RT SERIES
HEAVY DUTY
CNC ROUTER

ART
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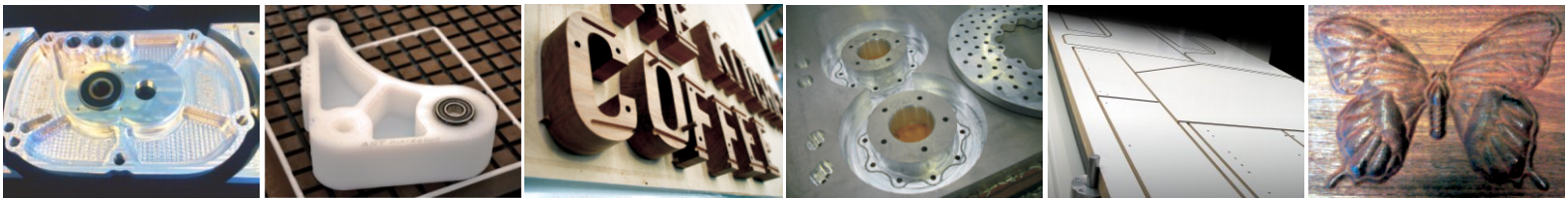
THE TRUSTED NAME
IN CNC TECHNOLOGY

THE RT SERIES
HEAVY DUTY CNC ROUTER

HIGH-PERFORMANCE MACHINING CENTRE



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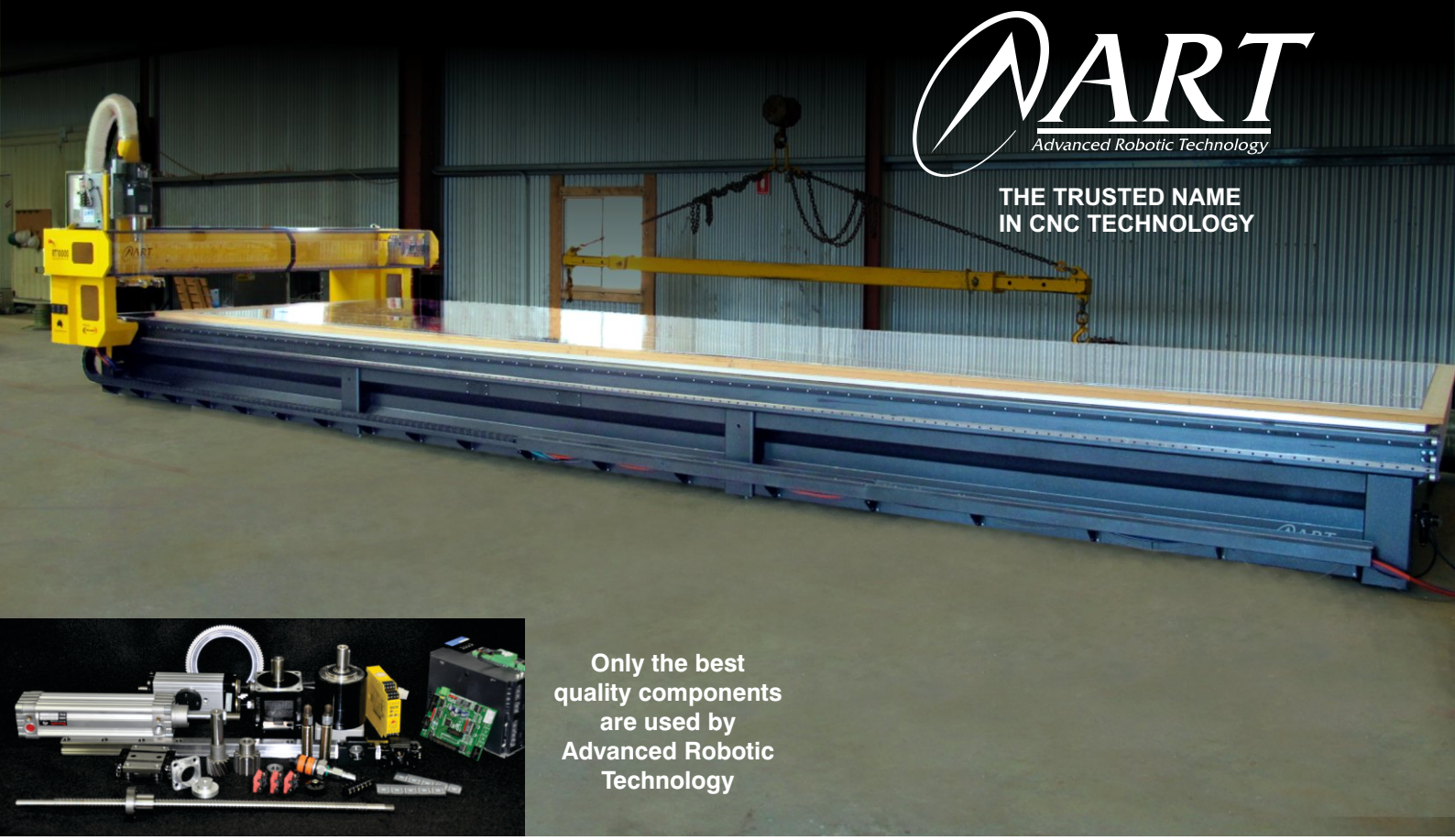
IF PRODUCTIVITY IS YOUR GOAL, LET ART SHOW YOU HOW TO ACHIEVE IT.

ART BRINGS YOU THE LATEST ADVANCEMENTS IN CNC ROUTING TECHNOLOGY. FASTER FEEDS, HIGHER ACCELERATION AND ADVANCED MOTION CONTROL ALGORITHMS COMBINE TO PROVIDE THE ULTIMATE CUTTING MACHINE. SUPER HEAVY DUTY CONSTRUCTION COMBINED WITH HIGH PERFORMANCE SERVO DRIVE TECHNOLOGY RESULTS IN THE HIGHEST PRODUCTIVITY LARGE FORMAT MATERIAL PROCESSING AVAILABLE.



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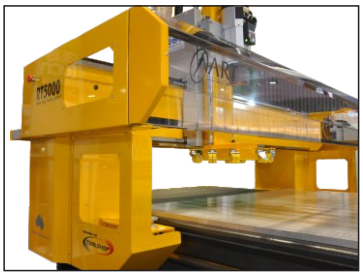
Only the best quality components are used by Advanced Robotic Technology

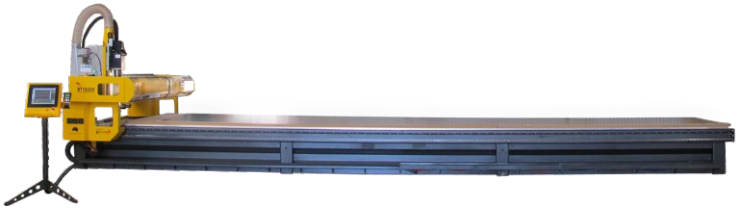
High power spindles:
- 9Kw to 22Kw high torque
- HSK63 taper
- Liquid or air cooled

Automatic tool changer:
- 10 tool rotary carousel
- Optional rack changer
- Under deck changer for extra large tools



Extra high gantry bridge:
- 400mm clearance for 3D
- Standard 750mm Z travel
- Super rigid design

Heavy duty fabrication:
- Fully welded steel construction
- 200mm x 100mm x 9mm chassis
- Close cross beam spacing
- Fully machined bearing beds



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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. High torque servo drives, integrated swarf extraction, intelligent accessory control, monocoque chassis design, 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 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.

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

Optional wireless remote pendant

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.

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.

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.

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 all parameters for each tool. It can automatically set all machining parameters such as rpm and feed rates for each material. Specialised tools such as rigid taps can be utilised without the need for special CNC files.

Integrated swarf extraction system
Fully integrated ducting provides optimum swarf extraction without the need for overhead booms and hoses. An outlet at ground level is provided to connect to the dust collection equipment.

THIS IS WHAT YOU GET OUT...

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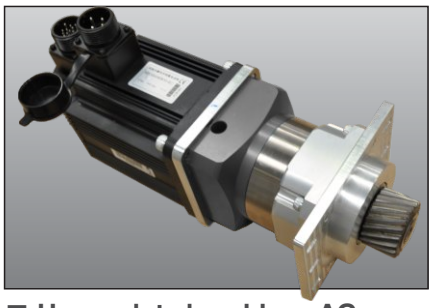
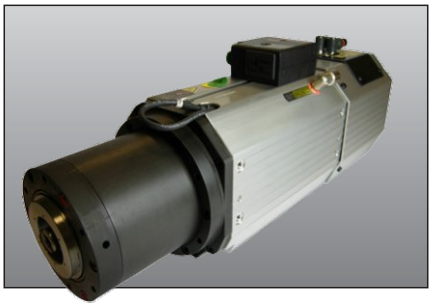
■ **Standard features** ☐ **Optional equipment**

☐ **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 and is fully secure with 16 bit encryption. Machine can be stopped remotely from anywhere in the factory.

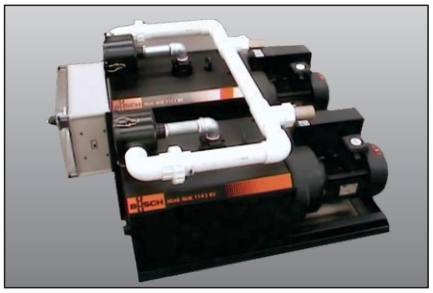


■ **Heavy duty brushless AC servo drives** coupled with precision planetary gearboxes provide fast positioning. Hardened and ground helical rack and pinion provides smooth motion with excellent edge finish on machined products.

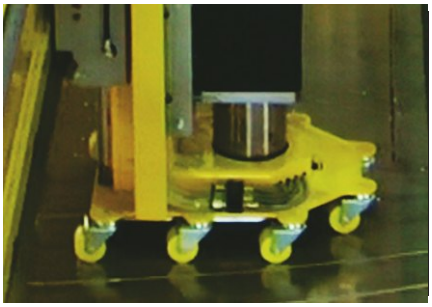
■ **10 tool rotary changer** allows faster and continuous processing with out the need for manual interaction during tool changing. The RT can optionally be fitted with a second rotary tool changer giving twenty tool positions. Other additional options are also available for loading specialised oversized tooling.



■ **Heavy duty spindle** is available as 9Kw(12HP) air cooled, or customised up to 22Kw (29HP) in 2 or 4 pole configurations with air or liquid cooling. This allows the spindle to be sized according to the requirements of the application. Spindles are Italian made and suit HSK63F tapers for quick tool change-over.



☐ **High power vacuum pumps** provide the perfect balance between high air-flow and raw holding power. These work hand in hand with a vacuum matrix deck to keep your work securely in place. Several options are available to meet your specific requirements including Mink rotary claw pumps and side channel blowers.

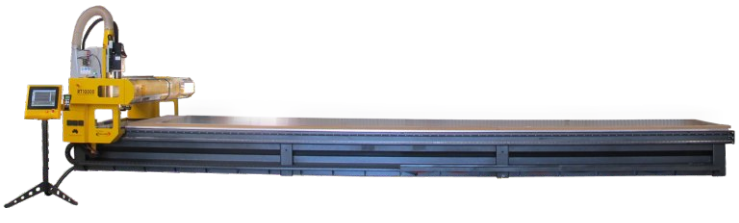


☐ **3 function combination foot** is the secret to extreme feed rates and superior cutting. This unique ART design delivers 4 jets of mist lubrication directly to the cutter, keeping material cool and cutters sharp. The efficient flow-through air path provides superior swarf extraction, and the 16 wheel high pressure foot dampens almost all vibration.

☐ **Laser pointer and optional digitising function** allows 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.

☐ **Vacuum matrix hold down system** allows flat smooth products to be held down without the need for mechanical clamping. The work area can be divided into 8 zones which turn on and off automatically under computer control. Advanced rotary lobe vacuum pumps are sized to the machine area and work type, in order to provide optimum holding power.

☐ **T-slot table surface** allows for conventional clamping systems to be utilised for work holding. A heavy duty aluminium deck provides a stable surface for clamping material down.



■ **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 speed cutting	Cuts faster than most other cutting processes	Better quality finish in less time
High power pressure foot	Virtually eliminates vibration for excellent cut quality	Tools last longer, less chatter and faster cutting
4 barrel misting lubricator	Cools cutter and lubricates for near dry cutting	Increases capacity and extends consumable life
10 tool rotary tool changer	Change tools automatically during job	Less human interaction - higher productivity
Ducted swarf extraction X & Y	Efficiently removes swarf without overhead hoses	Allows use of overhead cranes and sheet lifters
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 and productivity
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 with ease	Less hassle - faster plate loading
Digitising module	Trace patterns and parts and export to CAD	Simplifies migration to CNC from manual patterns
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
C axis for steered tools	Use knives, cutting & creasing wheels, saws etc.	Allows cutting of many different materials
12.5Kw liquid cooled spindle	Liquid cooled for longer bearing life and continuous torque	High power for fast heavy duty cutting
Options up to 22Kw spindles	Higher torque at lower speeds	Increased capacity for cutting difficult materials
Rigid tapping	Cuts threads using conventional taps	Remove the need for manual tapping - save time
Cyclone dust extraction unit	Efficiently removes swarf and dust from workshop	Better environment for workers
Twin bag dust extraction unit	Economica removal of swarf and dust from workshop	Protect the environment from dust and swarf
Auto remote start outputs	Control extraction or other accessories automatically	Saves time and electricity
Reciprocating saw	Cut foam, rubber, insulation and textiles	More diverse cutting capabilities
Straight & bevel knives	Cut Ductboard, cardboard, matting and other soft materials	Hvac ducting, block mounting, box prototyping

Backup and support

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

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