

### metaltek

# MODULAR MULTI-FUNCTION CNC MACHINING SYSTEM PORTABLE CNC ENGINEERING SOLUTIONS











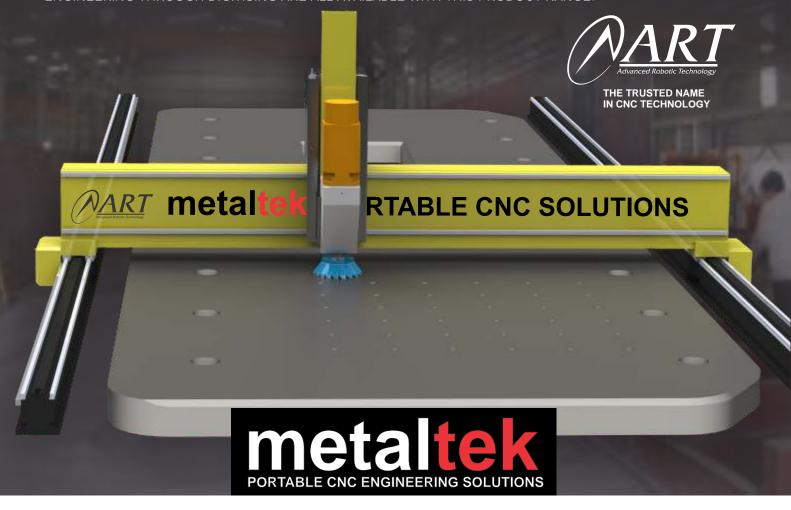




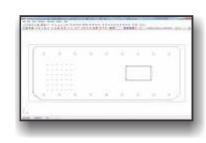
## IF PRODUCTIVITY IS YOUR GOAL, LET ART SHOW YOU HOW TO ACHIEVE IT.

ART BRINGS YOU THE METALTEK MODULAR MULTI-FUNCTION CNC MACHINING SYSTEM. THIS NEW BREED OF MACHINE IS FULLY PORTABLE AND IS ABLE TO PROVIDE AN UNPARALLELED RANGE OF MACHINING FUNCTIONS IN THE FIELD AND WORKSHOP.

PROCESSES SUCH AS FACE MILLING, DRILLING, POCKETING, BEVELLING, THREAD MILLING, TAPPING, PLASMA AND OXY PROFILING AS WELL AS SURFACE MAPPING (PROBING) AND REVERSE ENGINEERING THROUGH DIGITISING ARE ALL AVAILABLE WITH THIS PRODUCT RANGE.











Wireless touch controller:

- Water & drop resistant
- Microsoft Windows 7
- Remote assistance
- Easy to use

Easy-to-use software:

- ART designed & developed
- Advanced features
- Easy to learn and use
- Full training included

Modular gantry & chassis:

- Re-configurable structure
- Various lengths & widths
- Range of mounting options
- Heavy duty construction

Heavy-duty machining heads:

- Milling & drilling heads
- Plasma cutting (Hidef & Air)
- Clamping feet
- Misting lubricators



#### 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 lead to the partnership between ART and some of the world leaders in automation technology.

Over the last decade, ART has introduced a range of world-beating developments for the CNC cutting industry. Milling heads, plasma cutting torches, oxy fuel torches, auto sensing drill tools and rigid tapping are just a few of the developments that increase productivity and performance. ART's ProfileShop V3 touchscreen controller combines ease of use with advanced features to automate all cutting settings, resulting in optimum cut quality. Our new wireless pendant allows for monitoring of the machine from anywhere in the factory. At ART, we are driven to do better every day.

Intelligent wireless controller ART ProfileShop V3 touchscreen controller gives ultimate control over every job. User log-in enables functions suitable to each operator's capabilities. Modify jobs on the fly. Start, stop, adjust parameters and more with a touch of the finger. Super heavy-duty gantry construction
A fully-welded fabrication provides outstanding stability and smooth cutting without deflection. Weighing in at over 500kg, the sheer mass provides dampening against vibration. Wide linear bearing spacing provides superior geometry for the cutting head bearings which further increases stability.



Modular chassis construction An innovative modular chassis design allows for fast installation and easy relocation. Stability and strength are inherent in the construction. Modular extension rails provide levelling/jacking bolts and various hold down options, including magnetic and vacuum operated clamping systems.

Modular head design Optional heads are available for inclusion. Choose from milling, drilling, tapping, plasma cutting, oxy fuel cutting, laser digitizer, surface probing, engraving and high speed routing attachments. Optional accessories include misting lubricators, as well as fume extraction and filtration units.

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. Wiper seals on all bearing surfaces keep bearings dust free for long service life.



☐ Wireless pendant controller allows the operator to get close to the action for optimal view during manual operations. Communication range is up to 200 metres.



■ Heavy duty brushless AC servo drives coupled with precision planetary gearboxes provide fast accurate positioning. Hardened and ground helical rack and pinion provides smooth motion.



☐ High quality accessories ART use the finest quality accessories and components to provide the best quality cutting possible. Brands such as Hypertherm, HSD, Bosch Rexroth, Atlanta Drives etc.

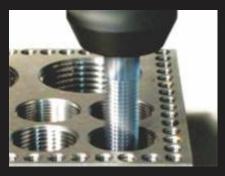
#### THIS IS WHAT YOU GET OUT...



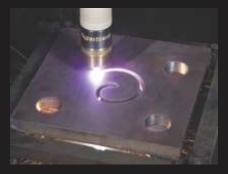
THE TRUSTED NAME IN CNC TECHNOLOGY



■ Face machining for accurate surfacing of steel and aluminium



■ Thread milling allows treads of any diameter and pitch to be cut.



■ High definition plasma cuts steel, stainless and aluminium



■ Bevelling/chamfering using angled milling cutters.



■ Drilling using indexable insert drills.



■ Laser digitising allows tracing of existing parts for duplication.



■ Contoured surfacing using ball nose cutters.



■ Pocketing of complex shapes from 2D drawings



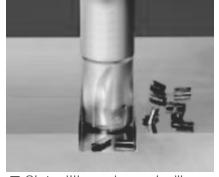
■ Oxy-acetylene torches enable accurate cutting of thick plate.



■ Rigid tapping using conventional thread taps



■ Rotating head for machining on vertical or overhead surfaces



■ Slot milling using end mills and slot drills





Servo-driven milling/drilling spindle ART offers this spindle for applications requiring machining of steel and other machinable metals. The milling/drilling spindle supports drilling, surfacing, pocketing, thread milling and rigid tapping. Servo drive motors are available in various sizes. The spindle supports BT tool holders as well as through-tool coolant and spray mist coolant.



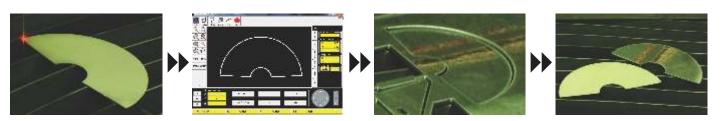
Five axis plasma cutting head This option allows full five axis bevel cutting. This can be used to cut weld preps, countersink large holes and cut specialised components that are not possible with normal three axis cutting.



High speed routing spindles
These spindles run at speeds up to 24000rpm.
They are suitable for high speed machining of aluminium as well as timber, plastics, composites etc. Models available from 1kW up to 24kW. They support manual collet too holding or HSK63F and ISO30 tapers with auto tool changing.



High definition HPR plasma cutter head The Hypertherm HPRxd series plasma torches combine seamlessly with ART's advanced CNC controller to provide excellent quality cutting in steel, stainless and aluminium. They support TRUE HOLE™ cutting for taper free holes, as well as etching for part numbers and other data. Models available to cut up to 160mm in stainless



□ Laser pointer and 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 cleanup or modification. This allows for reverse engineering of large and complex components. Reproduce any shape with precision. You can plot the position of holes and other features with ease.



- 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.



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