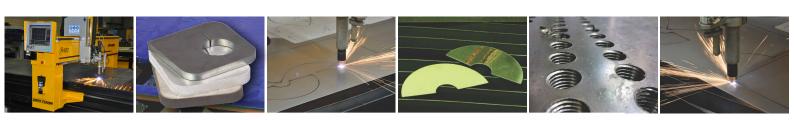


VERSATILE METAL PROCESSING MACHINE.





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

ART BRINGS YOU THE LATEST ADVANCEMENTS IN CNC PLASMA PROFILE CUTTING. EASE OF USE, FASTER FEEDS, HIGHER ACCELERATION AND ADVANCED MOTION CONTROL ALGORITHMS COMBINE TO GIVE YOU EXCELLENT CUTTING PERFORMANCE. THE XR PLASMA IS DESIGNED TO ACHIEVE THE BEST QUALITY CUT POSSIBLE USING THE HYPERTHERM PMX RANGE OF AIR PLASMA CUTTING











#### **Powermax Plasma Torch:**

- Cuts using compressed air
- Cost effective and fast
- •30 to 125 amp options
- •Up to 25mm cutting in steel

#### **Automatic Height Control:**

- Auto Initial Height Sensing
- Auto surface tracking (AVC)
- Adjusts for steel, stainless and aluminium

#### **Automatic Settings:**

- Adjusts air pressure
- Adjusts cutting current
- •Adjusts pierce dwell
- Adjusts feed rates

#### Full diagnostics screens:

- View pressures, voltages etc.
- Real English status messages
- Full real-time communication with plasma unit





## INVEST IN THE FUTURE OF YOUR BUSINESS.

Over the last two decades, ART's drive to develop new and exciting technologies has led to a range of world-beating developments for the CNC cutting industry. High torque servo drives, integrated fume extraction, intelligent accessory control, monocogue chassis design, machine vision and auto sensing drill tools are just a few of the developments that are designed to increase productivity and performance in your business long into the future.

At ART, we are driven to do better every day.

#### Intelligent touchscreen controller improves productivity

The advanced ART ProfileShop Touchscreen Controller gives ultimate control over every job. Modify nests on the machine, start, stop, adjust parameters and more with the touch of the finger. ART ProfileShop combines ease of use with advanced features to automate all cutting settings, resulting in optimum cut quality. User log-in enables functions suitable to each operator's capabilities. Our new wireless pendant allows for monitoring of the machine from anywhere in the factory.





**ART Touch-Screen Controller with** optional Wireless Remote Pendant makes the XR Plasma one of the most efficient CNC plasma cutters on the market

Here are just a few of the other reasons why an XR Plasma from Advanced Robotic Technology is the best choice...



## ■ Controller runs Microsoft Windows<sup>™</sup> This provides excellent compatibility and

allows your existing networking professional to easily integrate the controller into you business network.



#### ■ Built-in WiFi networking

The controller easily connects into your existing WiFi network for downloading job files. Also supports remote access and diagnostics for the ART service team.



#### ■ Heavy duty AC servo drives

Coupled with precision planetary gearboxes provide fast positioning. Hardened and ground helical rack and pinion provides smooth motion with excellent edge finish on machining.



#### ■ Integrated Safety Circuit

Category 4 safety controller interfaces with all safety sensors and switches. Monitors all devices and cuts power to drives through monitored safety contactors.



#### ■ Heavy duty fabrication:

Fully welded steel chassis construction using 250mm deep PFC & UB profiles. Close cross beam spacing gives unparalleled stability. Steel is machined for precision linear components.



#### **■** Precision linear 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.

☐ Optional Drilling head with auto tool change and clamping foot enables drilling in plate and sheet up to 14mm diameter. The high pressure clamping foot holds the material firmly in place to minimise vibration. Optional auto surface sensing is available to adapt to uneven plate. A number of accessories and optional features are available to compliment the drill head





### ☐ 10 position tool changer

Gantry mounted tool changer allows faster and continuous processing without the need for manual interaction during tool changing. Applies to drill head



☐ Enclosed safety screen protects operator from safety-critical areas of the machine. Provides for a safer working environment. Applies to tool changer option



#### ☐ Rigid thread tapping

This option allows the use of thread taps. Machine first drills holes then automatically changes to tapping tool to cut thread. (Requires drill head)



#### ☐ Misting coolant lubricator

Used with drill head option. Dual jets extend drill life dramatically in materials such as aluminium and steel. Computer controlled. Pulsing piston pump provides accurate dosing for optimal drilling.



#### ☐ Auto surface sensing drill

Optional sensing system automatically senses the position of the clamp foot and adjusts the drill depth to consistently drill to the correct depth on each hole - even on uneven plate.



#### ☐ Engraving spindle head

Available as an upgrade to enable controlled depth engraving of part numbers and other marking directly into the plate.

The controller automatically engages engraver as required and controls the spindle speed and feed rate for optimum performance.

Depth can be controlled from a light etch-like mark that can be hidden with paint, to a deep and wide engraving that can be seen through even the thickest coatings such as hot dip galvanising.

A dedicated misting lubrication unit is built into the foot to give long cutter life even in the toughest materials

ART can supply coolant, extra collets and replacement cutters as required.





#### ☐ Industrial fume extraction system



Industrial quality fume extractors are supplied for optimum health and safety purposes. Large metal ducting provides less drag and improves efficiency. The Extraction and filtration system works in conjunction with the downdraft extraction deck to remove most of the fumes and dust from your workshop environment.

#### ☐ Pipe cutting accessory

Rotary 4th axis chuck allows pipes to be processed up to 250mm diameter and up to the length of the machine's work area.



#### ☐ ART iCam Vision Tracing System

Optional camera system is integrated with the ART controller. No extra third party computer system required. The ART iCam option allows the machine to automatically trace patterns into the controller. This high-end feature can save countless hours of time



when reverse
engineering existing
parts. It can also locate
and align the job to plate
automatically. This
option includes the
industrial camera
mechanism and all
related software
modules in the
controller.

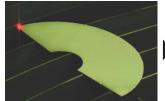
#### ☐ Laser pointer

The optional laser pointer makes setting up the job much more simple. The precise dot allows the operator to set the origin of the job at the corner of the plate with ease. A special plate alignment function allows the operator pick a point



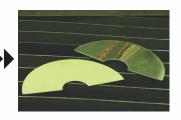
along the bottom or side of the plate. This allows the controller to rotate the job to fit material in the event that is not placed squarely on the cutting deck. The controller activates the laser and calculates the offset to the torch automatically.

☐ **Optional digitising function** allow existing patterns to be traced into the controller. Lines, arcs and complex curves are easily and accurately traced with just a couple of points. The shapes appear on the screen point by point. They may then be cut immediately on the machine, or exported back to your CAD program for clean-up or modification. This makes the transition into CNC cutting much easier for the traditional workshop. You can also trace off-cuts into the machine for nesting parts into. Excellent for the customer that brings in a cardboard template or a part that needs to be copied. Requires Laser Pointer option















- 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
Windows Operating System	Industry standard system	Easy to learn and compatible
Wi-Fi networking	Connects to office network	Transfer files both ways with ease
ART ProfileShop software	Graphical editing of nests, tooling and all parameters	Quickly modify and adjust parameters at machine
Air Plasma cutting	Fast efficient standard definition cutting	Speed up your production and lower costs
Ducted fume trough	Extracts fumes under deck	Improves workplace health and safety
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
Digitising module	Trace patterns and parts and export to CAD	Simplifies reverse engineering of parts
ART iCam Vision System	Automatically trace parts using camera	Automates reverse engineering of parts
Engraving head	Engrave part numbers etc. using carbide cutter	Deep engraving visible through coatings
Drill head	Drills holes up to 14mm dia in mild steel	Reduce double handling - better quality holes
Clamping Foot	Firmly clamps material during drilling	Stops material vibrating or shifting
Auto sensing drill upgrade	Compensates for surface variations	Avoid drilling into slats or not cutting through
Rigid tapping upgrade	Cuts threads using conventional taps with drill head	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
4th Axis Rotary Chuck	Holds and rotates pipe and CHS for cutting	Process round material in-house

#### **Backup and support**

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



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