

**GTW-16**  
**MACHINE QUOTATION**

# Precision GTW-16 Series Geared-Head Engine Lathes

**16" Swing over Bedways, 40" & 60" Center Distances**

## **STANDARD GEARED HEAD ENGINE LATHE FEATURES**

### **CONSTRUCTION:**

- Meehanite Castings, fine grain and high-density cast iron using the superior Meehanite process yields superior vibration dampening and improved surface finish and tool life.
- Induction Hardened & Precision Ground oversized Bed Ways
- Gap-Bed with added swing clearance

### **HEADSTOCK:**

- 7-1/2 HP spindle motor for efficient metal removal capability
- Hardened and ground D1-6 Camlock spindle nose & 3-bearing spindle
- Two tapered SKF-Germany roller bearings & a rear deep-groove ball bearing
- 12-speed geared-head spindle
- Alloy Steel Hardened & Ground Headstock Gears
- Safety gated spindle control lever to protect from accidental engagement
- Chuck guard w/ Micro-switch to control spindle for added operator safety

### **AXIS FEED DRIVE:**

- Inch / metric, diametral & modular threading capability without the use of change gears
- A thread dial indicator is included with the machine for inch & metric thread cutting
- Dual Inch/Metric cross feed, compound, and longitudinal position indicator dials
- Safety overload clutch for feed shaft to protect gearing from overloads
- Lead screw Safety Torque Limiting device as well as a shear pin for lead screw
- The automatic feed mechanism is mechanically interlocked with the thread cutting engagement lever to prevent damage through simultaneous engagement.
- The fourth rod controls a 4-position automatic feed stop which disengages the longitudinal feed motion at 4-distinct adjustable pre-determined positions.

### **MACHINE FEATURES:**

- Automatic way lubrication with filtered pressure lubrication system.
- The electrical control box and coolant system are equipped with electro-magnetic contactors and overload relay protection devices to prevent motors from burning out and to ensure safe operation.
- The tailstock quill is oversized and equipped with a tang-drive and a drift-slot to make removing the centers and taper shank drills very easy.
- Flood coolant system is included
- A tool box and tool kit with grease gun and touch-up paint is included with the machine
- Inspection Report on accuracy to CNS 94 and B7001 standards included
- Instruction Manual, Tools and Tool Box with hand tools and lube gun included
- One-Year Limited Parts and Labor Warranty Included
- Large compliment of parts and accessories in stock to ensure continued operation

**PRECISION BUILT IN TAIWAN AT OUR ISO-9000 APPROVED FACILITY**

# GTW-16 GEARED HEAD ENGINE LATHE SERIES

## MACHINE SPECIFICATIONS

### Capacity & Dimensions-

Swing over Bed	16"	410 mm
Center height	8-1/16"	205 mm
Swing over Cross Slide	9-7/16"	240 mm
Swing thru Gap	23-7/16"	595 mm
Length of Gap in front of face plate, D1-6 / A1-6	6-1/8" / 6-7/8"	155 mm / 175 mm (optional)
Bed casting width / bed casting height	11-13/16" / 12.20"	300 mm / 310 mm

### Spindle-

Spindle Motor Horsepower	7.5 HP	7.5 HP														
Spindle speeds – 12-speeds	30 – 2000 rpm)															
	(+ = High & - = Low)															
		<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">+</td> <td style="text-align: center;">540</td> <td style="text-align: center;">1600</td> <td style="text-align: center;">325</td> <td style="text-align: center;">1000</td> <td style="text-align: center;">700</td> <td style="text-align: center;">2000</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">55</td> <td style="text-align: center;">160</td> <td style="text-align: center;">30</td> <td style="text-align: center;">95</td> <td style="text-align: center;">70</td> <td style="text-align: center;">200</td> </tr> </table>	+	540	1600	325	1000	700	2000	-	55	160	30	95	70	200
+	540	1600	325	1000	700	2000										
-	55	160	30	95	70	200										
Spindle Bore	2-1/16"	52 mm														
Spindle Nose	D1-6	A1-6 optional														
Spindle taper in spindle nose	MT-6	Morse Taper #6														

### Carriage -

Cross slide travel / Cross slide width	9" / 7-3/32"	230 mm / 180 mm
Cross slide lead screw pitch	4 TPI	
Cross slide resolution per division	0.50" /rev.	(On diameters)
Carriage lead screw diameter / pitch	1-1/4" / 4 TPI	32 mm / 6 mm pitch
Feed rod dimensions	7/8" hexagon	23 mm hexagon

### Compound-

Compound top slide travel / Compound width	4-3/4" / 4-11/32"	120 mm / 110 mm
Cutting tool height maximum	1.0" x 1.0"	25 mm x 25 mm

### Tailstock-

Quill diameter	2-1/8"	54 mm
Quill stroke	4-3/4"	120 mm
Quill taper	MT-4	Morse Taper #4
Quill tang drive and drift-slot for tailstock	included	
Tailstock body set-over adjustment	±0.04"	± 1 mm

### Thread Cutting-

Thread cutting range – 40 inch pitches	2 – 56 TPI	
Thread cutting range – 53 metric pitches	0.4 – 14 mm	
Thread cutting range – 32 diametral pitches	4 – 32 D.P.	Optional
Thread cutting range – 44 module pitches	0.4 – 7 M.P.	Optional

### Feeds-

Feeds – longitudinal - 40 feeds	<b>(with clutched feed shaft for safety)</b>	
Feeds – cross - 40 feeds	0.0012" – 0.0252"/rev.	0.032 mm – 0.898 mm/rev.
Feed stop control shaft	0.0006" – 0.0126"/rev.	0.016 mm – 0.449 mm/rev.

4-adjustable automatic feed stops to disengage the longitudinal feed

### Power-

Coolant pump motor	220 vac, 1/8-HP, 3-Phase
Power requirements	220 vac, 7.5-HP, 3-Phase @ 20 amps

# GTW-16 SERIES GEARED HEAD ENGINE LATHE PRICES

## **GTW-1640 16" X 40" Engine Lathe**

**\$19,990.00**

40" between centers, Bed Length 74.8", LxWxH – 88.3" x 39" x 48", G.W. 4,410 pounds

**INCLUDED WITH EACH MACHINE - A \$2,500 VALUE**

8" 3-jaw scroll chuck
10" 4-jaw independent chuck
Steady Rest Capacity :1"- 6" (Bearing Shafts are Optional)
Follower Rest
Full Length Splash Guard
Chuck Guard w/ interlock
Foot brake
4-Way Tool Post w/wrench
Machine Leveling Pads
Halogen Work Light (55 Watts)

## **GTW-1660 16" X 60" Engine Lathe**

**\$21,990.00**

60" between centers, Bed Length 95.1", LxWxH – 108.5" x 39" x 48", G.W. 5,071 pounds

## **GTW-1640 16" X 40" Engine Lathe With Value Package**

**\$22,990.00**

## **GTW-1660 16" X 60" Engine Lathe With Value Package**

**\$24,990.00**

### Included in Value Package:

- Newall 2-axis DRO - installed
- Wedge-Type Quick-Change tool post installed, size CXA with 3.5" square base & 5-toolholders - installed

### Machine Options

Factory machine installation: "Peace-of-Mind Factory Installation" – includes expenses	\$2,995.00
Wiring to 440 volts (Net Price)	\$495.00
Upgrade to Steady Rest with Roller Bearings	\$595.00
16-piece 5C Collet set	\$495.00
Drill Chuck & Arbor – 3/4" capacity	\$350.00
Taper Attachment (Factory Installed)	\$2,995.00
Micrometer Carriage Stop	\$295.00
Live Center MT-4	\$860.00
5C Collet Closer (JFK) quick-action lever-type installed	\$2,195.00
Wedge-Type import Quick-Change tool post installed, size CXA with 3.5" square base & 5-toolholders 1-ea.) 3/4" Turn/Face, 3/4" Bore/Turn/Face, H-D 3/4" Bore, Part-Off, 3/4" Knurl/Turn/Face	\$795.00
Dorian Wedge-Type Quick-Change tool post installed, size CXA with 3.5" square base & 4-toolholders 2-ea. Turn/Face toolholder, 2 ea. Bore/Turn/Face toolholder	\$1,495.00

### Digital Readouts

2-Axis 40" Newall Premium DRO's – installed	\$3,495.00
2-Axis 60" Newall Premium DRO's – installed	\$3,995.00

3-Axis readouts and FAGOR models are available by request.

## **Terms of Sale**

**Warranty** – 1 full year parts warranty on the machine. Labor warranty will be provided by your local servicing distributor.

**Parts**– Spare parts are available at our facility in Chatsworth to support your continued machine operation.

**F.O.B. Point** – Machines ship F.O.B. from Chatsworth, CA 91311.

**Payment Terms** – 30% down payment with your Purchase Order secures the machine. 60% is due prior to machine shipment, and the 10% balance is due after installation or the machine can be financed with our approved lender. Leases with \$1.00 buyout are available upon approved credit.

**Purchase is governed by the Expand Machinery terms and conditions of sale.**

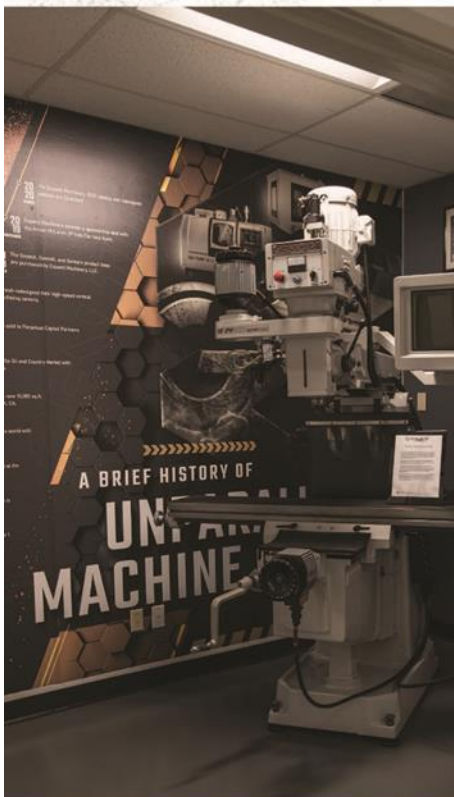
**UL & TÜV ELECTRICAL APPROVAL IS AN AVAILABLE OPTION**

**Prices and specifications subject to change without prior notice.**



## SHOWROOM

4,000 SQ. FT. Showroom



## COMPANY HISTORY ROOM

Learn more about 30+ years of history



## ROTARY TABLES & TRUNNIONS

Demo and Training Center



## ROBOTICS TRAINING CENTER

Robot Demo and Training Center



## SIMULATION ROOM

Learn How to Use Our Machines



## PRODUCTION AREA

Complete Testing on all Machines



## PARTS ROOM

Thousands of Spare Parts in stock



## SPONSORSHIPS

Arrow McLaren Indycar Team