOLUTIONS



PORTABLE CNC SOLUTIONS

## THIS IS WHAT YOU GET OUT ...

WART metaltel















Machine is stored & transported on platform along with plasma units



CNC machine is positioned onto the pressure vessel by crane



Vacuum or magnetic arms grip the vessel wall for stability



5 axis head can reach extreme angles for excellent performance



Simplified design software makes designing vessels easy





160mm capacity in stainless steel allows 45° bevels in 100mm walls



■ 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 <sup>™</sup> technology	Virtually eliminates taper for excellent hole quality	Bolts fit easily with accurate hole sizing
Power Pierce <sup>™</sup> 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
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	Position and align job to reference points	Less hassle - faster setup time
Digitising module	Trace patterns and parts and export to CAD	Simplifies migration to CNC
Refrigerated air dryer/booster	Filters and dries air, boosts pressure	Improves consumable life and cut quality

#### Backup and support

Extended warranties, telephone support and on-site servicing are all standard features

Remote technical support via direct internet connection to the machine controller enables assistance and diagnostics for training or service requirements.

Full spares kits are available for use in remote locations to facilitate quick repairs in the event of damage.

As ART manufacturers most components in-house, all parts are available ex factory at short notice.

Advanced Robotic Technology

THE TRUSTED NAME IN CNC TECHNOLOGY

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