XR PLASMA

VERSATILE METAL PROCESSING MACHINE.

Advanced Robotic Technology
THE TRUSTED NAME IN CNC TECHNOLOGY
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 TORCHES.

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, monocoque 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.

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™**
  This provides excellent compatibility and allows your existing networking professional to easily integrate the controller into your 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.

- **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.

- **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.

- **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. Adjustable supports cradle the pipe along its length. Extraction can be configured to draw fumes through the chuck.

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.

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Backup and support

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

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.