INNOVATION LTD

Presenting tomorrowc innovations today











Hartford CNC MACHINING CENTRES

HARTFORD is a dedicated producer of CNC machining centres. With 50+ years in the business, they have sold over 46,000 machines in over 65 countries worldwide. In recent years HARTFORD have made significant investments in their Research & Development capabilities and they continually invest in large machining equipment to enhance the level of "in house" production. The reason for HARTFORD's success is they do as much as they can themselves. No reliance on outsourced machining ensures absolute thorough quality control.



NEW FROM HARTFORD

NEO Highly Efficient AI Vertical Machining Centres

With its unique structural design, the LG NEO series ensures mechanical quality. The machine design incorporates a large working envelope with reduced overall footprint. The LG NEO has four models to choose from 800, 1000, 1300 and 1500mm X axis travel.

S-Series Production CNC Machining Centres

The S-Series is the perfect balance between performance and capital investment without compromise. The castings are reinforced with heavy ribs ensuring stability. Production

enhancing features like through spindle coolant and 4th Axis drive is available. Plus, the unbeatable performance of the HARTROL Plus 3 controller and all the optional apps.



5-Axis High Efficiency Machining Centres

The 5A-65 5-axis machining centre features a bridge construction for optimal rigidity. The ballscrews drive through the centre of gravity ensuring stable and dependable head movement. During 5-Axis simultaneous motion, a HARTFORD 5A-65

5-axis machining centre has tool edge deviation tolerance within 36μm.
Best in its class for accuracy.



Horizontal Borers

The PBM Series features the patent pending quill (W axis) systems on two roller guide ways. This gives superior accuracy even when the quill is fully extended. The spindle is driven by a 3-step true gear transmission (no belts) delivering a staggering 6527Nm of torque (with 37kW motor). Being box way it handles heavy table loads without distorting the table. Like all their machines HARTFORD know they are good because they use them in their own production.

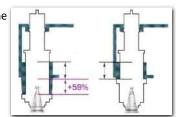


HCMC Heavy Cutting Box Way Vertical Machining Centres

The "Solid as a Rock" structure of the HCMC series delivers exceptional cutting

performance with enhanced surface finish, whether you are heavy cutting or fine finishing. Check out the high-performance spindle headstock design (right).

The casting of the headstock has been enlarged to encase the spindle, significantly increasing spindle rigidity. Consider the HARTFORD HCMC box way series for all production or 3D precision machining of heavy, hard steels or stainless steel.



Hartford

HSA Series Multi Surface Double Column Machining Centres

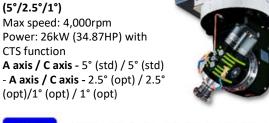
HEAVY MACHINING

The HSA Series features the best head change time of only 118 seconds compared to others at 240 seconds. A large range of machining heads are available for most 5-face machining applications. Patented X & Y axis ball screw support system and patented 4 linear rail design Z axis. An optional horizontal & vertical swing arm tool changer significantly improves productivity.

Automatic Universal Head

Power: 26kW (34.87HP) with

- A axis / C axis - 2.5° (opt) / 2.5°





SORALUCE

SORALUCE was founded in 1962 and is in Bergara, Northern Spain. SORALUCE is part of DANOBAT group. SORALUCE is a technology-driven leader in the production of highly customisable, multitasking machines for large complex parts. Their broad product range includes bedtype and floor-type milling and boring machines, multitasking machining centres, bridge and gantry-type portal machines, and vertical turning centres.

All SORALUCE machines can be configured with over 300 different head designs, including universal, fixed, multitasking, turning and special purpose heads, all of which are designed, engineered and built in-house. SORALUCE has pioneered and holds patents in many groundbreaking technologies in the machine tool sector.

SORALUCE offers professional advice in machining, with a team of highly experienced engineers who evaluate the clients' production and machining processes and then provide solutions to optimise them.

FIXED TABLE, TRAVELLING COLUMN, MILLING MACHINES • Proven quality components: High performance 7000 rpm

- head, direct drive inline motor and robust software.
- Best geometric stability through water-based cooling and real time thermal compensation.
- Solutions adapted to your needs: Easy integration of milling & turning tables (Rotary milling/turning table size: Ø 1000 mm / Max. swing: Ø 1500 mm).
- Set & Go: Less footprint in the workshop. Less expensive foundation. Easy transport & installation.

FLOOR TYPE MILLING & BORING MACHINES

• Advanced SORALUCE technology geared towards maximising productivity, precision & performance.

 High dynamics with speeds of up to 35 m/min and acceleration of 1 m/s2 (longitudinal) and 1.5m/s2 (vertical and cross).

• Great precision and efficiency with the hightorque, direct drive spindle motor.

• Automated solutions: Integrated palletised workpiece loading and unloading systems and robot-based solutions.

- · Multitasking machine: Milling and boring in a single set-up.
- SORALUCE head technology: Highly reliable, extensive range quills and head options.
- Automatic head and tool changing systems.



DRILLING & MILLING MACHINES

Linmac Machinery Inc. was established in 1979, exporting Taiwanese made milling machines and inverter variable speed drilling machines. Bringing quality machines with leading technology to our customers.

YS-4KVS & YS-5KVS KNEE TYPE TURRET MILLS

- YS-4KVS X Axis: 855, Y Axis: 380, Z Axis: 430
- YS-5KVS X Axis: 855, Y Axis: 430, Z Axis: 520
- Table Size: 1370mm x 254mm (54"x10")
- Slideway hardened & surface ground
- Table Surface hardened & ground
- Spindle: NT40, 5HP, Variable speed
- Includes: X & Y Axis feed, Z Axis rapid motor, Air draw bar, chip tray, Splash back guard, CE safety including chuck guard, Auto lub
- 3 Axis DRO fitted

YS-6BVS BED TYPE TURRET MILL

- YS-6BV X Axis: 1100, Y Axis: 490, Z Axis: 650
- Table Size: 1524mm x 305mm (60"x12")
- Slideway hardened & surface ground
- Table Surface hardened & ground
- Spindle: NT40, 5HP, Variable speed
- Includes: X & Y Axis feed, Z Axis rapid motor, Air draw bar, chip tray, Splash back guard, CE safety including chuck guard, Auto lub,
- 3 Axis DRO fitted







LINMAC DP-920G Drilling Machine

- Drilling cap: Ø35mm, MT3
- Inverter variable speed (Gear Drive)
 2hp 3ph motor
- With Tapping function
- CE mark includes: Safety guard with shut off micro switch
- Coolant equipment & Halogen lamp

LINMAC DP-925G-M Drilling Machine

- Drilling cap: Ø40mm, MT4
- Inverter variable speed (Gear Drive)
 2hp 3ph motor
- With Tapping function
- Auto powered down feed
- CE mark includes: Safety guard with shut off micro switch
- Coolant equipment & Halogen lamp

LINMAC DP-925G-B Drilling Machine

- Drilling cap: Ø50mm, MT4
- Inverter variable speed (Gear Drive)
 2hp 3ph motor
- With Tapping function
- · Auto powered down feed
- CE mark includes: Safety guard with shut off micro switch
- Coolant equipment & Halogen lamp





Everox Industrial Co Ltd was founded in 2000, they specialise in heavy-duty, large travel, bed-type manual milling machines. There are three sizes in the range, model EM-1460 [1400mm X travel], model EM-1660 [1600mm X travel] & model EM-6065 [2000mm X travel]. Three head options available are: B-type is an ISO 40 turret head, VF-type is an ISO 50 3-step inverter variable speed head, G-type is an ISO 50 6-step gearbox driven head. Ballscrews are standard on X,Y,Z axis. The Z axis can be upgraded to 900mm travel.

available on any horizontal spind axis for rise and

A popular optional accessory available on any Everox model is the horizontal spindle, on a powered W axis for rise and fall. The horizontal



Optional Horizontal Spindle

HO CHUN MACHINERY

Established since 1988, Ho Chun Machinery is a Taiwanese manufacturer, experts in making medium size heavy duty Bed-Type Universal, Bed-Type Vertical and Bed-Type Horizontal Milling Machines as well as Vertical Machining Centres. All built for low maintenance, long life and excellent reliability.





HIGH SPEED CNC LATHES

Crocowy

GIS Sprips

Featuring the latest machine tool technology and precision turning performance, Goodway brings you the new GLS series high speed CNC turning centre. Using 2 types of bed combined with high rigidity, high-speed turning capability and compact size provides you with high efficiency cutting power. The GLS series equipped with an optional live tooling turret, Y-axis and sub-spindle can work on turning, milling, drilling tasks at the same time to increase the output capacity with high end value to meet your needs of today and tomorrow.

Y-axis control further enhances multitasking live tooling capabilities and improves productivity. High precision grooving and X-axis off-centre drilling is possible



GMT Series

The GMT-2000 series integrates the functional characteristics of turning centres and machining centres into one. It has the highest 9-axis control and 5-axis simultaneous machining capabilities. It can efficiently complete various complex workpieces in a single setup. This is a versatile model that can be used in all industries.

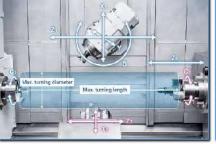
(Casting structure of GLS-1500LYS series shown.)

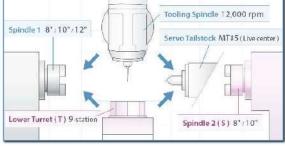
THE ULTIMATE MACHINING POWER

ensure the ultimate

Both the tool spindle and the lower turret can independently work on the first spindle or the second spindle. In addition, a long and slender bar is clamped and fixed at both ends of the twin spindle. The tool spindle and the lower turret are synchronized to balance the turning mode, which can greatly shorten cutting cycle time and







With leading technology and high-quality components, the GVF series CNC vertical turning centre combines a super rigid ram structure and high torque gear type spindle design to provide you heavy

cutting abilities for large sizes. Plus, with the optional live tooling spindle, CF-axis control, and multi-purpose milling heads, turning, milling and drilling applications may be completed for both end surface and cylindrical surface to accomplish demanding turning applications.



- Enclosed splashguards keep chips and coolant contained for a safe clean working environment.
- Extra wide door enables large size work-pieces to be loaded onto the worktable with a crown block for easy loading and unloading.

PRECISION LATHES



JESCO MACHINERY LTD (Jessey) is a highly regarded and experienced manufacturer specializing in the development and production of high-precision Lathes, Teach-In Lathes, Slant-Type CNC Lathes and the high-quality Flat Bed CNC Lathes. With unwavering dedication, accumulated experience, and ongoing improvements and innovations, Jesco now operate a state-of-the-art production facility spanning 30,000 square feet.



Toolroom quality Lathes of the highest standard

- Rigid bed construction which is induction hardened over HRC50 & precision ground
- Hardened & ground spindle & gears in headstock for high-speed running at low noise
- Camlock spindle nose
- Interlock device between feeding and threading
- Smooth, easy speed change selection

2280ENC

- Feed rod fitted with an overload clutch for safety
- Easy longitudinal & cross feed change operated by a push/pull plunger on apron
- Simple, fast, pull up engage, push down disengage, feed control lever
- Front pullout chip tray facilitates easy chip cleaning

Highest Quality Flat Bed CNC Lathes

Headstock – Built with hardened & ground gears, high precision bearings, to provide the highest spindle speed and the highest turning accuracy.

Bed – Made from high quality cast iron with hardened & ground ways to ensure highest precision and rigidity.

Controller – Available with FAGOR, SIEMENS or FANUC control systems. The control console is mounted on an independent slideway to allow effortless repositioning. The MPG handwheel is mounted to the side of the control console for convenient operation.

Jessey Flat Bed CNC Lathes are always supplied with a good quality, steel body, 3-jaw chuck capable of holding accuracy at the machines' top RPM.





LIOUY HSING has been in the business of manufacturing machine tools since 1992. Renowned as a top supplier of CNC Lathes and High-Speed Lathes, they are recognized for their exceptional quality, precision, and reliability in the industry.



GOSAN MACHINERY (Taiwan) is a professional production machinery manufacturer with over 30-year experience. They specialize in Centre Lathes, Bench Lathes, High Speed Precision Lathes, and CNC Lathes. Boasting a wide array of functions allowing any metalworker to get the job done.

Gosan Lathes are famous for their advanced safety features, including interlocking chuck guards and electromagnetic braking, ensuring that when you use a Gossan Lathe you are as protected as can be.



WORKSHOP ESSENTIALS

CARIF is an Italian bandsaw manufacturer which has engineered saws since 1948. The range includes semi automatic and fully automatic CNC controlled metal cutting horizontal bandsaw machines. CARIF's patented down feed and pressure relief system is the hallmark of their success. It's utilised across all machines in the CARIF family. Being able to set the cutting pressure is critical for blade preservation. The reliability and accuracy of these machines will leave you thinking why you didn't purchase a CARIF machine years ago.



CARIF Semi Automatic Bandsaws

CARIF semi-automatic bandsaws feature a swivel bow. The operator can effortlessly rotary the bow to mitre cut either left or right. No need to double handle the material; cut one mitre end, push the material through, swivel the bow to the other mitre direction and cut.

CARIF Automatic Bandsaws

CARIF produce two fully automatic models at 320mm & 450mm cutting widths. The saws automatically feed the material with two hydraulic hitch feed vices. Two vertical devices are standard. These allow bundle cutting.

2m conveyor tables and extra blades are available



COLDCUT SAWS & DOUBLE MITRE BANDSAW

MACC metal cutting coldsaws are available in three different variants: manual, semi-automatic and vertical semiautomatic, A MACC saw will cut most materials including steel, stainless steel and non-ferrous we sell comes metals. Every coldsaw complete with a blade, and coolant system.



The MACC SPECIAL 650DI is a heavyduty, high-quality double mitre horizontal bandsaw with hydraulic vice and variable blade rotation speed. It is a semi automatic machine with a swivel head that enables 0 to 60° cuts in both directions. MACC is Italian made so you will be guaranteed quality. Comes complete with

2m conveyor tables and extra blades are available



TOOL HOLDERS & BELT GRINDERS



ANN WAY TOOL HOLDERS

ANN WAY manufacture cutting tools and cutting tool holders for conventional and CNC machine tools

Their main products include:

- · Boring and milling cutting tools
- BBT chucks (dual taper & face contact)
- ER collet chucks
- Milling chucks
- · Keyless drill chucks
- HSK chucks
- Boring chucks
- · Shrink fit chucks



SCANTOOL belt grinders are market leaders in more than 45 countries worldwide. Their products reduce grinding time by half compared to traditional grinding wheels. In addition you get very low noise level, adjustable tool rest, eye shield and adjustable working position. SCANTOOL meets all safety regulations with motor brake, no-volt release and emergency stop. The optional CYCLONE dust extraction is also available for all models and recommended for a healthy low-dust working environment.



TOOLROOM ESSENTIALS

NEUAR provides various Electric Discharge Machine product solutions

CNC-H Series

Excellent high-rigidity column-structural EDM design ideal for high-speed eroding performance. Especially suitable for high precision, complex, special alloy parts and automated production lines.

The series supports up to a 20-tool automatic changer on the machine. It has a compact design to save workshop space.

CNC-C Series

This series has a built-in high precision C-axis. This series supports 4-axis simultaneous movement. Ideal for complex tool making.

CNC-A Series

This series is a reliable general-purpose range. It supports 3-axis simultaneous movement. Suitable for most toolroom tasks.

CNC-C/A Series [Ram type]

This is the series to choose for large format eroding. It has longitudinal travel options between 600mm to 3200mm. Designed to maintain excellent performance over the large machining envelope. The unique high-speed [18m/min] Z-axis jumping technology is suitable for large moulds found in the likes of the automotive industry.

ZNC-SE Series

This series has manual table position with programmable Z-axis depth control. Suitable for connectors, tungsten steel punches and deep hole rib eroding applications.

Conventional E Series

Economical manual operation models. They are suitable for simple eroding applications.

SURFACE GRINDERS



PROTH Industrial Co. Ltd are a manufacturer of precision surface grinders in Taiwan, providing high quality surface grinders since 1980. Over the years, PROTH has become a leading name within the grinding machine industry and have won acclaim across the world. This renown has grown from a commitment to quality control, innovation and desire to exceed the needs of their customers. PROTH's grinding machines include: Saddle Type, Column Type, Over-Arm Type Surface Grinding Machines and more.

- Auto down feed S1 with 10" touch screen.
- Minimum control increment is 0.001mm (1μm).
- Total stock removal resolution is up to 99999μm.
- Total rough feed stock removal resolution is up to 30μm.
- $\bullet\,$ Total fine feed stock removal resolution is up to 10 $\mu m.$
- Setting of "Spark-out" grinding is up to 10 passes.
- Selectable wheelhead retract clearance at job completion for convenient workpiece loading and unloading is up to 300mm.
- Includes cross feed stroke adjuster by electronic one touch system.
- · Criss cross grinding and manual pulse generator (MPG).

LERO INNOVATION TEAM

Our commitment to excellence extends beyond just providing top-notch products; it encompasses delivering exceptional, professional service and support throughout our entire customer's journey. Our technicians offer comprehensive installation and commissioning services for all machines sold, along with thorough training to empower our users to operate their new equipment confidently and efficiently. Additionally, we offer both one-time and routine maintenance services to guarantee uninterrupted, smooth machine operation. Whether you require product information, scheduled servicing or urgent assistance, our LERO Innovation team members are always prepared to assist you promptly and effectively.



