



**GANESH
MACHINERY**
The Edge in Cutting.

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ASL-100 Auto-Loading CNC LATHE

2.36" (60mm), 1.1 lb. Part Capacity – Compact Footprint



- **A2-5 Spindle**
- **6" 3-Jaw Hydraulic Chuck w/ Thru-Bore**
- **12-Station Tool Turret**
- **6,000 RPM Spindle Speed**
- **FANUC 0i-TF CNC Control w/ Premium Alpha Drives & Motors**

Standard Dual-Gripper Automatic Overhead Parts Loader



Optional VDI-30 (or BMT-55) Driven Tools Turret pictured above. Bolt on tooling is standard.

ASL-100 Auto-Loader Machine Features

The slant bed ASL-100 CNC lathe is made of premium shock-absorbing Meehanite® processed cast iron for superb interrupted cut capability. The heavy one-piece bed casting is heat-treated, annealed twice and ground to eliminate stress, thermal growth and vibration. The one-piece base and box lathe bed is an engineered torque-tube structure that demonstrates excellent thermal stability and anti-flexing capability under severe cutting conditions.

The headstock is ribbed to increase surface area to better facilitate heat dissipation for optimal thermal stability. The heavy-duty spindle is supported by a double row of cylindrical roller bearing in front and rear, with duplex pair of angular thrust bearings mounted in between. The cylindrical roller bearings feature a large contact surface to ensure high rigidity for heavy cutting loads and superb surface finishes. All spindle bearings are precision class P4 and are grease lubricated for a long service life.

Dual Parts Gripper –

The rotating dual 2-jaw parts grippers have 10mm gripper stroke and a 1.1-pound weight limit with a Ø2.36" size limit. Parts are staged for the gripper unit on an incoming fabric parts conveyor belt. The parts enter the machine lying flat on the incoming conveyor belt, and an orientation gripper picks up the part to present it vertically to the parts loader. The gripper unit picks up the finished part that was just machined and rotates and then loads the new part into the lathe chuck. The finished part exits the machine on another fabric parts conveyor belt, running in the opposite direction, parallel to the incoming parts belt at the head-end of the machine. A shutter door is used to separate the work-handling area from the machining area to protect from chip contamination.

Chip Wash-Down & Rear-Discharge Chip Conveyor –

The cast machine angles and flood coolant flow forces chips on to the rear-discharge chip conveyor so that they can efficiently discharge them from the back side of the machine to simplify maintenance.

Coolant Tramp Oil Separator Unit –

The included coolant tramp oil separator unit removes tramp oil off of the surface of the coolant to reduce maintenance and extend coolant life. This device reduces maintenance interruptions help increase machine productivity.

Auto Power Shut Off –

The control's auto shut off feature automatically shuts down the machine once a long program is finished. This capability enhances your ability to let the machine run lights-out for extended production capability.

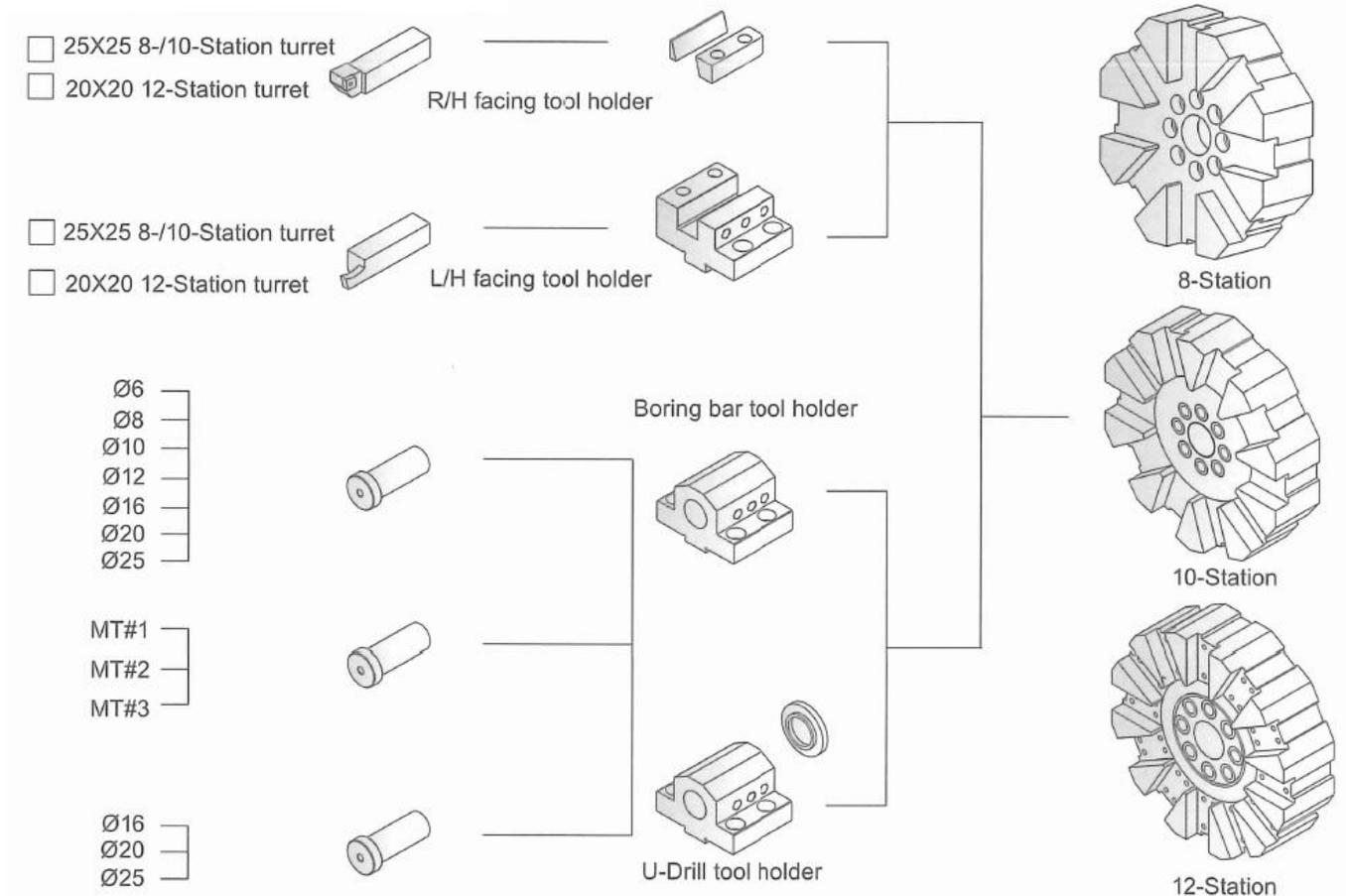
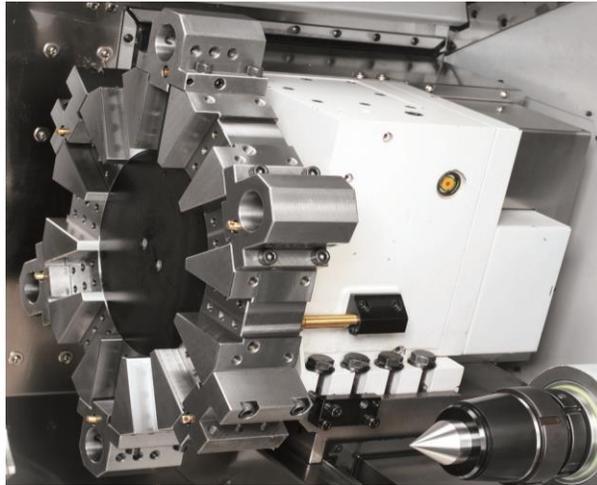
Ball-Bar Testing –

The **geometric ball bar test** conducted on each machine checks for servo gain synchronization, backlash, lateral play, squareness, and straightness to ensure your machine will perform to our rigid accuracy and performance standards. **Laser inspection technology** is employed to measure linear and pitch error accuracy and repeatability to ensure high quality machine performance. The spindle is **dynamically balanced** to ensure long term production performance. Premium quality ball screws are double-anchored and pre-tensioned, and then 100% inspected for parallelism to the axis guideways. The rotational torque of each ballscrew is inspected over the entire length of travel to guarantee a true smooth non-binding alignment to ensure maximum service life and the highest possible machining accuracy.

**The Ganesh ASL-100 CNC lathe is manufactured in our
Certified ISO 9001 Production Facility in Taiwan.**

12-Station Tool Turret

The 12-station tool turret uses an extra-large 10.6" 2-piece coupling for quick indexing and 22,000 lbs. of rigid clamp force to provide a stable cutting platform for high metal removal rates. The high-speed indexing system provides quick 0.19-second tool changes. Turret indexing is not-stop and bi-directional. Turret position is determined and confirmed by a rotary encoder, and clamp complete is confirmed by a proximity switch. Pictured with standard tooling below. A BMT-55 or VDI-30 driven tool turret is optional with a Y-axis.



12-Station Tool Turret = 1-R/H & 1-L/H 3/4" facing toolholder, and 12 3/4" O.D. tool clamps
 All turrets include 3-boring bar holders Ø1-1/4", and 1-U-Drill holder Ø1-1/4" included with machine.
 Bore bar bushings: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1" supplied. U-Drill bushings: 5/8", 3/4", 1", supplied.

ASL- 100 Auto-Loading CNC Lathe Specifications

Capacity & Dimensions-

Maximum Cutting Diameter (work handling limit is 2-1/8")	4.3"	(110 mm)
Maximum Cutting Length (3.9" with Y-axis option)	5.5"	(140 mm)

Spindle -

Spindle Motor – 5.5kw/7.5kw	15-Peak Available Horsepower 10-HP 30-min. rating, 7.5-HP constant duty	
Spindle Speed	6,000 RPM	
Spindle Torque Maximum	60 ft. lbs.	
Spindle Nose	A2-5	
Spindle Bore	1.61"	(41mm)
Bar Capacity (in draw tube)	1.29"	(33mm)
Chuck Diameter	6"	

Axis -

Axis Travel – X-axis	4.7"	(120mm)
Axis Travel – Z-axis	9"	(230mm)
Ballscrew Diameter / Pitch Rate – X & Z Axis	Ø25mm	6mm pitch
Axis Drive Motor - X Axis	1-Horsepower	(.75kw)
Axis Drive Motor - Z Axis	1.6-Horsepower	(1.2kw)
Rapid Traverse Feedrate X	472 IPM	(12m/min)
Rapid Traverse Feedrate Y (optional w/ 1.6-HP)	393 IPM	(10m/min)
Rapid Traverse Feedrate Z	709 IPM	(18m/min)
Way Type / Slant Bed Angle	Box Ways / 15°	
Axis Positioning Resolution (in metric 0.001mm = 0.00004")	X-axis = Ø0.0001" / Z-axis 0.0001"	
Axis Positioning Repeatability	±0.0001"	

Tool Turret -

Tool stations – any combination of ID/OD tooling /Index time	Hydraulic Indexing & Clamping 12-stations (8 & 10-stations optional)
Tool Index Time- adjacent tool station / 180° index	0.35 sec. / 1.5 sec. Hydraulic
O.D. Tooling 20mm when specified for metric users)	3/4"
I.D. Tooling (32mm when specified for metric users)	1.25" (4 I.D. holders included)
Driven Tool System – VDI (Sauter) / Power 3kw (optional)	VDI-30, 4-Horsepower, 4,000 rpm, 34 Nm
Y-Axis Driven Tool System – BMT / Power 2.2kw (optional)	BMT-55,3-Horsepower, 5,000 rpm, 20 Nm

Loader System -

Gripper Type	2-Jaw
Gripper Stroke	3/8" (10mm)
Workpiece Size Limit	2.36" (60mm)
Workpiece Weight Limit - per workpiece	1.1 lbs. (0.5 kg)
Incoming Parts	Incoming Fabric parts conveyor belt
Outgoing Parts	Outgoing Fabric parts conveyor belt

Specifications -

Power Requirements	220vac ±5%, 38-amps
Floor Space Requirements - LxWxH	78" x 62" (+31" for rear conveyor) x 88"
Machine Weight	4,188 lbs. (1900kg)
Hydraulic Motor Power / Pressure / Oil	2-H.P. / 600 PSI (Mobil #24 oil)
Coolant Pump / Pressure / Capacity	1-HP / 60 PSI / 45-gallons (Coolant pressure to 225 psi optional)

Standard Loader System Operation: Parts enter the machine laying flat on a fabric conveyor belt and proceed to a gripper station that picks up the part and orients it in the vertical position for presentation to the load/unload gripper unit. When the machining cycle is completed, the overhead shutter door opens and the load/unload gripper unit places the unload station on spindle centerline to grip the finished part. The chuck opens and the unload gripper removes the part from the lathe chuck then withdraws a short distance and rotates 90° to load the blank part into the open lathe chuck. The chuck closes, the gripper unit withdraws and the overhead shutter door closes and the machining cycle commences. The gripper unit rotates 90° so that both gripper heads are lined up with the two parallel fabric coveyor belts. The finised part is placed on the outgoing conveyor and the raw part gripper presents a new part to the loading gripper which waits for a machine complete signal from the control and the cycle is repeated as long as there are raw parts availalbe.

FANUC 0i-TF CNC CONTROL

The **FANUC 0i-TF** all digital control and drive package provides exceptional value and reliability. The control features a clear 8.4" LCD screen that pivots out for easy operator viewing, and can catalog 400- part program numbers and features 640 meters of program storage reserved for part programs and features embedded high-speed Ethernet capability and AICC II and includes DB-25 RS-232 serial interface, RJ-45 Ethernet interface USB, and PC MCIA CF memory card connections for program transfer. A MPG handwheel is also provided. There is a heat exchanger on the electrical cabinet to control the ambient temperature of the electronic hardware. Manual Guide 0i is an included feature for ease of programming.

Includes a two-year warranty on the Fanuc CNC control & drives, one-year machine warranty.



Prices and specifications subject to change without prior notice.