





# **VARIAXIS I-300 AWC**

The <u>Auto Work Changer (AWC)</u> and the expandable large capacity tool magazine enable a flexible approach for high-mix, low-volume production, ideal for aerospace and medical industries.

The gantry construction ensures maximum high accuracy machining of complex workpieces. Smooth AWC software is embedded to the Mazatrol SmoothX to increase productivity. The AWC enables various kinds of high accuracy machining on small parts.

### MACHINE SPECIFICATION:

- Maximum Workspace Diameter:
- Maximum Workspace Height:
- X-axis Stroke:
- Y-axis Stroke:
- Z-axis Stroke:
- A-axis (table tilt) travel amount/indexing 0.0001°
- C-axis (table rotation) travel amount/indexing 0.0001°
- 360mm 316mm 360mm 660mm 610mm 0.0001° x 1500000

0.0001° x 3600000





## **INTEGREX I300**

The INTEGREX i-300 advanced Multi-Tasking machine delivers maximum versatility, high precision and throughput for small to large complex parts. It combines the capabilities of a high-powered turning center and full-function machining center to produce parts in single setups. This machine configuration works to minimise fixtures, tools, handling and non-cut time. For fully automated operations, the machine has been outfitted with a bar feeder.

### MACHINE SPECIFICATION:

- Bar Work Capacity Main Spindle: 80mm
- Maximum Machining Diameter: 500
- Movement Stroke X
- Movement Stroke Z
- Movement Stroke Y

500mm 615mm 695mm 250mm





# QT-250 MY

The QUICK TURN 250 CNC turning center brings together advanced technology and productivity. This 4-axis machine efficiently processes a wide range of part sizes with milling function & Y-axis.

Plus, the machine comes equipped with the SmoothG CNC that features MAZATROL conversational programming and EIA-ISO programming. For fully automated operations, the machine has been outfitted with a bar feeder.

### MACHINE SPECIFICATION:

- Bar Work Capacity Main Spindle: 80mm
- Maximum Machining Diameter:
- Movement Stroke X:
- Movement Stroke Z:
- Movement Stroke Y:

380mm 234mm 625mm 100mm





### CV5-500

Bridge construction 5-axis vertical machining center with a fully supported trunnion table provides high-rigidity for high-accuracy machining. High-accuracy simultaneous 5-axis machining center.

Designed to deliver high speed, high-accuracy machining and ease of operation. The CV5-500 defines a new standard for 5-axis machining. For fully automated operations, the machine has been outfitted with a robotic arm mill assist.

| • Maximum Workspace Diameter: | 600mm |
|-------------------------------|-------|
| Maximum Workspace Height:     | 320mm |
| X-axis Stroke:                | 730mm |
| Y-axis Stroke:                | 450mm |
| Z-axis Stroke:                | 470mm |
| C-axis Stroke                 | 360°  |





# **ROBOARM MILL-ASSIST**

The MillAssist Essential collaborative robot automates repetitive CNC milling tasks efficiently and safely alongside staff to improve turnaround, reduce costs, and deliver consistent precision, quality, and dimensional accuracy for every customer part batch through its easy lead-through programming and integrated torque sensor motions. For fully automated operations, the machine has been integrated with our CV5-500.

- Designed for rapid prototyping and small batch production
- Reduces cycle times and manual labour requirements
- Boosts productivity and part consistency
- 25kg payload capacity





## **MULTIFEED MX1B**

The MultiFeed MX1B automatically feeds 12ft long, 1.5 inch diameter bars into CNC lathes enabling lights-out manufacturing for faster turnaround of precision machined parts with consistent quality, reduced chatter, and improved surface finishes thanks to the hydraulic bar pusher and motorised guide channel.

For fully automated operations, these machines have been integrated with our Integrex I-300 and the QT-250 MY.

- Multi Bar Loader
- Bar capacity 3-80mm diameter
- Maximum Bar Length: 1500mm





# **M5A ATC CNC ROUTERS**

Peregrine MLS run three M5A ATC CNC routers from our Derbyshire Facility, which feature a versatile 3-axis design, 6-position tool changer, rapid traverse rates up to 1,800ipm, 20 hp spindle, and sturdy steel frame ideal for fast, accurate prototyping, custom parts, and short manufacturing runs.

#### MACHINE SPECIFICATION:

- Maximum Material Length:
- Maximum Material Width:
- Maximum Material Depth:
- Materials Include:
  - Foam (including ARPLANK 100% recyclable material)
  - Softwood
  - Plastics

2000mm 1000mm 100mm





# **N-LASE - LASER ENGRAVER**

The Needham Laser Desktop Pro's precision laser engraving, marking and annealing capabilities allow our manufacturing business to reliably engrave high definition graphics with fine details, sharp edges and excellent clarity.

Our in-house fixture design capabilities ensure positional tolerances are always consistent combined with quick turnarounds to meet our customers' exact specifications for improved satisfaction.

- Marking Area: 100x100mm
- Output Type: 20W JPT MOPA Ytterbium Fiber Laser
- Supported Materials: All metals and some plastics



# AXIOM too 900 CMM

The Axiom too 900 CNC CMM's fast, precise, repeatable automated inspection capability allows Peregrine MLS thorough quality verification of critical specifications on customer parts through its accelerated motion system, granite/aluminium table, temperature compensation features, and ultra-stable air bearing system for reliable micron-level precision metrology even in uncontrolled environments

- Aberlink 3D geometric measurement software for CNC
- Programming from CAD software module
- CAD Comparison software module.
- Fitted with a Renishaw PH10T fully motorised probe head with TP20 probe





## **BATY SM350 PROJECTOR**

The BATY SM350 profile projector's high magnification, precision, repeatability, edge detection and digital image processing allow comprehensive quality inspection and verification of critical dimensions, geometries and surface finishes on customer parts down to the micron for ensuring conformance to specifications and process control.

- Up to 100x Magnification
- 0.5µm Resolution
- 2D Fusion Touch Software including full 2D geometric measuring and construction functionality.
- Digital Angle Measurement to 1 minute





# **TESA-HITE MAGNA**

The Tesa Hite Magna's digital readout, motorised column and thermal stability allow our quality team to precisely, efficiently measure heights, widths and distances on customer parts to verify critical dimensions and geometries down to .00005 inches for certifying conformance to specifications through its superior accuracy and repeatability.

- Digital readout accurate to .00005 in (.001 mm)
- Wide measuring range up to 40 inches for versatility
- Scanning capability for complex contours





## **MK TEST SYSTEM D1500**

Peregrine's D1500 Test System harness testing unit to validate wiring assemblies produced in-house. This highly configurable system enables automated testing of continuity, resistance, shorts, and insulation integrity up to 1500V. The intuitive software features autolearn for rapid test program development. Customised connectors matched to Peregrine's designs allow thorough validation of all wires and terminations prior to installation. This tester will ensure all harnesses meet quality standards.

- Continuity and resistance measurement, short circuit detection
- Insulation testing up to 1500VDC
- Customised test connectors matched to harness designs



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