

CAD-MECH

An ISO 9001-2015 Company

**PRODUCT
CATALOGUE**

About Us

Begun in 1997 as V-Ramp Systems, the company introduced a series of advanced learning equipments for technical education institutions. The overwhelming acceptance of the products prompted the company to form in 2000 the B. J. Engineering Company that would exclusively cater to Defence Department customers and other industrial customers. Ultimately, the group merged to form the Sinewave Engineering Pvt. Ltd. in 2007. Today, this merged entity competes nationally through a key strategy of value pricing, increasing product performance and abler service levels that go to enhance the brand building process.

Lending support to its overall initiatives is the strong team of engineers engaged in innovation engineering. This Research & Development team is the heart of Sinewave and is constantly working on innovative products, new applications and more reliable performance. As true professionals, the engineers in Sinewave Constantly work on devising efficient manufacturing process or interface with clients and customers to obtain feedback and further improve product and service quality.

The turn of the new millennium has revolutionised the educational scenario in India. The wide range of computerized products in its stable has made "Sinewave" the preferred source for equipments in the field of technical education.

Our Mission

The mission of Sinewave is to offer all users true value for their equipments investment by a combination of factors such as value engineering, active service support and superior performance consistency.

Products & Services

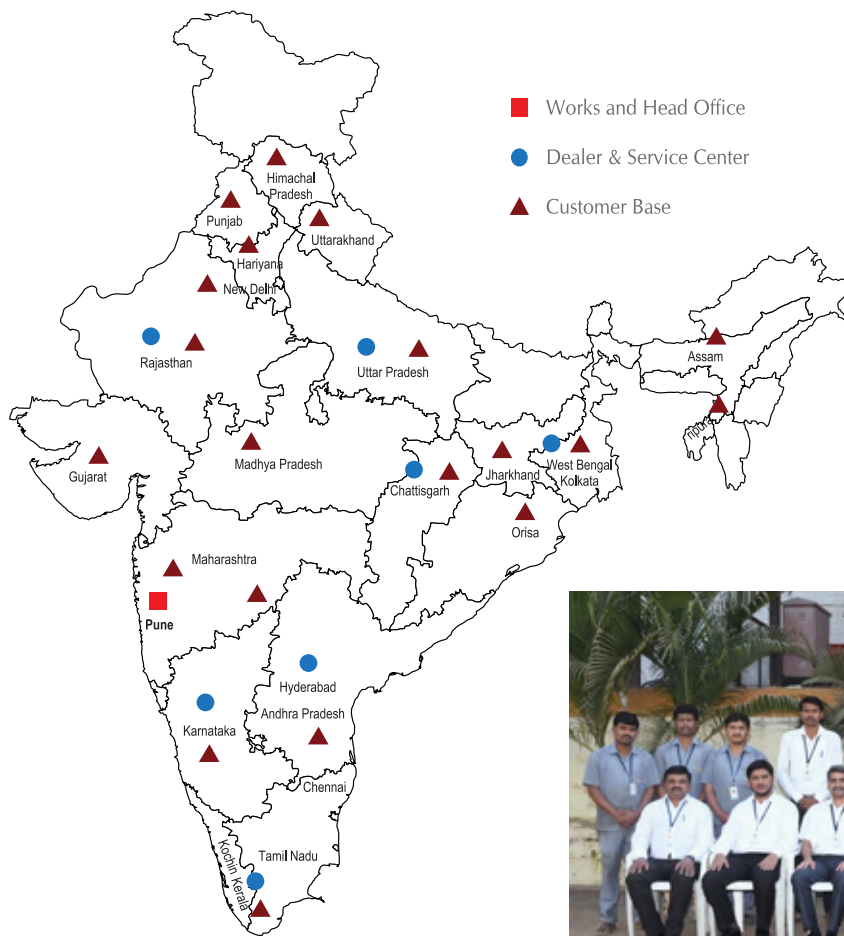
We are manufacturers & exporters of CNC Trainers, Educational Trainers, and Test Rigs for Engineering and Polytechnic Colleges & I.T.I's. It is also engaged with DRDO laboratories and Defence units in developing indigenous testing equipments for various applications. Besides, Sinewave provides low cost and dependable solutions for automation.

Quality Consciousness

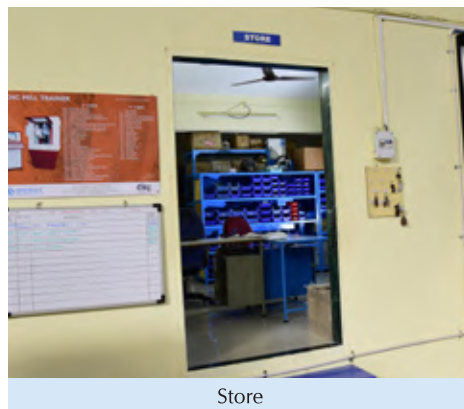
Each product coming out of Sinewave exemplifies top quality and best performance. Engineering colleges of repute in India vouch not only for the accuracy of the lab equipments but also for its consistency of performance. In addition, Sinewave provides support pro-actively, through a team of engineers dedicated to Quality output.



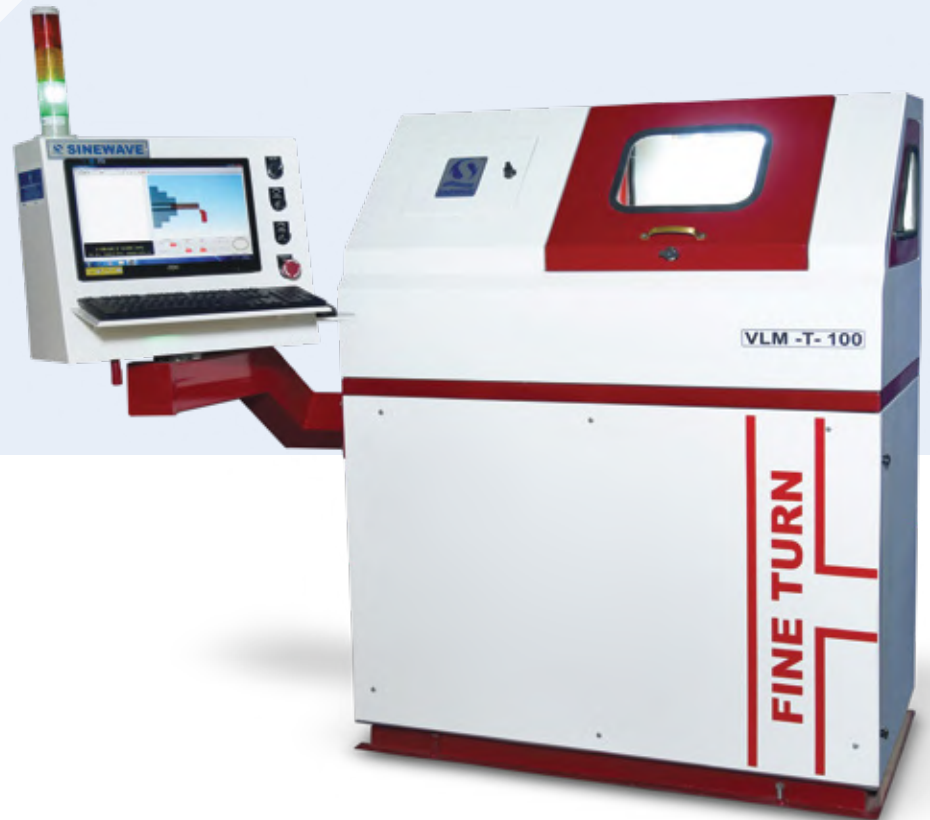
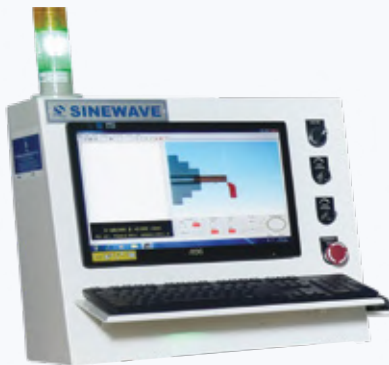
MANUFACTURING FACILITIES & CUSTOMER BASE



The facilities are state-of-art and the equipments represent the most recent in technology. With impeccable manufacturing credentials, advance testing equipments and an approach devoted towards Total Quality Management and professional who are totally dedicated, Sinewave is able to manufacture equipments that are world class at prices India can afford, to Create Next Generation Engineers.



CNC Lathe Trainer with PC Based Controller



Features

- Rugged Machine with Ground Bed.
- 8 Station Programmable Turret.
- Industrial Motion Controller.
- Latest Technological Platform for Software.
- Interactive CNC Part Programming Software.
- 3D Material Removal Simulation.
- STL Import / Export Facility
- Innovative live View on Screen.
- Customizable Tool Library.
- Customizable STK Design.
- Manual Pulse Generator (Optional).
- FMS & CIM Compatibility.
- Hydraulic Chuck (Optional).
- Auto Door (Optional).

Specifications

X – Axis Travel	:	150 mm
Z – Axis Travel	:	200 mm
Chuck Size	:	100 mm (Hydraulic chuck ø 135mm optional)
Maximum Turning Diameter	:	30 mm
Maximum Turning Length	:	150 mm
Swing Over Cross Slide	:	80 mm
Spindle Nose Taper	:	MT3
Standard Cutting Tool Size	:	16 x 16 mm
Spindle Motor	:	2 H.P DC Motor (300 - 3000 RPM)
Resolution	:	0.005 mm
Repeatability	:	± 0.01 mm
Automatic Lubrication Points	:	Provided
Interpolation	:	Linear, Circular
Programmable Feed Rate	:	0- 800 mm/Min.
Rapid Feed Rate	:	0- 1200 mm/Min.
Control System	:	PC Based System
Turret	:	8 Station (Electro - Pneumatic)
Coolant System	:	40 Lts. (Programmable)
Lubrication	:	Centralized (Programmable)
Axis Motor	:	Stepper / Servo Motor (Optional)
Mains Supply	:	230 V AC, Single Phase
Machine Dimensions	:	Approx. 1500 x 900 x 1500 mm
Total Weight	:	Approx. 900 Kg.



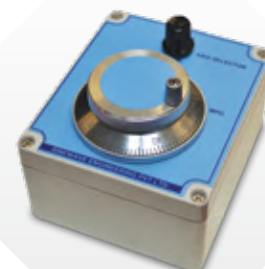
3D Software



Eight Station Turret



Live Screen



MPG

CNC Mill Trainer with PC Based Controller



Features

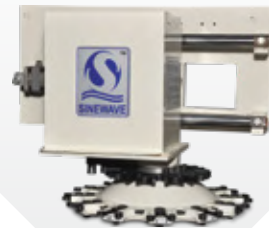
- Rugged Machine with Ground Bed.
- 12 Station Programmable ATC.
- Industrial Motion Controller.
- Latest Technological Platform for Software.
- Interactive CNC Part Programming Software.
- 3D Material Removal Simulation.
- STL Import / Export Facility
- Innovative live View on Screen.
- Customizable Tool Library.
- Customizable STK Design.
- Manual Pulse Generator (Optional).
- FMS & CIM Compatibility.
- Hydro Pnuematic wise (Optional).
- Auto Door (Optional).

Specifications

X – Axis Travel	: 250 mm
Y – Axis Travel	: 175 mm
Z – Axis Travel	: 200 mm
Table Size	: 500 x 200 mm
Spindle Nose to Table Top	: 40 - 190 mm
Spindle to Column	: 110 mm
Spindle Inside Taper	: BT 30 / ISO 30
Maximum Tool Size	: Diameter 12 mm, Length 70 mm
Spindle Motor	: 2 H.P DC Motor with 3000 RPM
Resolution	: 0.005 mm
Repeatability	: ± 0.01 mm
Automatic Lubrication Points	: Provided
Interpolation	: Linear, Circular
Programmable Feed Rate	: 0- 800 mm/Min. (X,Y,Z)
Rapid Feed Rate	: 0- 1200 mm/Min. (X,Y,Z)
Control System	: PC Based System
Automatic Tool Changer	: 12 Station (Pneumatic) (Geneva mechanism)
Lubrication	: Centralized (Programmable)
Axis Motor	: Stepper / Servo Motor (Optional)
Mains Supply	: 230 V AC, 1 Phase for Machine and 3 Phase 415 V AC for ATC
Machine Dimensions	: Approx. 1200 x 1200 x 1800 mm
Total Weight	: Approx. 1200 Kg.



3D Software



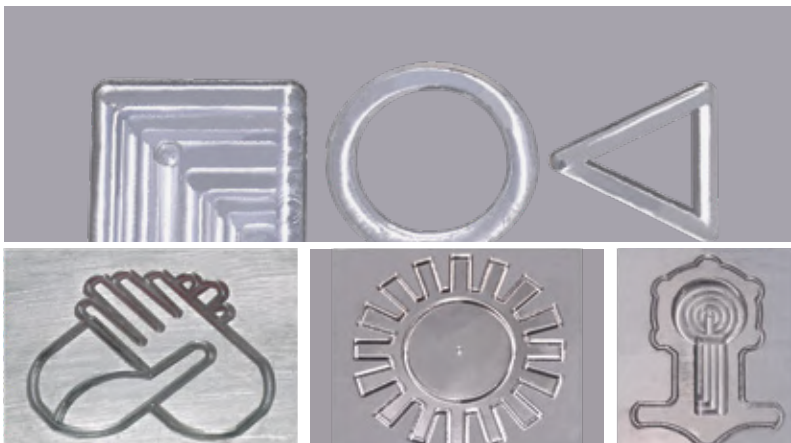
12 Station ATC



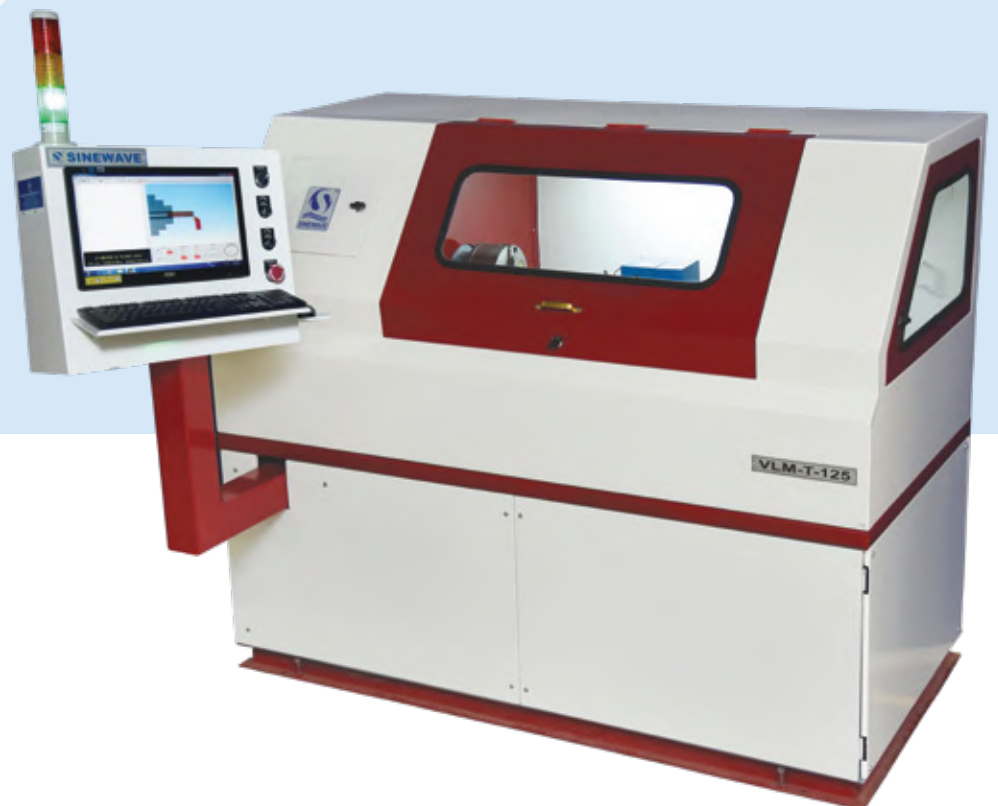
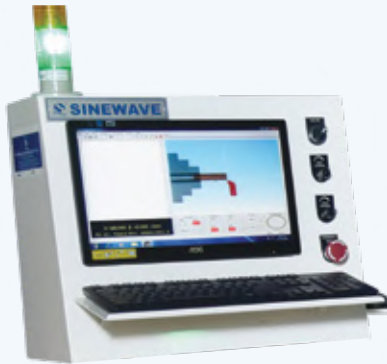
Live Screen



CNC Mill Spindle



CNC Lathe Cum Production Trainer with PC Based Controller



Features

- Rugged Machine with Ground Bed.
- 8 Station Programmable Turret.
- Industrial Motion Controller.
- Latest Technological Platform for Software.
- Interactive CNC Part Programming Software.
- 3D Material Removal Simulation.
- STL Import / Export Facility
- Innovative live View on Screen.
- Customizable Tool Library.
- Customizable STK Design.
- Manual Pulse Generator (Optional).
- FMS & CIM Compatibility.
- Hydraulic Chuck (Optional).
- Auto Door (Optional).

Specifications

X – Axis Travel	: 200 mm
Z – Axis Travel	: 400 mm
Chuck Size	: 200 mm
Max. Machining Diameter	: 100 mm
Max. Turning Length	: 200 mm
Swing Over Carriage	: 110 mm
Distance between Center	: 300 mm
Spindle inside Taper	: MT2
Standard Cutting tool size	: 16 x 16 mm
Spindle Motor	: 2HP D.C Motor (300 - 3000 RPM)
Resolution	: 0.005 mm
Repeatability	: ± 0.01 mm
Automatic Lubrication Points	: Provided
Programmable Feed Rate	: 0 – 800 mm / Min.
Rapid Feed Rate	: 0 – 1200 mm / Min.
Control System	: PC Based System
Turret	: 8 Station (Electro – Mechanical)
Coolant System	: 40 Ltrs. (Programmable)
Lubrication	: Centralized (Programmable)
Axis Motor	: Stepper / Servo (Optional)
Mains Supply	: 230 V AC, Single Phase / 415 V AC 3 ø for Turret
Machine Dimensions	: Approx. 2000 x 900 x 1600 mm
Total Weight	: 1100 Kg



3D Software



Eight Station Turret

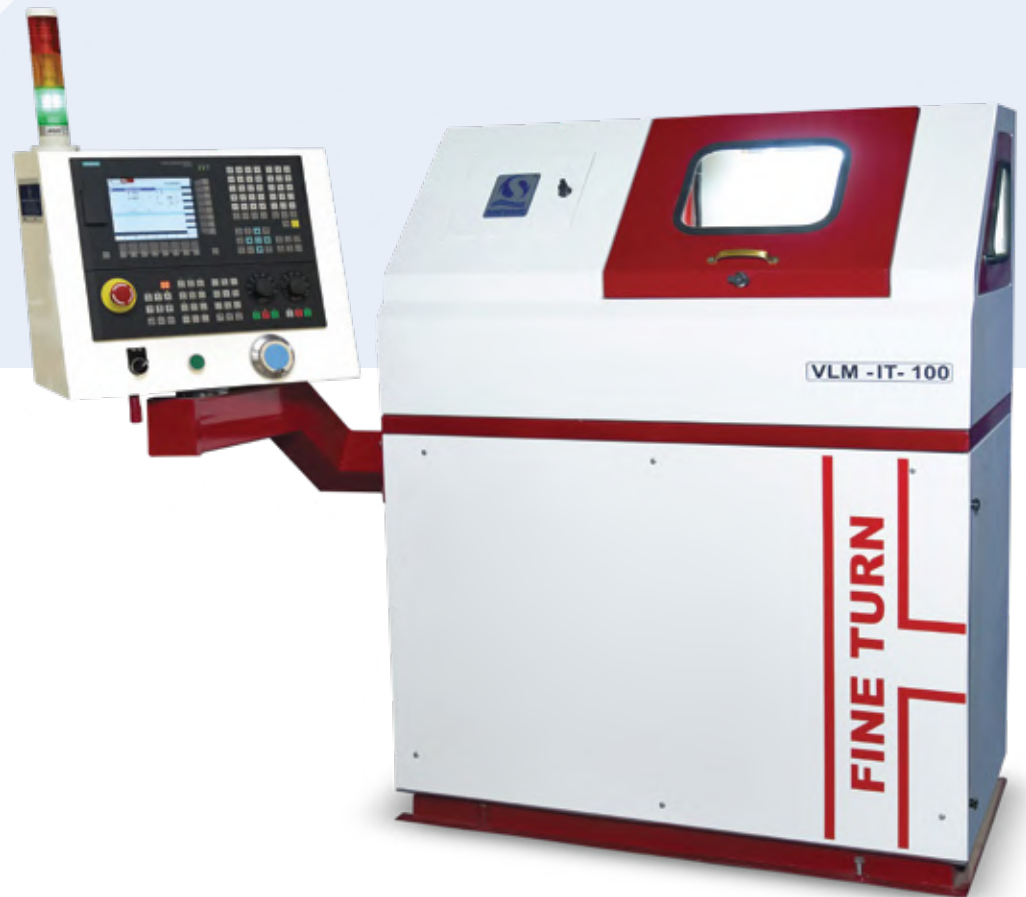


Live Screen



MPG

CNC Lathe Trainer with Industrial Controller



Features

- Rugged Machine with Ground Bed.
- 8 Station Programmable Turret.
- Fully Enclosed Working Area.
- Programmable Spindle
- Manual Pulse Generator (Optional).
- FMS & CIM Compatibility.
- Hydraulic Chuck (Optional).
- Auto Door (Optional).

Specifications

X – Axis Travel	:	150 mm
Z – Axis Travel	:	200 mm
Chuck Size	:	100 mm
Maximum Turning Diameter	:	30 mm
Maximum Turning Length	:	150 mm
Swing Over Cross Slide	:	80 mm
Spindle Nose Taper	:	MT3
Standard Cutting Tool Size	:	16 x 16 mm
Spindle Motor	:	2 H.P DC Motor (300-3000 RPM)
Resolution	:	0.005 mm
Repeatability	:	± 0.01 mm
Automatic Lubrication Points	:	Provided
Interpolation	:	Linear, Circular
Programmable Feed Rate	:	0- 800 mm/Min.
Rapid Feed Rate	:	0- 1200 mm/Min.
Control System	:	Siemens / Equivalent Industrial Controller
Turret	:	8 Station (Electro – Pneumatic)
Axis Motor	:	Stepper / Servo Motor (Optional)
Coolant System	:	40 Lts. (Programmable)
Lubrication	:	Centralized (Programmable)
Mains Supply	:	230 V AC, Single Phase
Machine Dimensions	:	Approx. 1500 x 900 x 1500 mm
Total Weight	:	Approx. 900 Kg.



Industrial Controller



Eight Station Turret



Servo Motor and Drive



MPG

CNC Mill Trainer with Industrial Controller



Features

- Rugged Machine with Ground Bed.
- 12 Station Programmable ATC.
- Fully Enclosed Working Area.
- Programmable Spindle
- Manual Pulse Generator (Optional).
- FMS & CIM Compatibility.
- Hydro Pneumatic wise (Optional).
- Auto Door (Optional).

Specifications

X – Axis Travel	:	250 mm
Y – Axis Travel	:	175 mm
Z – Axis Travel	:	200 mm
Table Size	:	500 x 200 mm
Spindle Nose to Table Top	:	40 - 190 mm
Spindle to Column	:	110 mm
Spindle Inside Taper	:	BT 30 / ISO 30
Maximum Tool Size	:	Diameter 12 mm, Length 70 mm
Spindle Motor	:	2 H.P DC Motor with 3000 RPM
Resolution	:	0.005 mm
Repeatability	:	± 0.01 mm
Automatic Lubrication Points	:	Provided
Interpolation	:	Linear, Circular
Programmable Feed Rate	:	0- 800 mm/Min. (X,Y,Z)
Rapid Feed Rate	:	0- 1200 mm/Min. (X,Y,Z)
Control System	:	Siemens / Equivalent Industrial Controller
Automatic Tool Changer	:	12 Station (Pneumatic)
Lubrication	:	Centralized (Programmable)
Axis Motor	:	Stepper / Servo Motor (Optional)
Mains Supply	:	230 V AC, 1 Phase for Machine and 3 Phase 415 V AC for ATC
Machine Dimensions	:	Approx. 1200 x 1200 x 1800 mm
Total Weight	:	Approx. 1200 Kg.



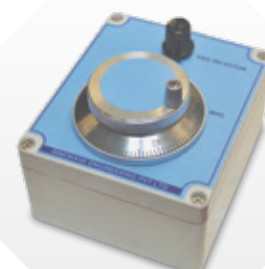
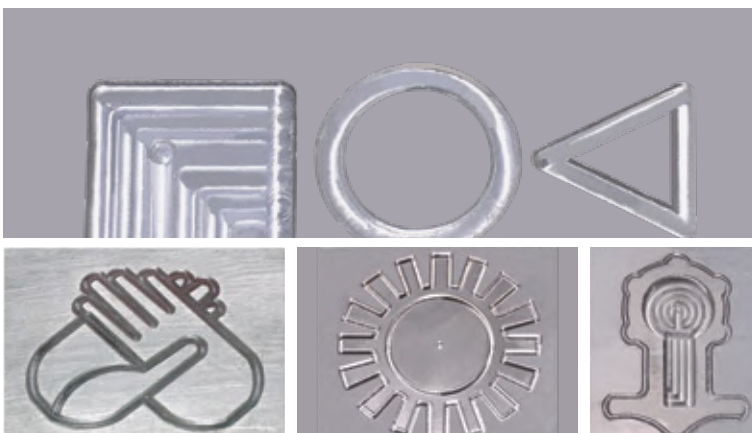
Industrial Controller



12 Station ATC



Servo Motor and Drive



MPG

Computer Integrated Manufacturing (CIM) Set Up



Highlights of Sinewave CIM Setup

The Integration of the total manufacturing of enterprise through the use of integrated systems and data communications coupled with new managerial philosophies that improve organizational and manufacturing efficiencies.

Sinewave CIM Setup Comprises of

- CNC Lathe Trainer with Loading Arm.
- CNC Mill Trainer with Loading Arm.
- ASRS.
- Automated Guided Vehicle.
- Pallet Conveyor.
- Assembly Station.
- Vision Inspection System.(Quality control Station)
- 6 Axis Robot.
- SCARA Robot.
- Coordinate Measurement Machine.
- Electronic Height Gauge.

Integration of systems and technologies

- Material storage and feeding (ASRS, feeders, palletizing racks).
- Material handling (robots, conveyors, slidebases, pneumatic transfer units, Positioning tables, vises, end effectors and tool changers).
- CNC machining (turning, milling, engraving, automatic tool changers).
- Pneumatic and hydraulic systems (manipulators, Chucks, feeders, vises)
- Identification, detection and tracking (RFID scanning, pallet tracking, sensors, Switches).
- Quality control (machine vision, coordinate measuring machine, electronic height Gauge).
- Programmable logic controllers (PLC)



Software architecture

- Interfaces with a variety of machines and robots by means of device drivers (small interface programs that translate and transmit messages between the CIM manager and the machines at CIM stations).
- Stores all data in standard industrial database format, allowing easy access and manipulation on any level. Data files can be read by any Windows application (e.g., Excel, Access, MS-SQL) and exported to any other application. Easily imports and uses data files from external applications.

Dynamic 3D Graphic Simulation

- Fully functional, dynamic 3D simulation module.
- Accurately simulates operations and movements of machines, robots and peripheral axes, including components such as safety Doors, chucks and spindles.
- Accurately simulates part transportation and manipulation, including movement of pallets on conveyor and supply of parts from storage cells and feeders.
- Accurately simulates manufacturing processing, including milling, turning, engraving
- View control: zoom in and out, rotate (pan), view from above, below and any angle in between; camera redirect (reset camera's focal point), drag camera.
- Improves comprehension of CIM management and manufacturing processes by viewing 3D graphic dynamic on-screen simulations.
- Allows programming and operation of the CIM system without causing damage to actual equipment or disrupting operation of the actual CIM cell.
- Enables experimentation with CIM cells in which some components actually operate while others are simulated.

Flexible Manufacturing System (FMS)



Highlights of Sinewave FMS Setup

Flexible Manufacturing Systems are an evolutionary process from numerical control (NC), then computer numerical control (CNC), to manufacturing system. Numerical control provides the ability for a machine to use a program to process a part. Computer numerical control provides the ability to store multiple programs and interchange these programs for a machine.

CNC Controlled machines combined with a pallet changing device provides the ability to process a mixture of parts without setup. FMS combine multiple CNC controlled machines with pallet handling systems, pallet load unload stations and a supervisory computer control.

Advantages of Sinewave FMS Setup

- To reduce set up and queue times.
- Improve efficiency.
- Reduce time for product completion.
- Utilize human workers better.
- Improve product routing.
- Produce a variety of items under one setup.



Sinewave FMS Setup Comprises of

- CNC Lathe Trainer with Loading Arm.
- CNC Mill Trainer with Loading Arm.
- ASRS.
- Pallet Conveyor.
- Linear Shuttle Conveyor.

Storage Station

The ASRS storage station is a floor-mounted or a table top automated storage and retrieval (ASRS) system designed for educational use. The system's dedicated Cartesian robot transfers parts between storage cells and conveyor pallets stopped at the ASRS station.

Conveyors

The conveyor frame is constructed of extruded, black anodized aluminum. A double flexible-chain moves in the inner and outer rails and moves the load (pallets) by friction.

Intermediate CNC Lathe



Features

- Rugged Machine with Ground Bed.
- 8 Station Programmable Turret.
- Fully Enclosed Working Area.
- Programmable Spindle
- Manual Pulse Generator (Optional).
- FMS & CIM Compatibility.
- Hydraulic Chuck (Optional).
- Auto Door (Optional).

Specifications

X – Axis Travel	: 200 mm
Z – Axis Travel	: 400 mm
Chuck Size	: 200 mm
Max. Machining Diameter	: 100 mm
Max. Turning Length	: 200 mm
Swing Over Carriage	: 110 mm
Distance between Center	: 300 mm
Spindle inside Taper	: MT2
Standard Cutting tool size	: 16 x 16 mm
Spindle Motor	: 2HP D.C Motor (300 - 3000 RPM)
Resolution	: 0.005 mm
Repeatability	: ± 0.01 mm
Automatic Lubrication	
Points	: Provided
Feed Rate	: \varnothing – 1000 mm / Min.
Rapid Feed Rate	: \varnothing – 2000 mm / Min.
Control System	: Siemens / Equivalent Industrial Controller
Turret	: 8 Station (Electro – Mechanical)
Coolant System	: 40 Ltrs. (Programmable)
Lubrication	: Centralized (Programmable)
Axis Motor	: Servo
Mains Supply	: 230 V AC, Single Phase / 415 V AC 3 \varnothing
Machine Dimensions	: Approx. 2000 x 900 x 1600 mm
Total Weight	: 1100 Kg



Industrial Controller



Servo Motor and Drive



Eight Station Turret



MPG

6 Axis Robot Trainer



Features

- Compact Design For Training Purpose.
- Industrial Motion Controller.
- Teach Pendant Facility.
- Programmable Digital I/O.
- Latest Technological Platform for Software.
- Interactive Programming Software.
- Powerful 3D simulation, Online and Offline
- FMS & CIM Compatibility.

Specifications

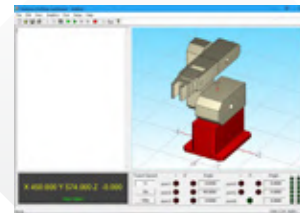
No of axis	:	6
Link 1	:	300 mm
Link 2	:	300 mm
Joint actuator	:	DC Stepper Motor
Transmission	:	Timing Belt Drive
Position feedback	:	Proximity Switch
Gripper actuator	:	Pneumatic
Weight of robot	:	50 Kg.
Accuracy	:	±0.3
Repeatability	:	±0.2
Tip Velocity range	:	500 mm / min
Pay load capacity	:	2 kg (including griper)

Specifications

J1 - Waist	:	± 140°
J2 - Shoulder	:	-100 - 60°
J3 - Elbow	:	- 70 + 10°
J4 - Wrist rotate	:	± 70°
J5 - Wrist pitch	:	± 35°
J6 - Wrist roll	:	± 180°

External I/O

- 8 Programmable digital inputs
- 8 Programmable digital outputs



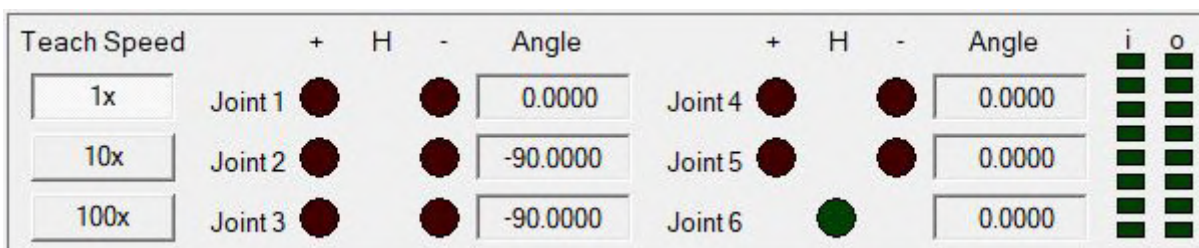
3D Software



Gripper

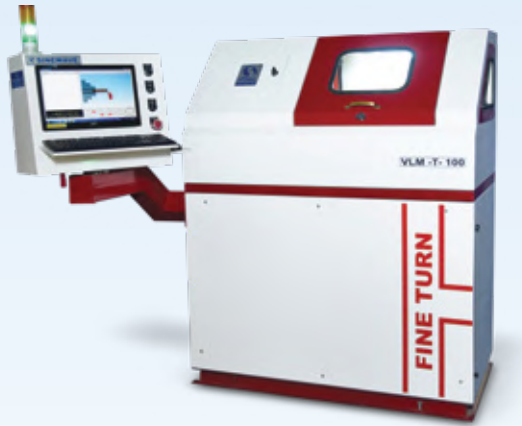


Teach Pendant



Status Window Screen

CIM Components



CNC Lathe Trainer



CNC Mill Trainer



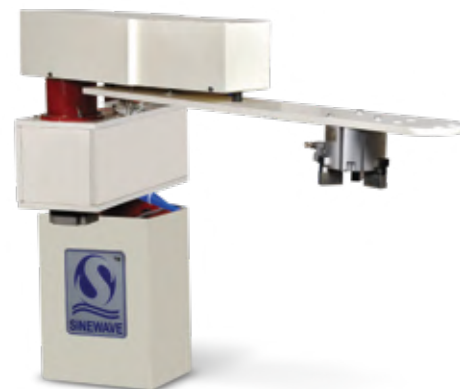
Pallet Conveyor



Assembly Station



Loading ARM for Lathe



Loading ARM for Mill



ASRS



AGV



Vision Inspection



6 Axis Robot



Scara Robot

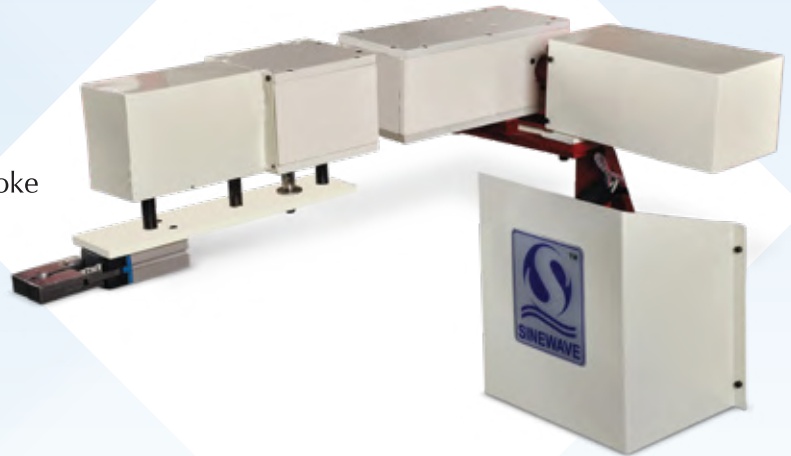


Linear Shuttle Conveyor

Loading Arms

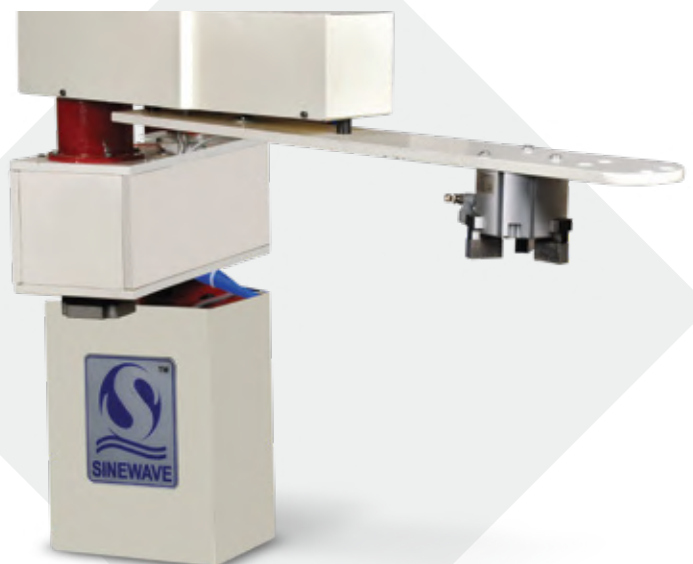
Loading and Unloading ARM For Lathe Trainer

Application	: Loading & Unloading
Number of Axes	: 2 Axes
Actuation	: Pneumatic and Electrical
Axis 1	: Rotary (0- 270 Degree) Combined with 90 Degree Rotation of the Wrist
Axis 2	: Chuck or Pallet, 25 mm Stroke
Handling Capacity	: 200 g
Gripper	: Rack & Pinion Angular Gripper, \varnothing 40 mm
Control System	: PC Based Control Panel
Communication	: Ethernet / USB / WiFi
Control Modes	: Auto / Manual
Simulation	: Online / Offline with FMS / CIM Setup



Loading and Unloading ARM For Mill Trainer

Application	: Loading & Unloading
Number of Axes	: 3 Axes
Actuation	: Pneumatic and Electrical
Axis 1	: Rotary (0- 270 Degree) Combined with 90 Degree Rotation of the Wrist
Axis 2	: Vice or Pallet, 25 mm Stroke
Handling Capacity	: 200 g
Gripper	: \varnothing 50 mm
Control System	: PC Based Control Panel
Communication	: Ethernet / USB / WiFi
Control Modes	: Auto / Manual
Simulation	: Online / Offline with FMS / CIM Setup



ASRS (Automatic Storage & Retrieval System)

ASRS is a training system that can be used as stand-alone or integrated manufacturing system to teach the principles of automatic storage and material handling.

Application	: Automatic Storage & Retrieval System for Component
Platform	: The Platform is Traversed in X & Y Axes by Ball Screw, DC Stepper Motors and PC Control Unit
Storage Racks	: 18 (6 Rows x 3 Columns)
Transfer System	: Platform will be Provided to transfer the Pallet from the ASRS Racks to AGV or Linear Shuttle Conveyor.
ASRS	: Controller PC Based
Load Capacity	: 5 Kg
Dimensions	: 1000 mm X 350 mm X 1200 mm (W X D X H)
Travel – X Axis	: 1200 mm
Travel – Y Axis	: 250 mm
Travel – Z Axis	: 1000 mm
Digital I/O	: 48 Nos
Communication	: Ethernet USB / Wi-Fi
Control Modes	: Auto / Manual
Simulation	: Online / Offline with FMS / CIM Setup



Material Handling System



Pallet Conveyor

Application	: Material Handling
Conveyor Belt	: Poly Urethane
Drive	: 24 V DC Motor
Sensor	: 02 Nos
Sensor Type	: Photo Electric
Load Capacity	: 5 Kg
Structure	: Aluminum Extruded
Dimensions	: 400 mm X 600 mm X 1100 mm (W X D X H)

Linear Shuttle Conveyor

Application	: Material Handling
Conveyor Belt	: Poly Urethane
Drive	: 24 V DC Motor
Sensor	: 07 No's
Sensor Type	: Photo Electric
Load Capacity	: 5 Kg
Controller	: PC/ PLC Based
Structure	: Aluminum Extruded
Dimensions	: Approx. 5000 mm X 400 mm X 1100 mm (W X D X H)



Automated Guided Vehicle

Material handling system with integration to conveyors, manufacturing assembly stations and ASRS.

Application	: Material Handling / Loading - Unloading
Guided System	: Powerful PC Based Guided System with a) Obstacle Sensing b) Job Transfer through Inbuilt Conveyor c) Safety Sensors to avoid Collision's. d) Station Identification
Load Capacity	: 35 Kg
Maximum Travel Speed	: 20 Meters / Minute max.
Minimum Turning Radius	: 1000 mm max.
Tracking & Sensors	: Color/ Background Suppression Sensor
Drive	: D. C. Drive
Communication	: Wi-Fi
Dimensions	: 500 mm x 600 mm x 1100 mm (W X D X H)



Assembly Station

The unit controlled through standard PLC system.

The unit consists of pneumatic actuators, linear conveyors, pick and place unit for Bearing and Shaft Assembly.

This Unit can be customized as per user requirement.



Features

- PLC based System.
- Compact industrial design.
- ISO, CE approved industrial component.
- Flexible and expandable stations.
- Wireless interface with FMS & CIM.

Specifications

Design	: 4 Axes, external Oriented horizontal articulated arm.
Pay Load	: 1.5 Kg.
Reach	: 425 mm.
Axis	
1. Waist (J1)	: 270°
2. Shoulder (J2)	: 135°
3. Elbow (J3) with Ball Screw	: 120 mm
4. Roll (J4)	: 360°
Link 1	: 225 mm
Link 2	: 220 mm
Joint Actuator	: Stepper Motor with Gear Box.
Controller	: USB Based Motion Controller.
Safety	: Micro Switches for Home and Axis Limits.
I/O	: 8 nos.
Power	: 230 VAC, 50 Hz, Single Phase.



Features

- Short Cycle time.
- High Speed.
- High Performance.
- High Rigidity.
- High Repeatability.
- Ease of Use.
- Low Maintenance Efforts.
- High Operational Safety.

SINE-O-MILL



Features

- AC servo drives
- AC variable speed spindle motor
- Hardened and ground ball-screws
- Centralised automatic lubrication
- Basic coolant system
- Telescopic covers and bellow on Z-axis
- Full machine guard
- Manual pulse generator

Specifications

X Axis	: 350 mm
Y Axis	: 275 mm
Z Axis	: 300 mm
Distance from Spindle Nose to Table Top	: 70 - 300 mm
Traverse Screws	: Ball Screw Dia 32 x 10
Table Size	: 550 X 325 mm
Max. Load on Table	: 120 Kgs
Clamping Area	: 450 x 250 mm
Spindle Bore Taper	: BT 40
Spindle Speed	: 100 - 3000 RPM
Spindle Motor Power	: 5 HP, AC
Spindle Motor Drive	: 5 HP VFD HP
Rapid Traverse Rate X & Y Axes	: 8 & 8 m/min
Rapid Traverse Rate Z Axis	: 8 m/min
Cutting Feed Rate X & Y	: 1 – 5000 m/min
Cutting Feed Rate Z	: 1 – 5000 m/min
Controller	: SIEMENS 808D Basic
Motors & Drives X & Y	: 4 NM SERVO
Motors & Drives Z	: 7 NM SERVO
Accuracy	: 0.01 mm
Repeatability	: ± 0.005 mm
Resolution	: 0.001 mm
Min. Input Increment	: 0.001 mm
Front x Side	: 1500 x 1700 mm
Machine Weight (Approx)	: 2500 Kg
Main Supply	: 415 VAC, 3 Ph, 50 Hz



Industrial Controller



Servo Motor and Drive

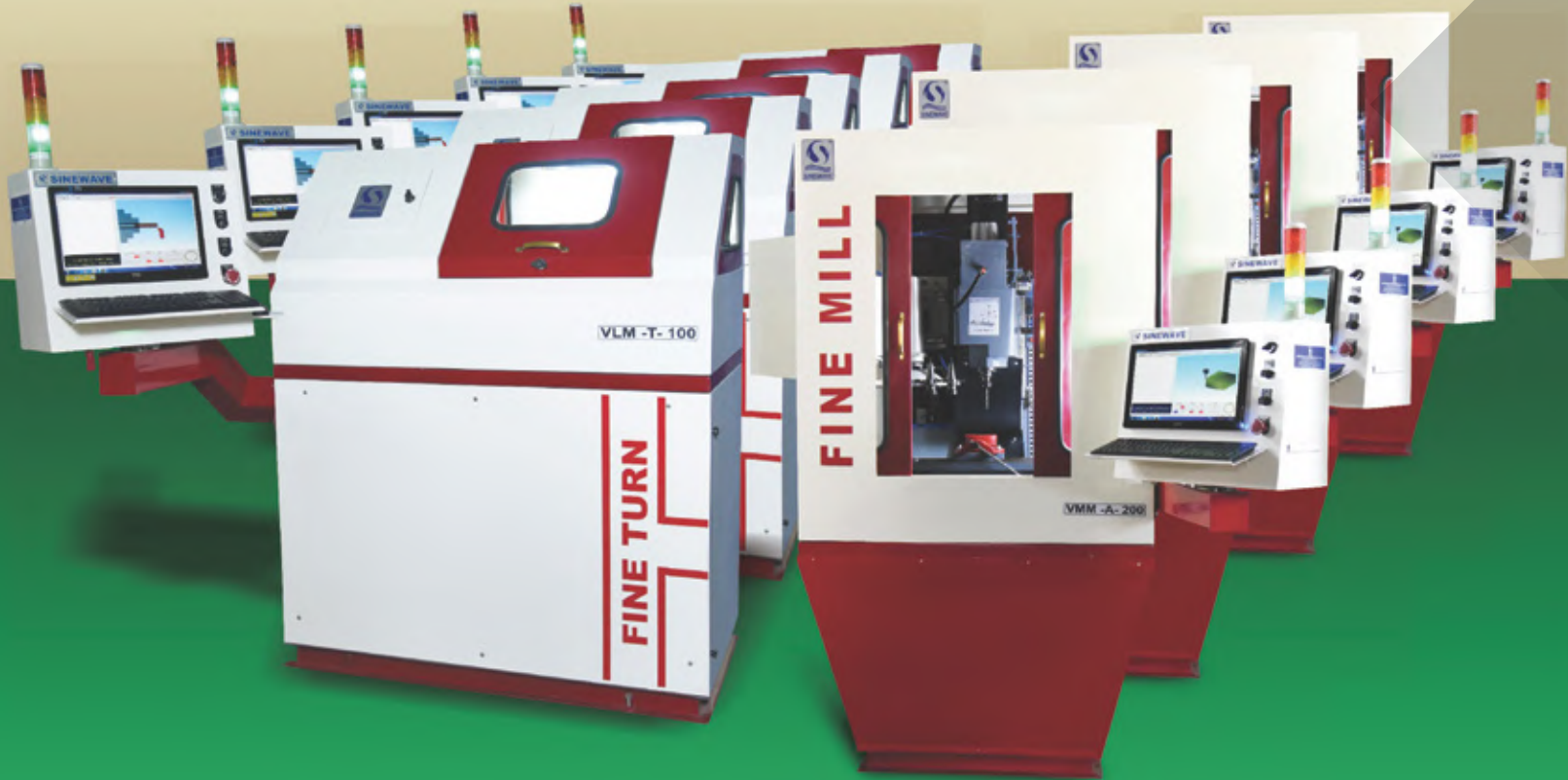


12 Station ATC



MPG

Production Capabilities



CAD-MECH

CAD-Mech Engineering Private Limited

Gat No. 30, Kasurdi, Behind Yogiraj Resort,
Tal. Bhor, Dist. Pune - 412 205.

P: +91 7276032488 | WhatsApp: +91 9763719531

Email: admin@cadmech.co.in, mktg@cadmech.co.in

Website: www.cadmech.co.in, www.vrampsystems.com

OUR BRAND



An ISO 9001-2015 Company