

Welcome To ARS Machine

ARS Machine Precision Engineering and Innovation for Unmatched Reliability.

At ARS Machine, we are dedicated to delivering engineering excellence through our wide range of high-quality industrial products. With a strong commitment to innovation and precision, we specialize in manufacturing and supplying top-tier machinery and components, including CNC Turning Machines, VMCs, HMC, and Special Purposes Machine also Spare Like Precision Ball Bearing Linear Guide Ways, Ball Screw, CNC Control Accessories Voltage Stabilizers, and Hydraulic spare parts etc.

ARS Machine delivers cutting-edge engineering solutions with a commitment to precision and innovation. Our comprehensive range of high-quality machinery and components ensures exceptional performance and reliability for diverse industrial applications.

PRECISION ENGINEERING MEETS INNOVATIVE SOLUTIONS

Founded on the principles of reliability and customer-centric service, ARS Machine has established itself as a trusted name in the industry. Our team of skilled professionals combines extensive experience with cutting-edge technology to provide solutions that meet the evolving needs of our clients across various sectors.

We pride ourselves on our ability to deliver products that not only meet but exceed industry standard. Our focus on quallity, durability, and performance ensures that every product bearing the ARS Machine name is a testament to our unwavering dedication to excellence.



CNC Turning Machine

What is CNC Turning Machine? Computerised Machining Control (CNC)

and Latest Launched Syntec.

A CNC turning machine is a specialized machine tool used in the manufacturing industry to shape materials by rotating a workpiece against a cutting tool. This process, known as turning. This is controlled by computer programs that dictate the movements of the cutting tool, ensuring accuracy and repeatability. CNC turning machine can do machining of various material including metals, composites. CNC turning machine are controlled by



popular control makes like Fanuc, Siemens, Mistubishi

- High Precision and Accuracy CNC turning machine provide exceptional accuracy, making them ideal for manufacturing intricate parts with tight tolerances.
- Automation and Efficiency The use of computer-controlled programs reduces manual intervention, increasing production speed and reducing human errors.
- 3). Versatility These machines can handle different materials and complex geometries, making them suitable for various industries.
- 4). Cost-Effectiveness CNC turning reduces material waste and improves production efficiency, leading to cost savings in the long run.
- Consistency and Repeatability Once programmed, CNC turning machine can produce identical parts with precise consistency, essential for mass production.

Our CNC Turning Machine Models





1. TL 160 SERIES



2. TL 20 SERIES



3. TL 250



4. TL 30EX SERIES



5. TL 30XL SERIES



6. VTL



Vertical Machining Center

What is a Vertical Machining Center?

A Vertical Machining Center (VMC) is a type of CNC (Computer Numerical Control) machine where the spindle is oriented vertically. This design allows for superior accuracy, ease of programming, and efficiency in handling complex machining tasks. VMCs are widely used for milling,

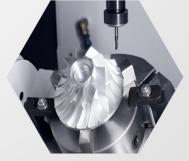
drilling, tapping, and contouring applications.

Key Features of Vertical Machining Center

- 1). High Precision & Accuracy Ensures the production of intricate components with tight tolerances.
- Robust Construction Built with durable materials to withstand high-speed operations.
- 3). Advanced CNC Controls Offers user-friendly interfaces and customizable programming options.
- 4). Superior Automation Minimizes human intervention, increasing productivity and reducing errors.
- 5). Flexible Workholding Accommodates various part sizes and configurations.







Our Vertical Machining Center Models



1. VM 3



2. VML 50 / VM 7 / VM 9



3. VML 800 / VM 10 / VM 11



4. VML 1200 / VML 1500 / VML 1800



5. VML 9



6. VM 11



Precision Bearing

What is a Precision Bearing?

The structure of angular contact ball bearings produces an axial component when a radial or combined load is applied; therefore, two opposed bearings or a multi-bearing arrangement are used. A preload is often used to increase the rigidity of single-row angular contact ball bearings, particularly in the main spindles of machine tools where high running accuracy is crucial. Bearings with a contact angle of 30° (A) or 40° (B) typically use pressed steel, molded resin, or machined brass cages, though machined synthetic resin or specialized polyamide resin cages are used for certain applications.

Key Features of Precision Bearing

Support both radial and axial loads, Single-row ACBBs can take radial loads and axial loads in one direction with typical contact angles of 30° or 40°. A variety of contact angles, Larger contact angles offer greater capacity for axial loads, while smaller contact angles are better for high-speed rotation. Two opposed bearings are used to adjust internal clearance. Pressed steel cages are common, though polyamide resin cages are typically used for high-precision bearings with contact angles under 30°. ARS Machine, we take pride in delivering cutting-edge solutions with our premium product, Precision Bearing. Designed to meet the highest industry standards, Precision Bearing ensures superior accuracy, smooth operation, and longevity in every application. Whether used in industrial machinery, automotive components, or heavy equipment, our bearings are meticulously crafted to reduce friction



Disc Spring

What is a Disc Spring?

Disc springs (also known as a Belleville Spring or Belleville washer) is a conical-shaped, circular spring that offers a high load capacity with a small deflection. It is widely used in applications requiring high force in limited spaces. The disc shape allows it to withstand heavy loads and return to its original shape after being compressed.

Key Features of Disc Spring

- 1). Conical Shape: The spring's cone-like shape provides greater flexibility and deflection than flat washers.
- 2). High Load Capacity: They can handle significant loads without taking up much space.
- 3). Stackable Design: Disc springs can be stacked in series or parallel to increase the force or deflection capacity.
- 4). Durability: Made from materials like stainless steel, spring steel, or other alloys, they offer high resilience and longevity.
- Non-linear Load-Deflection Characteristic: Unlike coil springs, disc springs have a non-linear force-deflection curve, making them suitable for precise force application.

Applications of Disc Springs in VMC is to hold cutting tool with the help of split or ball catch collet.



Linear Guide ways

What is a Linear Guide?

Smooth Precision, Every Time

Linear guideways are mechanical systems designed to facilitate smooth and accurate linear movement in machines. They typically consist of rails and carriages that work together to minimize resistance and enhance motion control. These guideways are critical in high-precision applications where stability and accuracy are paramount.



- 1). High Precision & Accuracy Ensures smooth and consistent motion for precision applications.
- 2). Low Friction Reduces energy consumption and enhances efficiency.
- 3). Durability & Longevity Constructed with robust materials to withstand wear and tear.
- 4). Load-Bearing Capacity Designed to handle heavy loads without compromising performance.
- 5). Corrosion Resistance Special coatings and materials prevent rust and degradation.
- Easy Maintenance Minimal upkeep required, ensuring longterm usability.





Ball Screw

What is a Ball Screw? Ball Screw Solutions – Precision Motion for Superior Performance

ARS Machine, our Ball Screw solutions are engineered to deliver precise motion and superior efficiency across a wide range of applications. Designed for high-speed performance, minimal friction, and exceptional load-bearing capacity, our ball screws are the preferred choice for industries requiring unmatched accuracy and reliability. Crafted with precision-ground threads and premium materials, ARS Machine's Ball Screws ensure smooth, consistent motion, reducing wear and extending the lifespan of machinery. Whether used in CNC machinery, robotics, or industrial automation, our ball screws offer enhanced operational efficiency and lower maintenance needs, enabling seamless integration into demanding environments. For industries where precision, performance, and durability are non-negotiable, ARS Machine's Ball Screw solutions set the standard for quality-driven motion control.





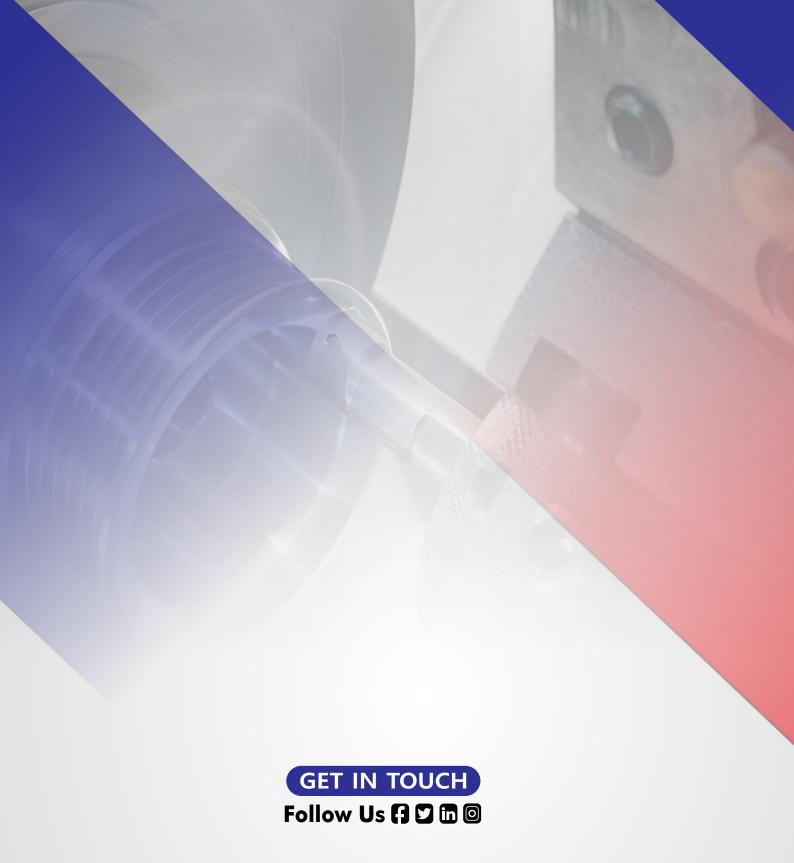
Timing Belt

What is the use of Timing Belt in VMC?

In a Vertical Machining Center (VMC), the timing belt plays a crucial role in the transmission of power and motion between different components. Its main function include:-

- 1). Power Transmission: The timing belt transfers rotational power from the spindle motor to the spindle itself. This ensures that the spindle rotates at the desired speed and torque for the machining operation.
- 2). Synchronization: The belt is designed with teeth that fit into corresponding grooves on the pulleys, ensuring precise and synchronized movement without slippage. This is essential for maintaining accuracy in machining accuracy in machining operations.
- 3). Speed Control: In some VMCs, timing belts are part of a gear reduction system, allowing for adjustments to spindle speed by changing the pulley ratio.
- 4). Smooth and Quiet Operation: Compared to chain drives or gear system, timing belts offer quieter and smoother operation, reducing vibration and improving surface finish quality.
- 5). Reduced Maintenance: Timing belts in VMCs are often made of durable materials, such as rubber with reinforced fibers, making them resistant to wear and requiring less frequent maintenance.





Call Us +91-9922031666, +91-9890894558





