

Metalworking Brochure



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SANDVIK
COROMANT

AMADA



FANUC



DVF 8000T Vertical Machining Center



- 5 Simultaneously controlled axes (X,Y,Z,A,C) with high precision
- 10,000 rpm main spindle (HSK100T)
- Ball screw shaft cooling for increased accuracy during long cycle times
- 600 rpm, direct drive turning spindle (C-axis)
- Z-axis thermal compensation by multiple temperature sensors and proprietary compensation algorithms for increased precision
- Spindle oil chiller



Scan or click to see a video on the DVF 8000T

Looking for unparalleled precision and performance in your machining operations? Look no further than the DVF Series of 5 axis Vertical Machining centers. The one-piece meehanite cast iron bed is engineered to absorb vibrations with unparalleled efficiency ensuring a stable foundation for your precision work. Equipped with linear glass scales on X, Y and Z helps to mitigate inaccuracy from thermal growth. Unleash the full potential of your machining operations with the DVF 8000T.

DNM 4500S Vertical Machining Center

Building upon the esteemed legacy of the DNM and DNM II series, DN Solutions latest iteration sets a new benchmark in reliability and performance. Featuring a direct coupled spindle drive system. Supported by high precision bearings, this true cartridge-type unit minimizes noise, vibrations and thermal growth. With an 15,000 rpm motor power is at your fingertips. Elevate your machining capabilities with the DNM 4500S.

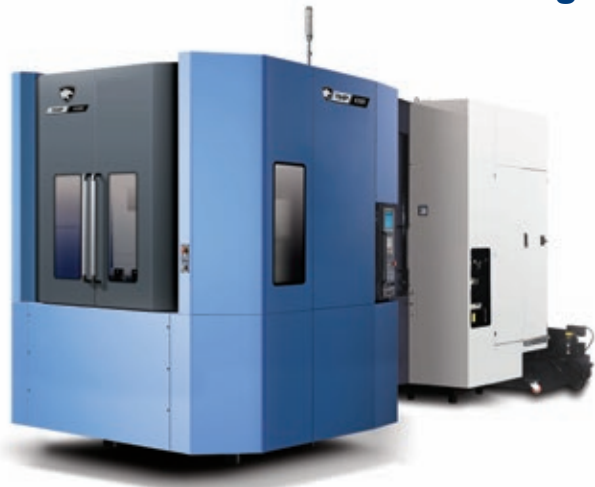
- Massive Meehanite bed
- Large Linear Roller Guides (X - 1.338", Y - 1.772", Z - 1.772")
- Tool-load Monitoring and Adaptive Feedrate Control
- FANUC Oi-Plus control with iHMi touch screen interface
- Spindle oil chiller



Scan or click to see a video on the DNM 4500S



NHP 6300 Horizontal Machining Center



- Fast rapid traverse rate (X - 2,362 ipm, Y - 2,362 ipm, Z - 2,362 ipm)
- High precision pallet location by 4, tapered conical pins and locked into position by 4 pull studs.
- Tool-load Monitoring and Adaptive Feedrate Control
- Spindle orientation, spindle oil chiller, load meter, override and rigid tapping

The NHP 6300 is designed for a combination of heavy duty cutting and high-speed machining along with high precision over a wide range of applications. It has a powerful built-in spindle motor with a dual wound, "virtual gearbox" design, which generates high torque at low rpm for heavy chip load roughing cuts. Featuring a 50-taper tool shank (CAT-50 Big Plus Spindle), the NHP 6300 offers best in class specifications for tool diameter. Also, the NHP 6300 incorporates many advanced and technological features such as FEM optimized construction, linear roller motion guides and a servo driven rotary APC (Automatic Pallet Changer), with a 12 second change time, making it capable of remarkable performance with long term reliability!



Scan or click to see
a video on the
Puma NHP 6300

SMX 2100 ST Milling/Turning Center

- FANUC 31i-B5 with touch panel 5 axis simultaneous control with swiveling operator's panel and large LCD display
- 5,000 rpm - 22 kW \ 30 hp digital AC integral spindle motors with spindle chillers for temperature control and thermal growth compensation
- Automated part unloading system with barfeed interface standard.
- Fast (1,890 ipm) Z axis rapid traverse



The Puma SMX2100ST multi-task milling/turning centers are designed for heavy and interrupted cutting, long-term high accuracy and superior surface finishes. High speed tool change and turret indexing combined with fast rapid traverse rates minimize non-cutting time. C-axis contouring, Y-axis off-center and B-axis any-angle milling/drilling allow for single set-up completion of highly complex work pieces. Same-size integral motors on both left and right spindles provide improved performance and flexibility. Multi-tasking capabilities increase productivity and provide for just-in-time production requirements by reducing lead time, changeover time, set-up time, and time between operations.



Scan or click to see
a video on the
Puma SMX2100ST

SVM 5100L Vertical Machining Center

The SVM 5100L vertical machining center has been developed to meet the increased demand for machining of Aluminum die-castings in both the Automotive and IT industries. In addition, it can be used for general-purpose light duty machining of steel parts. The machine's performance has been optimized to provide shorter cycle times by reducing the acceleration/deceleration times of the XYZ axes and spindle, thereby minimizing the non-cutting time.

- FANUC 0i-Plus control with iHMi touch screen interface
- Meehanite cast iron bed
- High precision, direct drive spindle with (5.5/18.5 kW \ 7.4/25 hp motor, 12,000 rpm)
- Spindle oil chiller



Scan or click to see a video on the SVM 5100L



ROMI C 1000 & C420 CNC Lathes

Designed to operate in environments of medium and high production, the ROMI Series has high power and torque. Its robust structure is ideal for machining at full power. It offers high rigidity even during severe machining operations. Thermal and geometric stability, grants accuracy, high performance and productivity. The quality of the manufacturing

processes grant's reliability and operational efficiency of ROMI machines. Projected in 3D CAD system, the entire structure of the ROMI SERIES is dimensioned by Finite Element Analysis software (FEA), resulting in adequate structures for each machine size.

- Main motor: 45 hp / 33.6 kW
- Tailstock positioning system by drag device with saddle and manual drive quill (built-in)
- CNC Siemens Sinumerik 828D with high performance and reliability
- Geared headstock with two speed ranges: 250 rpm (range 1) and 1,000 rpm (range 2) - ASA A2-11"

ROMI C 1000 CNC Lathe



Scan or click to see a video on the Romi C420 CNC



ROMI C420 CNC Lathe

- 12.5-Horsepower AC main motor (Continuous)
- 4,000-rpm (A2-5") or 3,000-rpm (A2-6")
- Advanced intuitive programming system
- USB, Ethernet and Compact Flash ports
- CE Fully enclosed splash guard
- 3 Mb Program memory

Gantry Eagle 1200 Sinker EDM

Combining the latest in technological innovation with a unique, human-centric design, the Gantry Eagle series places top-quality results firmly within reach—without requiring any extra hassle. Plus, with on-board components designed to reduce wear and tear throughout its lifespan—requiring less maintenance and costly downtime—the Gantry Eagle series offers unmatched utility across any number of projects, materials, industries, and more. The highly efficient, highly dynamic Gantry Eagle 1200 is a smart choice for large molding production that won't balloon your operating costs, allowing for efficient, profitable work.

- Fully integrated machine base fluid system
- Fixed table traveling gantry construction
- Direct drive AC smart servo system
- Dual ball screw gantry drive
- 3D lateral servo system



Scan or click to see a video on the Gantry Eagle 1200



Scan or click to see a video on the Eagle V550



Eagle V550 Vertical Machining Center

High-speed, high-precision 5-axis machining for small graphite electrodes, mold/die components, and more – all in a small footprint. There's nothing more frustrating than pouring time, energy, and resources into a machine fleet that—despite your best efforts—just can't seem to return the favor. Then you throw the new challenges facing today's machine shops into the mix: things like an ever-shrinking skilled labor pool, the need to be faster and more efficient than ever via automation, and other thorny problems. Relief for the challenging issues facing your machine shop comes on swift wings—in the form of the high-speed Eagle V550: a high-speed, ultra-rigid 5-axis vertical machining center (VMC) specially designed to cut the difficulty out of graphite machining jobs.

Industrial Robotic Experts

Source Atlantic offers automations solutions using Fanuc industrial robotics to enhance machine shops speed and precision.

Source Atlantic has the capabilities to implement co-bots that work in the same space as machining personnel. Not only will we find the right machine, but we also will install, offer maintenance, and repair services to keep you at peak performance.

Our machining specialists have over 100 years of combined machining experience to help you avoid downtime and operate your business at its highest capacity.

FANUC products are backed by production lifetime support.



Are you having trouble finding skilled labor to man your CNC machines?

At Source Atlantic Limited we have a team of Fanuc trained staff from CNC applications to robot programming to help transform your CNC to an automated cell.

Give your local Source Atlantic representative a call once you're ready to look at automating.



Scan or click to see a video on FANUC's robot product

CoroCut 2 Inserts & Grooving

CoroCut® 1-2, the number one versatile parting and grooving concept on the market, will now be upgraded. You can expect the same outstanding performance with CoroCut® 2 — and more. Upgraded state-of-the-art inserts, new and updated grades and improved stability, always with two cost-efficient edges.

- Rail insert interface ensures stable and precise insert position
- Wiper insert design for excellent surface finish
- Neutral, right- and left-hand style inserts with geometries designed for parting off
- Grooving inserts in many widths and corner radii
- Profiling inserts for high precision profiling operations
- Optimized geometries for turning wider grooves
- Tools with precision coolant for process security and longer tool life



Scan or click to see a video on
the Sandvik CoroCut 2 Inserts

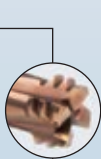
MTMH3-Z Helical Drill/Thread

Helical Drill/Thread Milling Into Solid Material Up to 66 Hrc

The new helical drill/thread milling cutter for high strength and hardened steels up to 66 HRC combines core hole and thread production in one tool. Thanks to the left cutting geometry the tool stabilizes itself during the climb milling process – perfect gauge threads up to 66 HRC are guaranteed. The MTMH3-Z guarantees process reliability and true to gauge threads.



Thanks to the special face geometry, the threaded hole is generated from solid using a single tool with a safe, reliable process.



Thanks to the left cutting geometry the tool stabilizes itself during the climb milling process - perfect, true to gauge threads up to 66 HRC are guaranteed.

Two oil grooves on the shank ensure optimum cooling with emulsion or air.



The MTMH3-Z is made of a special fine-grained carbide, which is characterized by its high hardness and is optimally suited for hard machining.

- Process reliability guaranteed.
- Excellent machining results in dry and wet machining.
- Core holes and threads in one step: significantly shorter cycle and setting time.
- Universally applicable in unhardened and hardened materials up to 66 HRC.



Scan or click to see a video on the MTMH3-Z Helical Drill/Thread

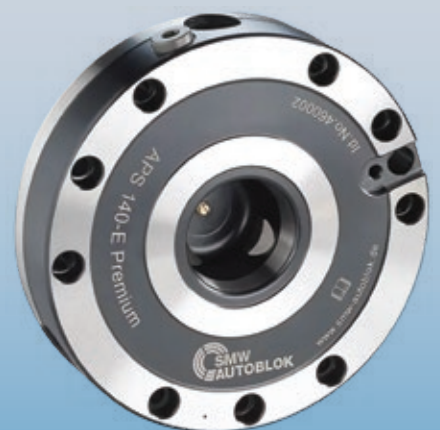
SMW-Autoblok APS Zero Point System



- Fully sealed (proofline)
- Highest stiffness by means of 3 clamping slides
- Low installation height due to the compact design
- Highest process reliability and repeat accuracy <0,005 mm
- Significantly reduced costs due to reduced set-up times

The development of the APS zero-point system was born out of a need to improve upon what was already existing in the market. This system was advanced to stand out and offer additional benefits to users that need a more robust and reliable zero-point system.

SMW-Autoblok included design advancements like jaws with double included plane with generates the “pull down” effect and piston with integral inclined planes. This system is the only system that boasts of having 3 clamping slides. These 3 slides set at 120 degrees, aids in centering, vibration dampening and higher accuracy for repeatability.



Scan or click to see a video on the APS Zero Point System

Amada Band Saws

HFA460P Band Saw

Experience the pinnacle of precision cutting with the HFA460P. With its unparalleled speed range, achieved through a frequency inverter drive and heavy-duty work gear transmission, the HFA460P ensures optimal cutting performance across a wide range of materials. Its hydraulic clamping and carbide blade guides reduce blade stress extending blade life while maintaining cutting accuracies of + .002 per inch. Operators can effortlessly control feed rate and down pressure independently, thanks to the intuitive color-coded dial, ensuring swift and accurate cutting for every job. Equipped with an MPC programmable control system, the HFA460P allows seamless programming and storage of up to 100 jobs, enhancing versatility and automation.



Scan or click to see a video on Amada Band Saws



HFA250W Horizontal Metal Cutting Band Saws

The HA250W features a "C" section frame that carry the mountings for the two band wheels, heavy-duty worm gear drive reducer, blade drive motor, and saw guide arm mounting supports. The result is an extremely rigid structure that delivers efficiency, economy, and large capacity cutting for all types of metals. Featuring a hydraulic-powered shaftless chip conveyor for chip removal and coolant separation. Greatly reduces cleanup time and enables the machine to run longer without operator cleanup.





Helping You Tackle Complex Machine Shop Challenges



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