



EXPAND[™]
MACHINERY

GANESH

x

2021 MACHINE CATALOG

GANESH



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HEADQUARTERS LOCATED IN CHATSWORTH, CA



FEATURING A LARGE 4,000 SQ. FT. SHOWROOM



FULLY STOCKED PARTS ROOM



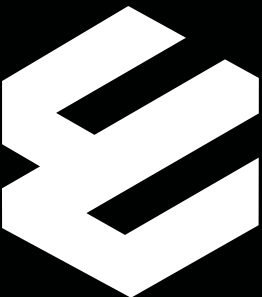
COMPANY HISTORY ROOM



SIMULATION ROOM



TRAINING CENTER



It began with a dream in 1985 to deliver superior quality machine tools to the market that provided the highest value and productivity available. We are still driven by this same commitment to you.



RACING SPONSORSHIPS WITH ARROW MCLAREN SP RACE TEAM



Expand Machinery produces incredible quality equipment with utmost capability, giving us the resource to compete and win at the highest level."

Nick Snyder
SPM Engineering Manager

PROUD PARTNER OF



ARROW McLAREN SP

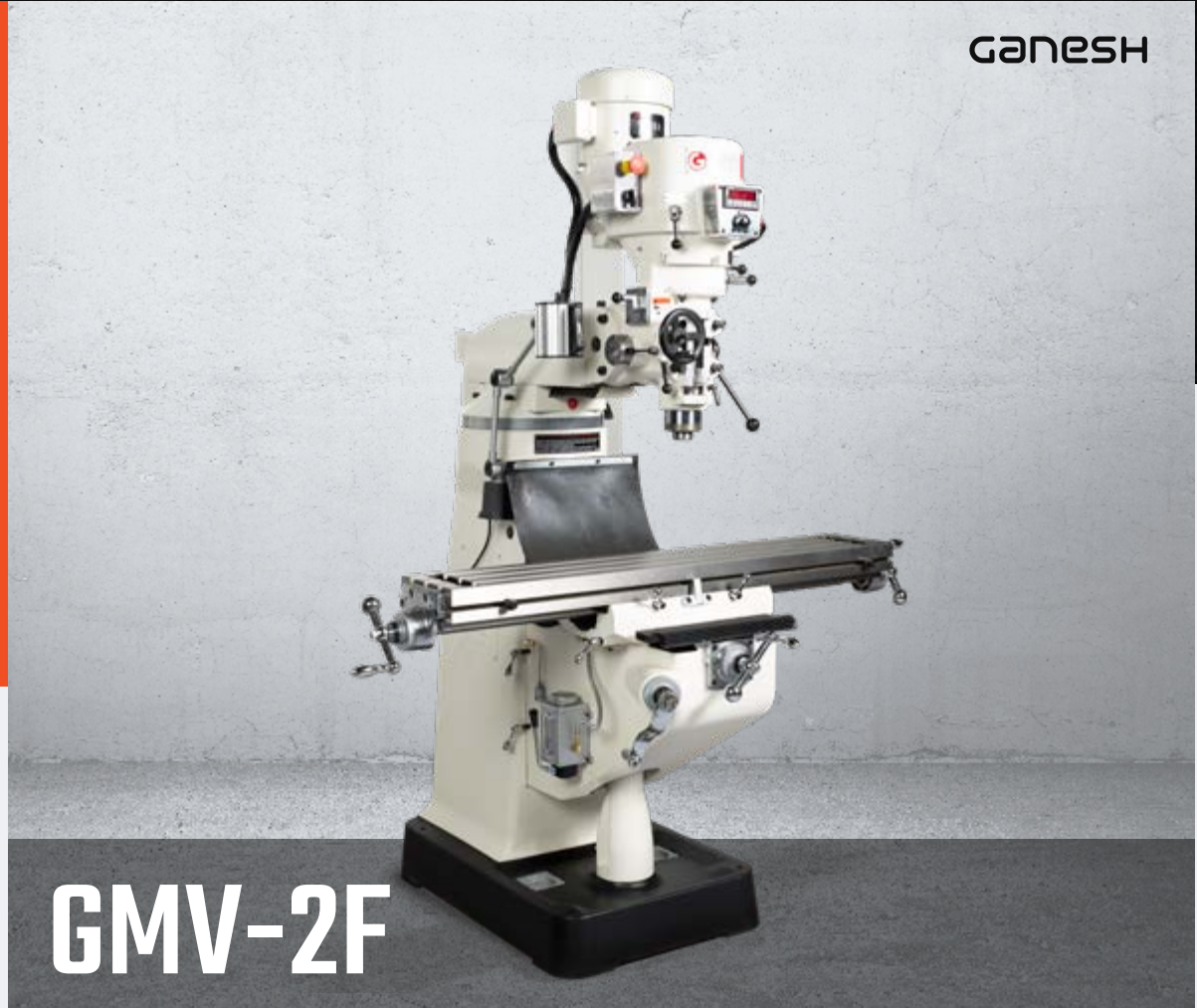


GMV-1F

9"X 42" Precision Milling Machine

- + 3-Horsepower Variable Speed Head
- + Class-7 Super Precision Spindle Bearings
- + Hard-Chrome Plated and Mirror Ground Quill
- + Hard-Chrome Plated X & Y Axis Ways
- + 9" x 42" Table Dimensions
- + Coolant Proof Halogen Lamp Standard

Table	
Table Size (W x L)	9" x 42" (230 x 1067mm)
T-slot Width / Quantity	5/8" / 3 on 2.5" centers
Table Load Capacity	400 lbs. (181kg)
Table Surface to Floor Dimension	32" - 48" (820 - 1226mm)
Machine Travels & Capacity	
Table Travel - Longitudinal - X Axis	30" (762mm)
Table Travel with Power Feed	24.8" (630mm)
Cross Travel - Y Axis	12" (305mm)
Vertical Knee Travel - Z Axis	16" (406mm)
Overarm (ram) Travel	12" (305mm)
Overarm Swivel	360°
Spindle Nose-to-Table Surface	0" - 18.5" (0 - 469mm)
Spindle Centerline to Column Face	6.75" - 18.75" (171 - 476mm)
Leadscrews with ground pitch surface (X & Y)	0.200" per rev.
Ways - X, Y & Z Axes - Hard Chrome Plated	Hardened & Ground Dovetail Ways
Spindle Head (Vari-Speed)	
Spindle Motor	3-HP / 3-Phase 220 volts (440 Optional)
Spindle Taper (hardened & ground)	R-8
Spindle Runout	0.00008" maximum runout (0.002mm)
Spindle Bearings ABEC-7 matched set	Class-7 Bearings
Variable Speed Spindle	60 - 4,500 RPM
Head Tilt (Left-to-Right)	90° - 0 - 90°
Head Tilt (Front-to-Back / Up-Down)	+45° - 0 - -38°
Head Swivel on Turret	360°
Quill	
Quill Diameter	3-3/8" (85.725mm)
Quill Travel - Manual & Power Feed	5" (127mm)
Quill feeds - With Trip Release - Inch	0.0015" / 0.003" / 0.006"
Quill feeds - With Trip Release - Metric	0.04mm / 0.08mm / 0.16mm
Dimensions & Weight	
Machine Weight	2,222 lbs. (1010 Kgs)
Electrical Requirements - 220 volts	3-Ph / 60 Hz / 9.5 amps



GMV-2F

9"X 50" Precision Milling Machine

- + 3-Horsepower Variable Speed Head
- + Class-7 Super Precision Spindle Bearings
- + Hard-Chrome Plated and Mirror Ground Quill
- + Hard-Chrome Plated X & Y Axis Ways
- + 9" x 50" Table Dimensions
- + Coolant Proof Halogen Lamp Standard
- + 4,000 RPM Digital Variable Speed Option Available

Table	
Table Size (W x L)	9" x 50" (230 x 1270mm)
T-slot Width / Quantity	5/8" / 3 on 2.5" centers
Table Load Capacity	440 lbs. (200kg)
Table Surface to Floor Dimension	32" – 48" (820-1226mm)
Machine Travels & Capacity	
Table Travel – Longitudinal – X Axis	38" (966mm)
Table Travel with Power Feed	33.07" (840mm)
Cross Travel – Y Axis	12" (305mm)
Vertical Knee Travel – Z Axis	16" (406mm)
Overarm (ram) Travel	12" (305mm)
Overarm Swivel	360°
Spindle Nose-to-Table Surface	0" - 18.5" (0 - 469mm)
Spindle Centerline to Column Face	6.75" - 18.75" (171 - 476mm)
Leadscrews with ground pitch surface (X & Y)	0.200" per rev. (ballscrews optional)
Adjustable scale ring display resolution	0.001" (5mm)
Ways – X, Y & Z Axes – Hard Chrome Plated	Hardened & Ground Dovetail Ways
Spindle Head (Vari-Speed)	
Spindle Motor	3-HP / 3-Phase 220 volts (440 Optional)
Spindle Taper (hardened & ground)	R-8
Spindle Runout	0.00008" maximum runout (0.002mm)
Spindle Bearings ABEC-7 matched set	Class-7 Bearings
Variable Speed Spindle	60 – 4,500 RPM
Head Tilt (Left-to-Right)	90° – 0 – 90°
Head Tilt (Front-to-Back / Up-Down)	+45° – 0 – -38°
Head Swivel on Turret	360°
Quill	
Quill Diameter	3-3/8" (85.725mm)
Quill Travel – Manual & Power Feed	5" (127mm)
Quill feeds – With Trip Release – Inch	0.0015" / 0.003" / 0.006"
Quill feeds – With Trip Release – Metric	0.04mm / 0.08mm / 0.16mm
Dimensions & Weight	
Machine Weight	2,222 lbs. (1010 Kgs)
Electrical Requirements – 220 volts	3-Ph / 60 Hz / 9.5 amps

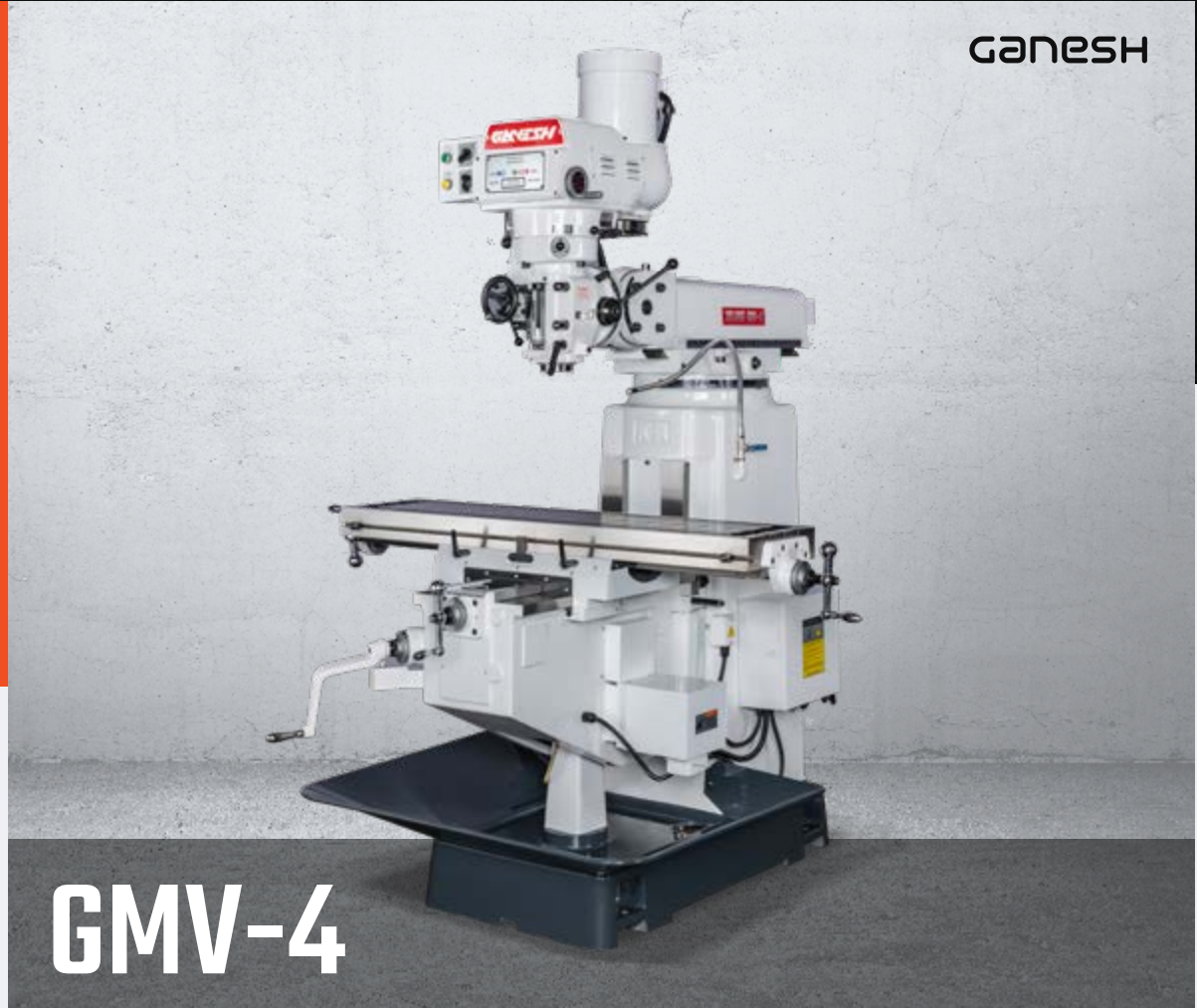


GMV-3F

10" X 54" Heavy Duty Milling Machine

- + Class-7 Precision Spindle Bearings
- + 3-Horsepower Variable Speed Spindle
- + Square Box Slideways on Y & Z Axes
- + Hard-Chrome Plated, Ground & Lapped Quill
- + R-8 Taper Spindle
- + Coolant Proof Halogen Lamp Standard
- + 10" X 54" Table Dimensions
- + 4,000 RPM Digital Variable Speed Option Available

Table	
Table Size (W x L)	10" x 54" (254 x 1372mm)
T-slot Width / Quantity	5/8" (15.9mm wide) 3 on 2.5" centers
Table Load Capacity	440 lbs. (200kg)
Table Height - Surface to floor adjustment	37.4" – 52.8" (950 - 1340mm)
Machine Travels & Capacity	
Table Travel – X Axis (Optional Power Feed)	35" / 30.3" (889mm) / (770mm)
Cross Travel – Y Axis	17.5" (444.5mm)
Vertical Knee Travel – Z Axis	15.05" (383.27mm)
Ram Travel (Overarm) / Swivel	18.5" (470mm) / 360°
Spindle Nose-to-Table Surface Travel	5.3" - 20.7" (135 - 525mm)
Z ² - Quill Travel - Manual & Power Feed	5" (127mm)
Quill Feeds - With Trip Release - Inch	0.0015" / 0.003" / 0.006"
Quill Feeds - With Trip Release - Metric	0.04mm / 0.08mm / 0.16mm
Quill Diameter	3 - 3/8" (85.725mm)
Leadscrew ground pitch (X & Y)	0.2" per rev. (ballscrews optional)
Scale ring resolution in inches	0.001" (5mm) (with adjustable zero position)
Ways - Hardened & Ground	Dovetail Ways in X axis / Square Box Ways in Y & Z axes
Spindle Head-Twin Swivel (Forward-Back & Left right)	
Spindle Motor	3-HP / 3-Phase 220 volts (440 Optional)
Spindle Taper (hardened & ground)	R-8
Spindle Runout	0.0002" maximum runout (0.005mm)
Spindle Bearings ABEC-7 matched set	ABEC-7 matched set Class-7 bearings
Variable Speed Drive - Dual Range	60 - 500 rpm (low-range) / 500 - 4500 rpm (high-range)
Head Tilt (Left-to-Right)	90° – 0 – 90°
Head Tilt (Front-to-Back / Up-Down)	+45° – 0 – -38°
Head Swivel on Turret	360°
Dimensions & Weight	
Power Requirements 3-Phase Power	220vac/15 amps (440vac optional)
Machine Weight	2750 lbs. (1250Kgs)
Machine Dimensions L x W x H	65" x 66" x 87"

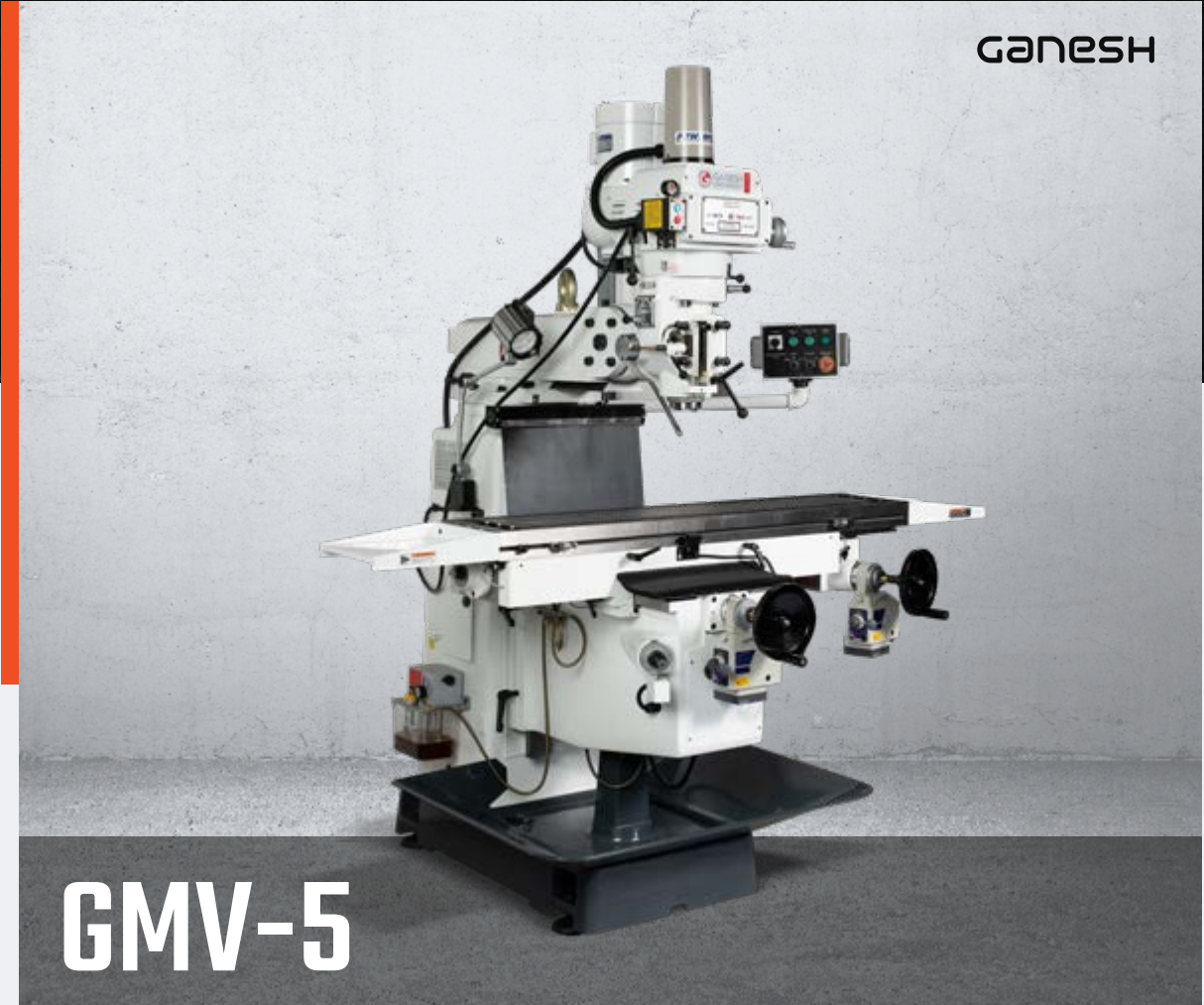


GMV-4

12" X 54" Heavy Duty 40-Taper Milling Machine

- + 5-HP spindle motor
- + #40 taper heavy duty spindle
- + Hardened and ground square boxways in "Y" and "Z"
- + Hardened and ground table and T-slots
- + Hardened, ground and chrome-plated quill
- + ABEC class-7 precision spindle bearings
- + Built-in 1.5-HP knee powerfeed

Table	
Table Size (W x L)	12" x 54" (305 x 1372mm)
T-slot Width (3 Ground T-Slots)	5/8" with ground reference edges (15.9mm wide)
Table Capacity	1200lbs
Machine Travels & Capacity	
Table Travel – X Axis (With Power Feed)	36" / 33.8" (914 / 860mm) / 32" (812mm)
Cross Travel – Y Axis	16" (400mm)
Vertical Knee Travel – Z Axis	16" (406mm)
Ram Travel (Overarm) / Swivel	17.7" (450mm)
Spindle Nose-to-Table Surface Travel	2" – 18" (50 – 457mm)
Quill Travel - Manual & Power Feed	5" (127mm)
Quill Feeds - With Trip Release - Inch	0.0015" / 0.003" / 0.006"
Quill Feeds - With Trip Release - Metric	0.04mm / 0.08mm / 0.16mm
Quill Diameter	4.13" (105mm)
Leadscrew ground pitch (X & Y)	0.2" per rev. (5mm)
Slide Ways	
Hardened & Ground Meehanite Cast Iron	
Longitudinal Table –X Axis	Hardened & Ground Dovetail Ways
Cross Slide to Knee –Y Axis	Hardened & Ground Square Box Ways
Knee to Column – Z Axis	Hardened & Ground Square Box Ways
Spindle Head	
Head Tilt (Left-to-Right)	90° – 0 – 90°
Head Tilt (Front-to-Back / Up-Down)	45° – 0 – 45°
Head Swivel	360°
Spindle Motor	5 HP / 3 Phase / 220 Vac.
Spindle Taper	NT #40 NMTB N.S. Spindle Taper
Spindle Runout	0.0002" maximum runout (0.005mm)
Spindle Bearings	ABEC-7 matched set of Class-7 bearings
Variable Speed Drive - Dual Range	80 –520 rpm (low-range) / 520 –4000 rpm (high-range)
<i>NOTE: 5,000 RPM Electronic Variable-Speed Spindle available with optional AC Inverter Spindle Head</i>	
Dimensions & Weight	
Power Requirements 3-Phase Power	220 vac @ 22-amps
Machine Weight	3520 lbs. (1,600 kg)
Coolant Capacity	11-Gallons (41 liters)

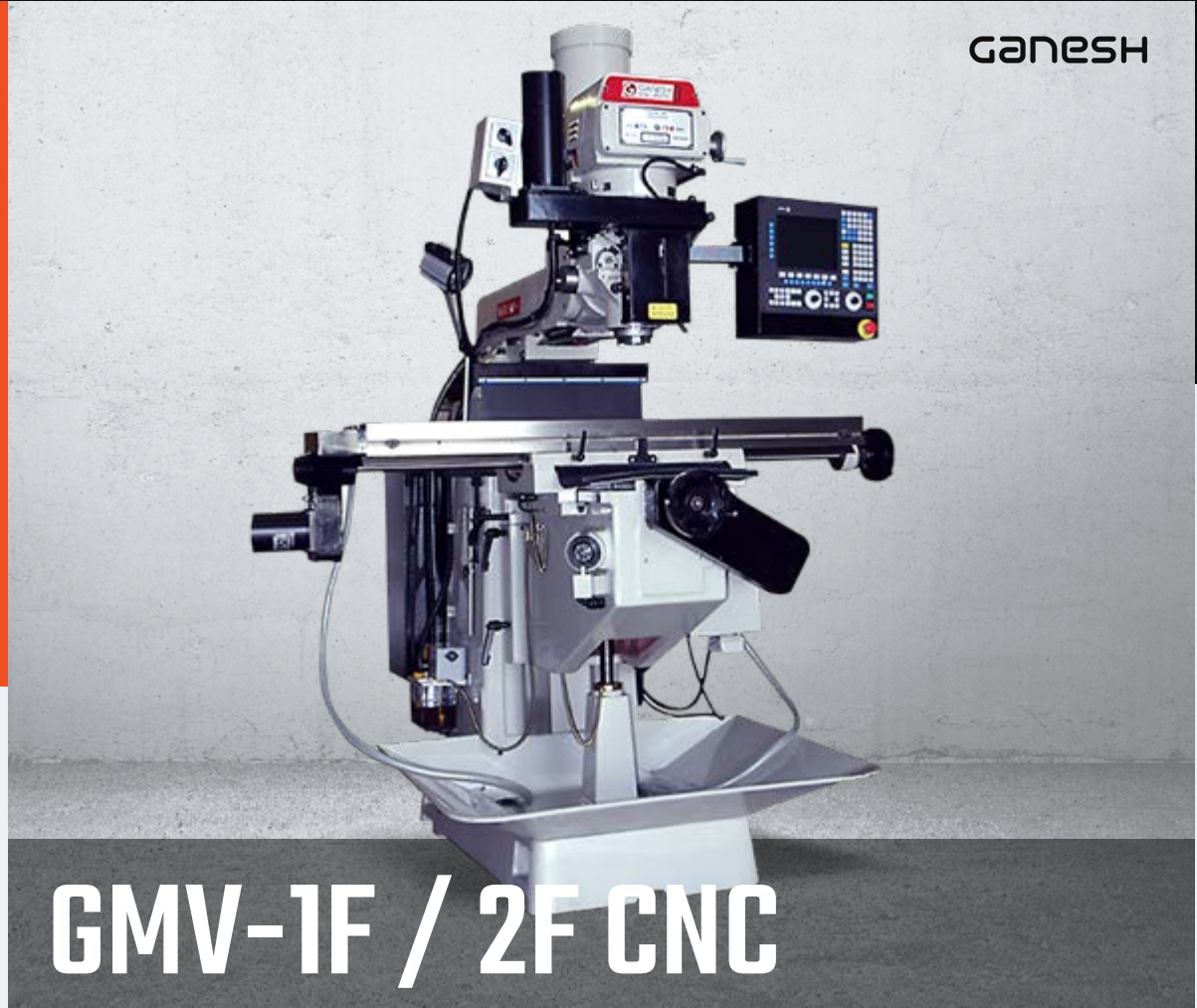


GMV-5

12" X 58" Super Heavy Duty 40 Taper Milling Machine

- + 5-HP spindle motor
- + #40 taper heavy duty spindle
- + Hardened and ground square boxways in "Y" and "Z"
- + Hardened and ground table and T-slots
- + Hardened, ground and chrome-plated quill
- + ABEC class-7 precision spindle bearings
- + Less than 0.0002-inch spindle runout
- + Built-in 1.5-HP knee powerfeed

Table	
Table Size (W x L)	12" x 58" (305 x 1473mm)
T-slot Width (3 Hardened & Ground T-Slots)	5/8" with ground reference edges (15.9mm wide)
Table Capacity	1500 lbs
Machine Travels & Capacity	
Table Travel – X Axis (With or without Power Feed)	40.5" (1028mm)
Cross Travel – Y Axis	15.75" (400mm)
Knee Travel – Z Axis	16" (406mm)
Ram Travel (Overarm) / Swivel	17.7" (450mm)
Spindle Nose-to-Table Surface Travel	2" – 18" (50 – 457mm)
Quill Travel - Manual & Power Feed	5" (127mm)
Quill Feeds - With Trip Release - Inch	0.0015" / 0.003" / 0.006"
Quill Feeds - With Trip Release - Metric	0.04mm / 0.08mm / 0.16mm
Quill Diameter	4.13" (105mm)
Leadscrew ground pitch (X & Y)	0.2" per rev. (5mm)
Slide Ways	
Hardened & Ground Meehanite Cast Iron	
Longitudinal Table –X Axis	Hardened & Ground Dovetail Ways
Cross Slide to Knee –Y Axis	Hardened & Ground Square Box Ways
Knee to Column – Z Axis	Hardened & Ground Square Box Ways
Spindle Head	
Head Tilt (Left-to-Right)	90° – 0 – 90°
Head Tilt (Front-to-Back / Up-Down)	45° – 0 – 45°
Head Swivel	360°
Spindle Motor	5 HP / 3 Phase / 220 Vac.
Spindle Taper	NT #40-Taper
Spindle Runout	0.0002" maximum runout (0.005mm)
Spindle Bearings	ABEC-7 matched set of Class-7 bearings
Variable Speed Drive - Dual Range	80 – 520 rpm (low-range) / 600 – 4000 rpm (high-range)
<i>NOTE: 5,000 RPM Spindle available with optional AC Inverter Spindle Head</i>	
Dimensions & Weight	
Power Requirements 3-Phase Power	220 vac @ 26-amps
Machine Weight	3740 lbs. (1700 kg)
Coolant Capacity	13.5 - Gallons (51 liters)



GMV-1F / 2F CNC

9" X 42"- 50" CNC Plus Mill

- + 3-Horsepower Variable Speed Head
- + Class-7 Super Precision Spindle Bearings
- + Hard-Chrome Plated and Mirror Ground Quill
- + Hard-Chrome Plated X & Y Axis Ways
- + 9" x 42" Table Dimensions
- + Coolant Proof Halogen Lamp Standard

Table	
GMV-1F Table Size (W x L)	9" x 42"
GMV-2F Table Size (W x L)	9" x 50"
T-Slot Width (3 T-Slots)	5/8" T-Slots with ground reference edges (15.9mm)
Machine Travels & Capacity	
<i>Travels may be reduced by limit switches, ballscrew bumpers, CNC etc</i>	
Table Travel – X Axis (under CNC control)	GMV-1F 26" GMV-2F 31.5"
Cross Travel – Y Axis	11.4"
Knee Travel –Z Axis	16" (406mm)
Ram Travel	17.7" (450mm)
Spindle Nose-to-Table Surface Travel	2" – 18" (50 – 457mm)
Quill Travel - Z Axis in 3-Axis Version	5" (127mm) (manual & Powerfeed travel w/o 3rd)
Quill Feeds - With Trip Release - Inch	0.0015" / 0.003" / 0.006"
Quill Feeds - With Trip Release - Metric	0.04mm / 0.08mm / 0.16mm
Quill Diameter	3 – 3/8" (85.725mm)
Ballscrews (X & Y)	0.200" per rev.
Adjustable scale ring display resolution	0.001" (5mm)
Spindle Head	
Head Tilt (Left-to-Right)	90° – 0 – 90°
Head Tilt (Front-to-Back / Up-Down)	45° – 0 – 38°
Head Swivel	360°
Spindle Motor	3 HP / 3 Phase / 208 –240 vac.
Spindle Taper	R-8 (ISO 30-taper optional)
Spindle Runout	0.0002" maximum runout (0.005mm)
Spindle Bearings	Fafnir ABEC-7 matched set of Class-7 bearings
Variable Speed Drive - Dual Range	60 –500 rpm (low-range) / 500 - 4500 rpm (high-range)
<i>NOTE: 6,000 RPM Spindle available with optional AC Inverter Spindle Head</i>	
Dimensions & Weight	
Power Requirements	220 vac ±5% / 3-Phase
Machine Weight	2400 lbs. (1200 Kgs)

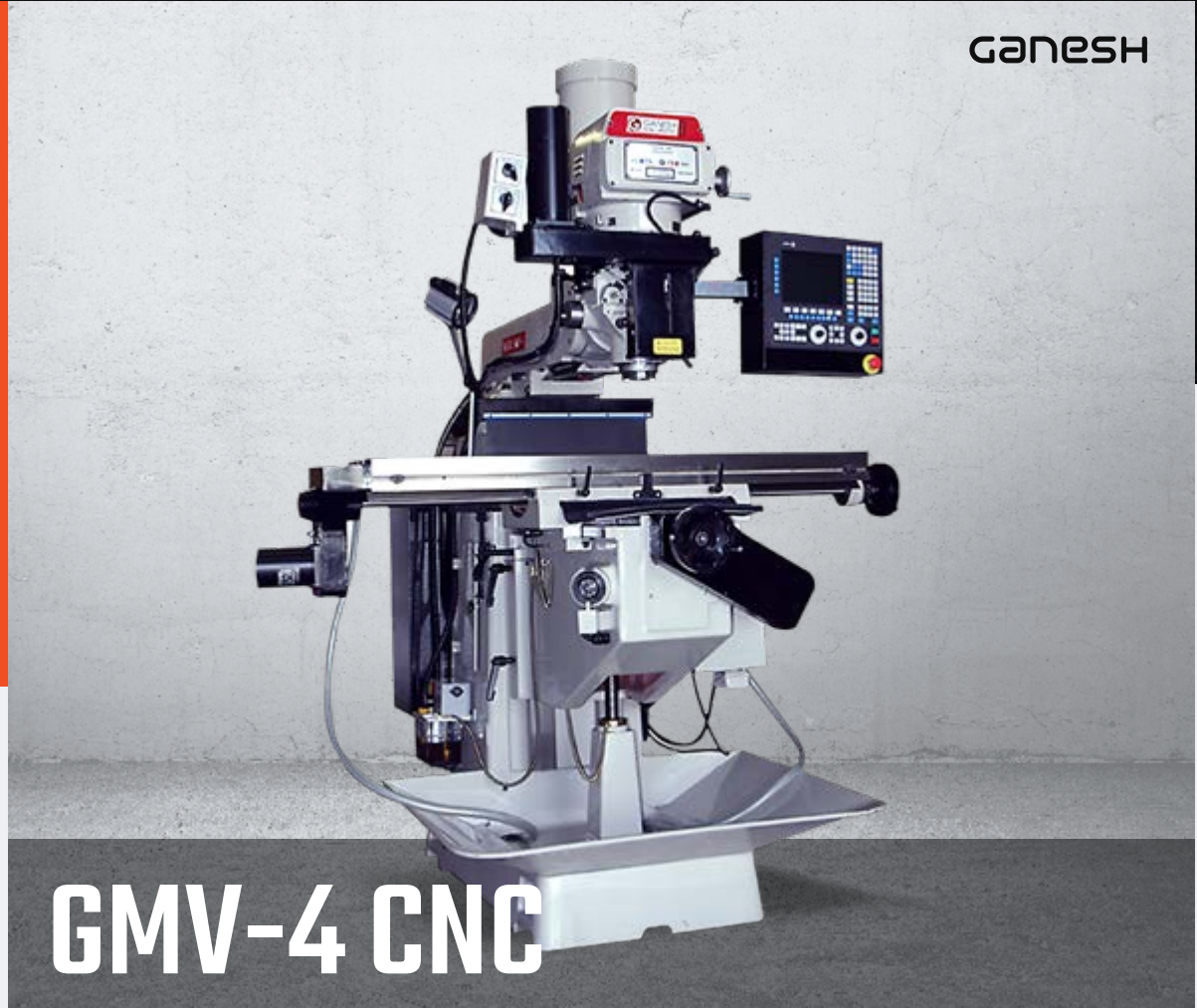


GMV-3F CNC

10" X 54" CNC Plus Mill

- + Full Manual & CNC Capability
- + Ideal for R&D Toolroom shops
- + Easy to use CNC Control
- + Precision Ball Screws
- + Rugged Meehanite castings with high density cast iron
- + Hardened & Ground Table ways
- + Class 7 Spindle Bearings
- + 3rd Axis DRO included with 2 Axis CNC Mills

Table	
Table Size (W x L)	10" X 54" (254 x 1372mm)
T-Slot Width (3 T-Slots)	5/8" T-Slots with ground reference edges (15.9mm)
Machine Travels & Capacity	
<i>Travel may be reduced by CNC limit switches</i>	
Table Travel – X Axis (under CNC control)	34.5" (875mm)
Cross Travel – Saddle / Y Axis	16.3" (415mm)
Knee Travel –Z Axis	15.75" (400mm)
Spindle Nose-to-Table Surface Travel	2" – 18" (50 – 457mm)
Quill Travel - CNC Z Axis	5" (127mm) (manual & Powerfeed travel w/o 3rd)
Quill Feeds - With Trip Release - Inch	0.0015" / 0.003" / 0.006"
Quill Feeds - With Trip Release - Metric	0.04mm / 0.08mm / 0.16mm
Quill Diameter	3 –3/8" (85.725mm)
Ballscrew ground pitch (X & Y)	0.2" per rev.
Adjustable scale ring resolution	0.001" (5mm)
Ways - Hardened & Ground	Dovetail Ways in X-Axis
Spindle Head	
Spindle Motor	3 HP
Spindle Taper	R-8 #30 taper & #40 taper optional
Spindle Runout	0.0002" maximum runout (0.005mm)
Spindle Bearings	ABEC-7 matched set Class-7 bearings
Head Tilt (Left-to-Right)	90° – 0 – 90°
Head Tilt (Front-to-Back / Up-Down)	45° – 0 – 45°
Head Swivel	360°
Dimensions & Weight	
Power Requirements 3-Phase	220 vac 21amps
Machine Dimensions L x W x H	65" x 66" x 87"
Machine Weight	3482 lbs. (1580 Kgs)



GMV-4 CNC

12" X 54" 40-Taper Heavy Duty CNC Plus Mill

- + Full Manual & CNC Capability
- + Ideal for R&D Toolroom shops
- + Easy to use CNC Control
- + Precision Ball Screws
- + Rugged Meehanite castings with high density cast iron
- + Hardened & Ground Table ways
- + Class 7 Spindle Bearings
- + 3rd Axis DRO included with 2 Axis CNC Mills

Table	
Table Size (W x L)	12" x 54" (254 x 1372mm)
Table Travel with CNC Control	33.5" (850mm)
Travel Capacity	1200lbs
T-Slot Width (3 T-Slots)	5/8" T-Slots with ground reference edges (15.9mm wide)
Machine Travels & Capacity	
Table Travel – X Axis	34.75"
Cross Travel – Y Axis	14"
Knee Travel	16" (406mm)
Ram Travel	17.7" (450mm)
Spindle Nose-to-Table Surface Travel	2" – 18" (50 – 457mm)
Ballscrew ground pitch (X & Y)	0.2" per rev.
Adjustable scale ring resolution	0.001" (0.0254mm)
Slide Ways	
<i>Hardened & Grounded Meehanite® Processed Cast Iron</i>	
Longitudinal Table - Z Axis	Hardened & Ground Dovetail Ways
Cross Slide to Knee - Y Axis	Hardened & Ground Square Box Ways
Knee to Column	Hardened & Ground Square Box Ways
Spindle Head	
Head Tilt (Left-to-Right)	90° – 0 – 90°
Head Tilt (Front-to-Back / Up-Down)	45° – 0 – 45°
Head Swivel	360°
Spindle Motor	5-HP / 3 Phase 208 - 240 vac.
Spindle Taper	NMTB #40 N.S. Taper
Spindle Runout	0.0002" maximum runout (0.005mm)
Spindle Bearings	Fafnir ABEC-7 Matched set of Class-7 Bearings
Variable Speed Drive - Dual Range	80 - 520 rpm (low-range) / 600 - 4000 rpm (high-range)
<i>Note: 5,000 RPM Electronic Variable-Speed Spindle available with the optional AC Inverter Spindle Head</i>	
Quill	
Quill Travel - CNC Z-Axis	5" (127mm) Manual & Power Feed w/o 3rd CNC Axis
Quill feeds (per rev.) with Trip Release - Inch	0.0015" / 0.003" / 0.006"
Quill feeds (per rev.) with Trip Release - Metric	0.04mm / 0.08mm / 0.16mm
Quill Diameter	4.13" (105mm)
Dimensions & Weight	
Power Requirements 3-Phase	208 - 220 vac. ±5% @ 22 amps (440 vac optional) / 110 vac 20-am dedicated service required for CNC Control
Coolant Capacity	11 Gallons. (41 liters)
Machine Weight	1600 Kgs



GHT-618 EVS

High Accuracy Toolroom Lathe

- + 3-Horsepower Electronic Variable-Speed Inverter Motor
- + 130 - 4000 RPM Infinitely Variable Spindle Speeds
- + 11" Swing x 18" Between Centers
- + Power Feeds in Both Cross and Longitudinal Axis

Work Holding Capacity

With Round 5C Collets	1 - 1/16"	(27mm)
With Hex 5C Collets	7/8"	(22mm)
With Square 5C Collets	3/4"	(19mm)
With Expanding Collets	3"	(76mm)
With Step Chucks	1 - 1/16" to 6"	(27 to 152.4mm)
With 3 & 4 Jaw Chucks	6"	(152mm)

Machine Capacity

Swing over bed	11"	(280mm)
Swing over carriage	9"	(228.6mm)
Swing over cross slide	6"	(152.44mm)
Distance between centers	18"	(457mm)
Tailstock quill	MT#2	
Main Motor	3-HP / 220 vac 3-phase 20 amps, or single phase 35-amp service (peak)	
Coolant Pump	1/8-HP / 220 vac 3-phase only (with coolant nozzle & flow control valve)	

Machine Travel & Specifications

Cross Slide Travel	6"	(152mm)
Compound Slide Travel	3"	(76mm)
Quick Action Compound Slide Motion	0.1"	(2.5mm) (eg. For thread pull out)
Tailstock Quill Travel	3 - 3/4"	(95mm) features inch & metric quill graduations
Inch Threads (36)	11 - 108 TPI	Threading gearbox selectable w/o change gears
Metric Threads (36)	0.275 - 2.7mm	Threading gearbox selectable w/o change gears
Carriage Slide Powerfeed Range	3/16" - 4" per minute	(8 to 178mm)
Cross Slide Powerfeed Range	5/16" - 7" per minute	(5 to 102mm)
Net Weight	2420 lbs.	(1098 Kg)
Machine Shipping Dimensions L x D x H	74" x 30" x 66"	(1880mm x 762mm x 1676mm)



GTW-13

13" X 40" Toolroom Engine Lathe

- + Hardened and ground Turcite® coated bed ways
- + Hardened and ground gears
- + 8-speed geared head spindle
- + Safety foot brake
- + Safety chuck guard
- + Coolant pump included
- + Chucks, steady rest and follow rest included

Capacity & Dimensions

Swing over Bed	13"
Center Height	6 - 1/2"
Swing over Cross Slide	7 - 25/32"
Swing thru Gap	18 - 3/4"
Length of Gap in front of face plate, D1-4	4 - 1/2"
Distance between Centers	40"
Bed casting width, length, depth	7-3/8" / 65-1/8" / 11-13/32"

Spindle

Spindle Motor Horsepower	3-HP	HIGH	1255	2000	755	460
Spindle Speeds - 8 speed geared head rpm	70 - 2000	LOW	190	300	115	70
Spindle Bore	1 - 1/2"					
Spindle Nose	D1 - 4					
Spindle taper in Spindle Nose	MT-5	Morse Taper-5				

Carriage

Cross Slide Travel	6 - 5/16"	(160mm)
Cross Slide Width	4 - 5/8"	(118mm)
Cross Slide Lead Screw Pitch	8 TPI	
Cross Slide Resolution per division	0.25"/rev.	(on diameters)
Carriage Lead Screw Diameter / Pitch	7/8" / 8 TPI	22mm / 3mm pitch
Feed Rod Dimension	3/4" hexagon	19mm hexagon

Compound

Compound Top Slide Travel	2 - 11/16"	(68mm)
Compound Top Slide Width	3"	(76mm)
Cutting Tool Height Maximum	5/8" x 5/8"	16mm x 16mm

Tailstock

Quill Diameter	1 - 21/32"	(42mm)
Quill Stroke	4 - 1/2"	(114mm)
Quill Taper	MT - 3	Morse Taper #3
Quill Tang Drive and Drift-Slot for Tailstock	included	
Tailstock Body set-over adjustment	±0.04"	±1mm

Thread Cutting

Thread Cutting Range - 31 inch pitches	4 - 56 TPI	
Thread Cutting Range - 26 metric pitches	0.4 - 7mm	
Thread Cutting Range - 32 diametral pitches	8 - 120 D.P.	(optional)
Thread Cutting Range - 21 module pitches	0.2 - 3 M.P.	(optional)

Feeds

Feeds - Longitudinal - 32 Feeds	0.002" - 0.548" / rev.
Feeds - Cross - 32 Feeds	0.0007" - 0.0187" / rev.

Weight & Dimensions

Machine Dimensions - L x W	76 3/8" x 29 3/4"	(1940 x 755mm)
Machine Height	48 3/4"	(1238mm)
Overall Machine Weight	1345 lbs.	610 Kgs
Electrical Power Requirements	220 volts / 3 Phase @ 8.50 amps	



GTW-16

16" X 40"/60" Heavy Duty Engine Lathe

- + Hardened and ground Turcite® coated bed ways
- + Hardened and ground gears
- + 12-speed geared head spindle
- + Safety foot brake
- + Safety chuck guard
- + Coolant pump included
- + Chucks, steady rest and follow rest included

Capacity & Dimensions

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

Spindle

Spindle Motor Horsepower	7.5 HP	+	540	1600	325	1000	700	2000
Spindle Speeds - 12 speeds 30 - 2000rpm	30 - 2000 rpm	-	55	160	30	95	70	200
Spindle Bore	2 1/16"		(52mm)					
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"	(230mm / 180mm)
Cross Slide Lead Screw Pitch	4TPI	
Cross Slide Resolution per division	0.50" / rev.	(on diameters)
Carriage Lead Screw Diameter / Pitch	1 1/4" / 4 TPI	(32mm / 6mm pitch)
Feed Rod Dimension	7/8" hexagon	23mm hexagon

Compound

Compound Top Slide Trave / Compound Width	4 3/4" / 4 11/32"	(120mm / 110mm)
Cutting Tool Height Maximum	1.0" x 1.0"	25mm x 25mm

Tailstock

Quill Diameter	2 1/8"	(54mm)
Quill Stroke	4 3/4"	(120mm)
Quill Taper	MT-4	Morse Taper #4
Quill Tang Drive and Drift-Slot for Tailstock	included	
Tailstock Body set-over adjustment	±0.04"	±1mm

Thread Cutting

Thread Cutting Range - 40" pitches	2 - 56 TPI	
Thread Cutting Range - 53 metric pitches	0.4 - 14mm	
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	0.0012" - 0.0252" / rev. (0.032mm - 0.898mm/rev.)
Feeds - Cross - 40 Feeds	0.0006" - 0.0126" / rev. (0.016mm - 0.449mm/rev.)
Feed stop control shaft	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

GANESH



GTW-20

20" Heavy Duty Engine Lathe

- + Heavy duty 10-HP D1-8 spindle with 20" Swing
- + Hardened and ground Turcite® coated bed ways
- + Hardened and ground gear
- + 12-speed geared head spindle
- + Safety foot brake
- + Safety chuck guard
- + Coolant pump standard

Capacity & Dimensions

Swing over Bed	20"	(510mm)
Center Height	10"	(255mm)
Swing over Cross Slide	13"	(330mm)
Swing thru Gap	26 3/8"	(680mm)
Length of Gap in front of D1-8 face plate	7 1/16"	(180mm)
Bed Casting - width / height	16 1/8" / 12 7/32"	(400mm / 310mm)

Spindle

Spindle Motor Horsepower	10 HP 3 Phase	+	1550	150	680	60	1100	100
Spindle Speeds - 12 speeds 20 - 1550rpm (high to low)		-	490	45	210	20	350	30
Spindle Bore	3 1/8"	(80mm)						
Spindle Nose	D1-8 Cam lock							
Spindle taper in Spindle Nose	MT-7	Morse Taper #7						
Spindle taper reduction sleeve provided	MT-7 to MT-5							

Carriage

Cross Slide Travel	12 1/2"	(320mm)
Cross Slide Width	7 3/32"	(180mm)
Cross Slide Lead Screw Pitch	.200" / rev	
Cross Slide Resolution per division	0.001"	(on diameters)
Carriage Lead Screw Diameter	1 1/2"	(38mm)
Carriage Lead Screw Pitch	4 TPI	(6mm pitch)
Feed Rod Dimensions	7/8" hexagon	23mm hexagon

Compound

Compound Top Side Travel	10"	(255mm)
Compound Top Slide Width	4 11/32"	(110mm)
Cutting Tool Height Maximum	1.0" x 1.0"	(25mm x 25mm)

Tailstock (2 speed quill advance)

Quill Diameter	2-15/16"	(255mm)
Quill Stroke	6 5/16"	(160mm)
Quill Taper	MT-5	Morse Taper #5
Quill Tang Drive and Drift-Slot for Tailstock	included	
Tailstock Body set-over adjustment	±0.04"	±1mm

Thread Cutting

Leadscrew Diameter / Pitch	1 1/2" / 4 TPI	38mm / 6mm pitch
Thread Cutting Range - 60" pitches	2 - 112 TPI	
Thread Cutting Range - 60 metric pitches	0.2 - 14mm	
Thread Cutting Range - 50 diametral pitches	4 - 112 M.P.	
Thread Cutting Range - 50 module pitches	0.2 - 7 M.P.	

Feeds

Feeds - Longitudinal - 50 Feeds	0.0014" - 0.0387"/rev. (0.037 - 1.04mm / rev)
Feeds - Cross - 50 Feeds	0.0007" - 0.01935"/rev. (0.0185 - 0.52mm/ rev)
Feed stop shaft	4 adjustable automatic feed stops to disengage the longitudinal feed
Coolant Pump	1/8 HP
Machine Power Requirements (440vac optional)	220 vac / 3 Phase / 30 amps



GTW-22

22" Heavy Duty Engine Lathe

- + Hardened and ground Turcite® coated bed ways
- + Hardened and ground gear
- + 12-speed geared head spindle
- + Safety foot brake
- + Safety chuck guard
- + Coolant pump standard
- + Heavy duty 15-HP D1-11 spindle

Capacity & Dimensions

Swing over Bed	22"	(560mm)
Center Height	11"	(280mm)
Swing over Cross Slide	14 1/8"	(360mm)
Swing thru Gap	29 3/8"	(745mm)
Length of Gap in front of D1-11 face plate	6 1/2"	(165mm)
Bed Width	16 1/8"	(400mm)

Spindle

Spindle Motor Horsepower	15 HP	12kw	HIGH	1200	120	520	50	860	85
Spindle Speeds - 12 speeds 15 - 1200rpm (high to low)			LOW	375	35	160	15	265	25
Spindle Bore	4 1/8"	(105mm)							
Spindle Nose	D1-11 Camlock	(A1-11 optional)							
Spindle taper in Spindle Nose	MT-8	Morse Taper #8							
Spindle taper reduction sleeve provided	MT-5	MT-8 to MT-5							
Spindle Max Weight Capacity (Chuck Only)	660 lbs	(300 kgs)							
Spindle Max Weight Capacity (Chuck and Tailstock)	1650 lbs	(750 kgs)							
Spindle Max Weight Capacity (Chuck, Steady Rest & Tailstock)	3300 lbs	(1500 kgs)							

Carriage

Cross Slide Travel	14.96"	(380mm)
Cross Slide Width	7 3/32"	(180mm)
Cross Slide lead screw pitch	.200" / rev	
Cross Slide resolution per division	0.001"	(on diameters)
Carriage Lead Screw Diameter	1 1/2"	(38mm)
Carriage Lead Screw Pitch	4 TPI	(6mm pitch)

Compound

Compound Top Side Travel	10"	(255mm)
Compound Top Slide Width	4 11/32"	(110mm)
Cutting Tool Height Maximum	1.0" x 1.0"	(25mm x 25mm)

Tailstock (2 speed quill advance)

Quill Diameter	2 15/16"	(75mm)
Quill Stroke	6 5/16"	(160mm)
Quill Taper	MT-5	Morse Taper #5
Quill advance - 2 gear selected advance speeds	1:1 2:1	
Tailstock body set-over adjustment	±0.04"	±1mm

Thread Cutting

Thread Cutting Range - 60 inch pitches	2 -112 TPI	2 -112 TPI
Thread Cutting Range - 60 metric pitches	0.2 -14mm	0.2 - 14mm
Thread Cutting Range - 50 diametral pitches	4 -112 D.P.	4 - 112 D.P.
Thread Cutting Range - 50 module pitches	0.2 -7 M.P.	0.2 -7 M.P.

Feeds

Feeds - Longitudinal - 50 Feeds	0.0014" - 0.0387" / rev. (0.037 - 1.04mm / rev)
Feeds - Cross - 50 Feeds	0.0007" - 0.01935" / rev. (0.0185 - 0.52mm / rev)
Coolant System	1/8 HP Pump Motor / 5 Gallon (20L) Tank Capacity
Power Requirements	220 vac. / 3 Phase / 40 Amps (440 vac optional)



GTW-26

26" Heavy Duty Engine Lathe

- + Hardened and ground Turcite® coated bed ways
- + Hardened and ground gear
- + 12-speed geared head spindle
- + Safety foot brake
- + Safety chuck guard
- + Coolant pump standard
- + Heavy duty 15-HP D1-11 spindle

Capacity & Dimensions

Swing over Bed	26"	(660mm)
Center Height	13"	(330mm)
Swing over Cross Slide	18 1/16"	(460mm)
Swing thru Gap	33 1/4"	(845mm)
Length of Gap in front of D1-11 face plate	6 1/2"	(165mm)
Bed Width	16 1/8"	(400mm)

Spindle

Spindle Motor Horsepower	15 HP	12kw	HIGH	1200	120	520	50	860	85
Spindle Speeds - 12 speeds 15 - 1200rpm (high to low)			LOW	375	35	160	15	265	25
Spindle Bore	4 1/8"	(105mm)							
Spindle Nose	D1-11 Camlock	(A1-11 optional)							
Spindle taper in Spindle Nose	MT-8	Morse Taper #8							
Spindle taper reduction sleeve provided	MT-5	MT-8 to MT-5							
Spindle Max Weight Capacity (Chuck Only)	660 lbs	(300 kgs)							
Spindle Max Weight Capacity (Chuck and Tailstock)	1650 lbs	(750 kgs)							
Spindle Max Weight Capacity (Chuck, Steady Rest & Tailstock)	3300 lbs	(1500 kgs)							

Carriage

Cross Slide Travel	14.96"	(380mm)
Cross Slide Width	7 3/32"	(180mm)
Cross Slide lead screw pitch	.200" / rev	
Cross Slide resolution per division	0.001"	(on diameters)
Carriage Lead Screw Diameter	1 1/2"	(38mm)
Carriage Lead Screw Pitch	4 TPI	(6mm pitch)

Compound

Compound Top Side Travel	10"	(255mm)
Compound Top Slide Width	4 11/32"	(110mm)
Cutting Tool Height Maximum	1.0" x 1.0"	(25mm x 25mm)

Tailstock (2 speed quill advance)

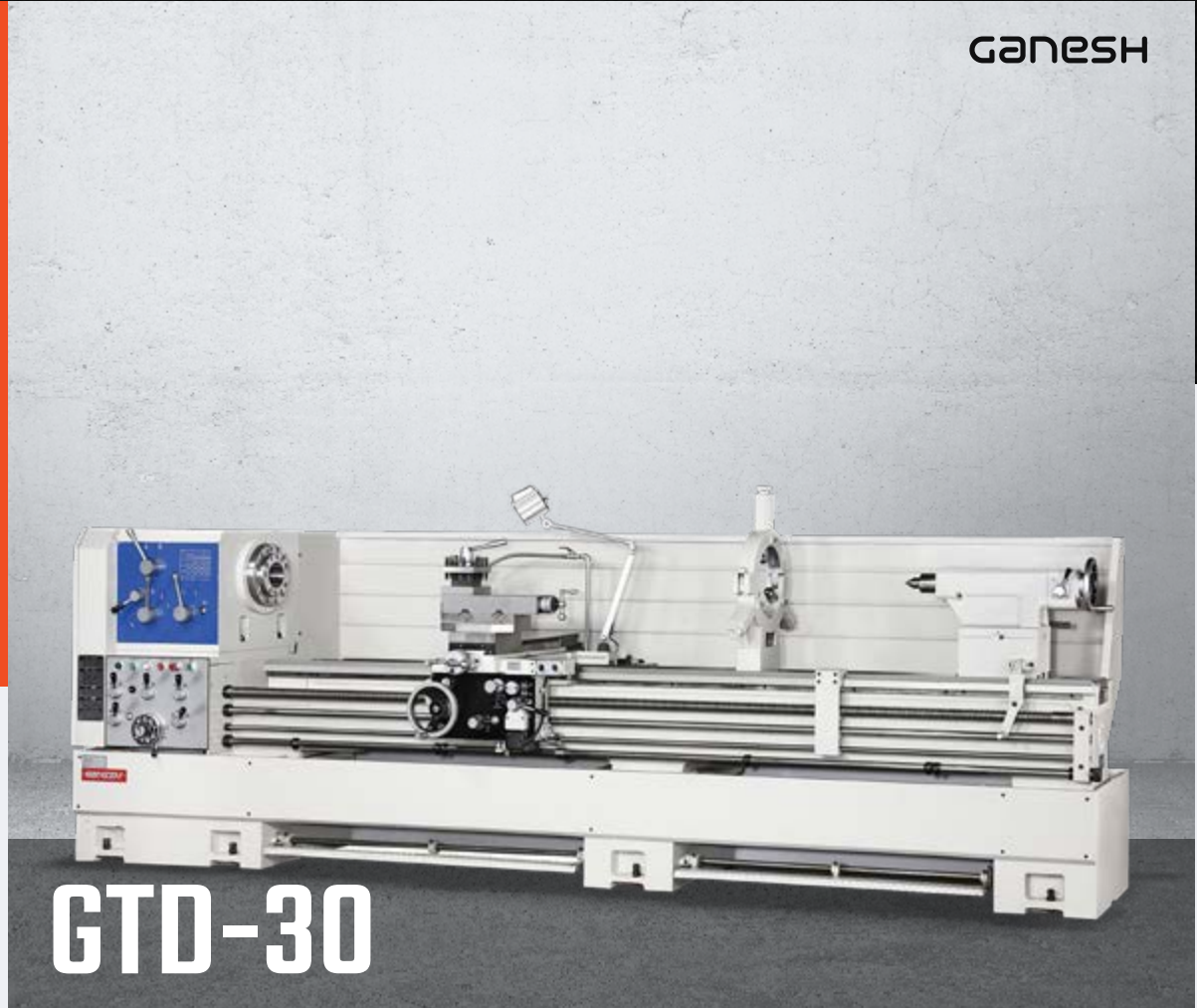
Quill Diameter	2 15/16"	(75mm)
Quill Stroke	6 5/16"	(160mm)
Quill Taper	MT-5	Morse Taper #5
Tailstock body set-over adjustment	±0.04"	±1mm

Thread Cutting

Thread Cutting Range - 60 inch pitches	2 - 112 TPI	2 - 112 TPI
Thread Cutting Range - 60 metric pitches	0.2 - 14mm	0.2 - 14mm
Thread Cutting Range - 50 diametral pitches	4 - 112 D.P.	4 - 112 D.P.
Thread Cutting Range - 50 module pitches	0.2 - 7 M.P.	0.2 - 7 M.P.

Feeds

Feeds - Longitudinal - 50 Feeds	0.0014" - 0.0387"/ rev. (0.037 - 1.04mm / rev)
Feeds - Cross - 50 Feeds	0.0007" - 0.01935"/rev. (0.0185 - 0.52mm/ rev)
Coolant System	1/8 HP Pump Motor / 5 Gallon (20L) Tank Capacity
Power Requirements	220 vac. / 3 Phase / 40 Amps (440 vac optional)



30" Heavy Duty Engine Lathe

- + Rapid Feeds for longitudinal and & cross motion
- + 15-HP Spindle motor
- + 12-Spindle Speed Gear-Ranges for High-Torque
- + Spindle Speeds from 23 – 1300 RPM
- + A2-11 Spindle with 4-1/8" spindle bore
- + Swings 40.5" Through the Gap Bed
- + Tailstock features 2-Speed quill advance
- + 4-Adjustable longitudinal feed stops

Capacity & Dimensions

Swing over Bed	29.92"	(760mm)
Swing over Cross Slide	19.69"	(500mm)
Swing thru Gap	40.55"	(1030mm)
Width of Gap (measured from spindle nose)	12"	(305mm)
Bed Width	16.54"	(420mm)

Spindle

Spindle Motor Horsepower	15 HP	11.5 KW	HIGH	370	730	1300	145	285	510
Spindle Speeds - 12 speeds 15 - 1200rpm (high to low)			LOW	60	115	210	23	45	82
Spindle Bore	4 1/8"	(105mm)							
Spindle Nose	A2 - 11	A2 - 11							
Spindle taper in Spindle Nose	MT-7	MT-7							
Spindle taper reduction sleeve provided	MT-5	MT-5							
Spindle Max Weight Capacity (Chuck Only)	1100 lbs	(500 kgs)							
Spindle Max Weight Capacity (Chuck and Tailstock)	2200 lbs	(1000 kgs)							
Spindle Max Weight Capacity (Chuck, Steady Rest & Tailstock)	4400 lbs	(2000 kgs)							

Carriage

Cross Slide Travel	15.75"	(400mm)
Carriage Width	26.38"	(670mm)

Compound

Compound Rest Travel	9.45"	(240mm)
Cutting Tool Height Maximum	1.0"	(25mm)

Tailstock (2 speed quill advance)

Quill Diameter	3.15"	(80mm)
Quill Stroke	7.87"	(200mm)
Quill Taper	MT-5	Morse Taper #5
Quill Tange Drive and drift-slot for tailstock	included	included
Tailstock Body set-over adjustment	±1/2"	(±13mm)

Thread Cutting

Lead screw diameter & pitch	1.77" x 2 T.P.I
Thread Cutting Range - 36" pitches	2 - 28 TPI
Thread Cutting Range - 65 metric pitches	0.8 - 14mm
Thread Cutting Range - 36 diametral pitches	4 - 56 D.P.
Thread Cutting Range - 22 module pitches	0.5 - 7 M.P.

Feeds

Feeds - Longitudinal	0.0019" - 0.027"/ rev. 0.05 - .7 mm/rev
Feeds - Cross	0.00098" - 0.0137"/rev. 0.025 - 0.35 mm/rev.
Feed shaft stop control	4 adjustable automatic feed stops to disengage the longitudinal feed
Feed Rod Diameter	1.26" (32mm)

Electrical Requirements

Connected Load - 12kw	10kva / 220 vac. / 42 amps / (440 vac. optional)
Rapid Traverse Motor	1/4 HP (0.1875 kw)
Coolant Motor / Coolant Tank Capacity	1/8 HP / 11 gal. (40 liters)



GTD-34

34" Heavy Duty Engine Lathe

- + 15-HP spindle motor for efficient metal removal capability
- + Hardened & ground A2-11 spindle and 4" spindle bore
- + 12-speed geared-headstock with 23 – 1300 rpm spindle speeds
- + Alloy Steel Hardened & Ground Headstock Gears
- + Safety gated spindle control lever to protect from accidental engagement
- + Footbrake provided for added safety and operational convenience

Capacity & Dimensions

Swing over Bed	33.86"	(860mm)
Swing over Cross Slide	21.26"	(540mm)
Swing thru Gap	47.24"	(1200mm)
Width of Gap (measured from spindle nose)	9.44"	(240mm)
Bed Width	20.07"	(510mm)

Spindle

Spindle Motor Horsepower 4" Bore (20HP 6" Bore)	15 HP	11.5 KW	HIGH	370	730	1300	145	285	510
Spindle Speeds - 12 speeds 23 - 1300rpm (high to low)			LOW	60	115	210	23	45	82
Spindle Bore	4 1/8"	(105mm)							
Spindle Nose	A2 - 11	A2 - 11							
Spindle taper in Spindle Nose	MT-7	MT-7							
Spindle taper reduction sleeve provided	MT-5	MT-5							
Spindle Max Weight Capacity (Chuck Only)	1100 lbs	(500 kgs)							
Spindle Max Weight Capacity (Chuck and Tailstock)	2200 lbs	(1000 kgs)							
Spindle Max Weight Capacity (Chuck, Steady Rest & Tailstock)	4400 lbs	(2000 kgs)							

Carriage

Cross Slide Travel	20.08"	(510mm)
Carriage Width	26.00"	(660mm)

Compound

Compound Rest Travel	14.56"	(370mm)
Cutting Tool Height Maximum	1.26"	(32mm)

Tailstock (2 speed quill advance)

Quill Diameter	4.92"	(125mm)
Quill Stroke	11.81"	(300mm)
Quill Taper	MT-6	Morse Taper #6
Quill Tange Drive and drift-slot for tailstock	included	included
Tailstock Body set-over adjustment	±1/2"	(±13mm)

Thread Cutting

Lead screw diameter & pitch	1.77" x 12mm.
Thread Cutting Range - 36" pitches	2 - 28 TPI
Thread Cutting Range - 65 metric pitches	0.8 - 14mm
Thread Cutting Range - 36 diametral pitches	4 - 56 D.P.
Thread Cutting Range - 22 module pitches	0.5 - 7 M.P.

Feeds

Feeds - Longitudinal	0.0019" - 0.027"/ rev. 0.05 - .7 mm/rev
Feeds - Cross	0.00098" - 0.0137"/rev. 0.025 - 0.35 mm/rev.
Feed shaft stop control	4 adjustable automatic feed stops to disengage the longitudinal feed
Feed Rod Diameter	1.26" (32mm)

Electrical Requirements

Connected Load - 12kw	10kva / 220 vac. / 42 amps / (440 vac. optional)
Rapid Traverse Motor	1/4 HP (0.1875 kw)
Coolant Motor / Coolant Tank Capacity	1/8 HP / 11 gal. (40 liters)



44" – 55" Heavy Duty Big Bore Lathes

- + Hardened and ground Turcite® coated bed ways
- + Hardened and ground gears
- + 30-HP spindle motor
- + 16-speed geared head spindle
- + Rear spindle mount optional
- + Safety chuck guard
- + Coolant pump standard
- + Up to 315-inch bed length available

Capacity & Dimensions

Swing over Bed	44"	(1120mm)
Swing over Cross Slide	31.89"	(810mm)
Swing thru Gap	61"	(1550mm)
Width of Gap (measured from spindle nose)	22.05"	(560mm)
Distance between Centers (Dependent upon bed selected)	39" – 315"	(1000 - 8000mm)
Bed Width	24"	(610mm)

Spindle

Spindle Motor Horsepower	30 HP	<table border="1"> <tr> <td>HIGH</td> <td>165</td> <td>225</td> <td>420</td> <td>35</td> <td>19</td> <td>14</td> <td>26</td> <td>310</td> </tr> <tr> <td>LOW</td> <td>48</td> <td>65</td> <td>120</td> <td>10</td> <td>5.5</td> <td>4</td> <td>7</td> <td>90</td> </tr> </table>	HIGH	165	225	420	35	19	14	26	310	LOW	48	65	120	10	5.5	4	7	90
HIGH	165	225	420	35	19	14	26	310												
LOW	48	65	120	10	5.5	4	7	90												
Spindle Speeds - 6" Bore = 16 speeds from 4 - 420rpm																				
Spindle Bore - (10", 12" & 15" spindle bores optional)	6"	(152mm)																		
Spindle Nose	A2 - 11	A2 - 15 & A2 - 20 optional																		
Spindle taper in Spindle Nose	MT-7	MT-7																		
Spindle center height to base	49"	(1245mm)																		

Spindle Weight Capacity

Workpiece weight limit when held by chuck only	4400 lbs	(2000 kgs)
Workpiece weight limit when held by chuck and tailstock	13200 lbs	(6000 kgs)
Workpiece weight limit when held by chuck, tailstock & steadyrest	17600 lbs	(8000 kgs)

Carriage

Cross Slide Travel	20.87"	(530mm)
Carriage Slide Width	11.81"	(300mm)
Width of Carriage	31.10"	(790mm)
Compound Rest Travel	14.57"	(370mm)
Cutting Tool Height Maximum	1.26" x 1.26"	(32 x 32mm)

Tailstock (2 speed quill advance)

Quill Diameter (5.9" diameter optional)	4.92"	(125mm)
Quill Stroke	11.8"	(300mm)
Quill Taper	MT-6	MT-7 Optional
Quill advance - 2 speed ratios	1:1 and 5:1	5X Thrust Force Multiplier
Tailstock body set-over adjustment	±0.4"	(±10mm)

Thread Cutting

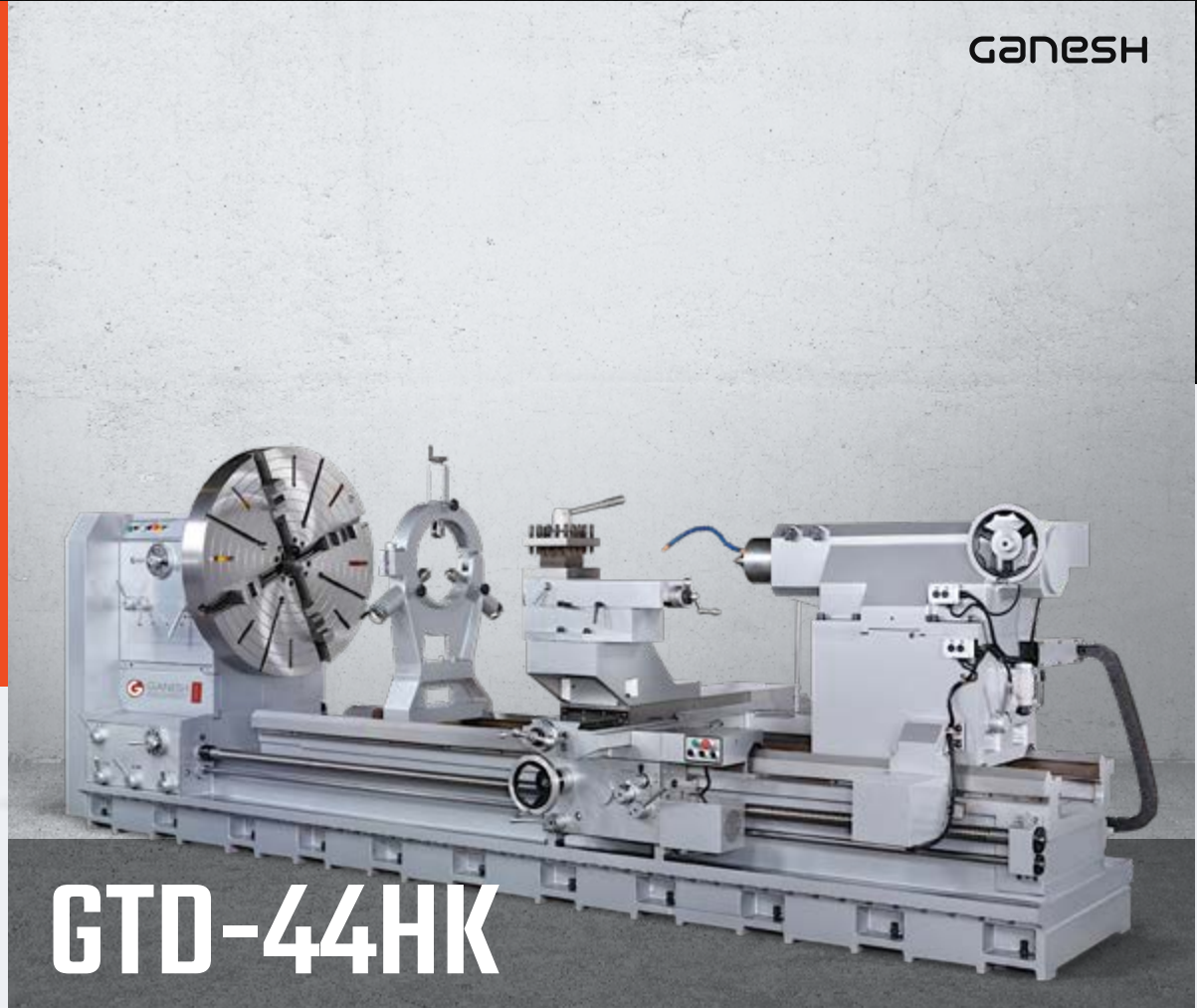
Lead screw diameter & pitch	2.36" x 2 TPI
Thread Cutting Range - 70" pitches	0.25 - 30 TPI
Thread Cutting Range - 62 metric pitches	1 - 120mm
Thread Cutting Range -70 diametral pitches	1 - 120 D.P.
Thread Cutting Range - 53 module pitches	0.25 - 30 M.P.

Feeds

Feed Shaft Diameter	1.26"	(32mm)
Feeds - Longitudinal	0.0028" - 0.34/rev	(0.072 - 8.68mm/rev)
Feeds - Cross Sign	0.0014" 0.17"/rev	(0.036 - 4.34mm/rev)

Power

Connected load - 86 Amps Full Load	Wired 440 vac	(220/440 vac motor)
Coolant Motor (coolant capacity shown with pricing)	0.25 HP	(0.2kw)
Rapid Traverse Motor	1 HP	(0.75 kw)



44" – 55" Super Heavy Duty Big Bore Lathes

- + Hardened and ground Turcite® coated bed ways
- + Hardened and ground gears
- + 40-HP spindle motor
- + Double-set of spindle bearings
- + Rear spindle mount optional
- + Safety chuck guard
- + Coolant pump standard
- + Heavy duty 32" bed width

Capacity & Dimensions

Swing over Bed	44"	(1120mm)
Swing over Cross Slide	27.95"	(710)
Swing thru Gap	55.11"	(1400mm)
Width of Gap (measured from spindle nose)	21.26"	(540mm)
Distance between Centers (Dependent upon bed selected)	39" - 315"	(1000 - 8000mm)
Bed Width	32"	(810mm)

Spindle

Spindle Bore - (9", 10", 12" & 15" spindle bores optional)	6"	(152mm)
Spindle Nose	A2-11	A2-15 & A2-20 optional
Spindle taper in spindle nose	MT-7	MT-7
Spindle center height to base	49"	(1245mm)
Spindle Motor Horsepower	40-HP	
Spindle Speedsq	16 gears	4 - 420 RPM

Spindle Weight Capacity

Workpiece weight limit when held by chuck only	4400 lbs	(2000 kgs)
Workpiece weight limit when held by chuck and tailstock	15400 lbs	(7000 kgs)
Workpiece weight limit when held by chuck, tailstock & steadyrest	19800 lbs	(9000 kgs)

Carriage

Cross Slide Travel	23.62"	(600mm)
Carriage Slide Width	13.75"	(350mm)
Width of Carriage	34.65"	(880mm)
Compound Slide Travel	15.75"	(400mm)
Compound Slide Width	10"	(250mm)
Cutting tool height maximum	1.5" x 1.5"	(40 x 40mm)

Tailstock (Electric motor driven body & quill)

Quill Diameter	7.87"	(200mm)
Quill Stroke	11.87"	(300mm)
Quill Taper	MT-6	MT-7 optional
Tailstock body set-over adjustment	±0.4"	(±10mm)
Tailstock body movement	Push-button 1/2 HP electric motor driven	
Quill Drive	Push-button 1/2 HP electric motor driven	

Thread Cutting

Lead screw diameter (60mm, 12mm pitch metric order)	2.36" x 2 T.P.I	
Thread Cutting Range - 70" pitches	0.25 - 30 TPI	
Thread Cutting Range - 62 metric pitches	1 - 120mm	
Thread Cutting Range -70 diametral pitches	1 - 120 D.P.	
Thread Cutting Range - 53 module pitches	0.25 - 30 M.P.	

Feeds

Feed Shaft Diameter	1.26"	(32mm)
Feeds - Longitudinal	0.0028" - 0.34/rev	(0.072 - 8.68mm/rev)
Feeds - Cross Sign	0.0014" 0.17"/rev	(0.036 - 4.34mm/rev)

Power

Connected load - 86 Amps Full Load	Wired 440 vac (220/440 vac motor)	
Coolant Motor / Coolant tank capacity	0.25 HP	(0.2kw)
Rapid Traverse Motor for cross & longitudinal motion	1 HP	(0.75 kw)



GTW-1840 CNC

18" X 40" CNC Lathe

- + 18" X 40" CNC Lathe
- + 18" Swing Diameter over Bedways
- + 40" Between Center
- + Compact Footprints make it ideal for R&D and Toolroom shops
- + Easy to use Fanuc or Fagor CNC Control
- + Safety chuck guard
- + Coolant pump standard
- + Meehanite casting help minimize vibration for superior finish and tool life
- + Hardened & Precision ground double-Vee / Double-Flat bedways for high rigidity
- + Automatic Metered lubrication system for ball screws and ways
- + Built in high capacity coolant system

Capacity & Dimensions

Swing over Bed	18"	(460mm)
Swing over Cross Slide	9"	(230mm)
Center Height	9"	(230mm)
Center Distance	39.37"	(1000mm)
Bed Length	82.5"	(2095mm)
Bed Way Width	14 1/2"	(370mm)
Bed Casting Height	13 3/8"	(340mm)

Spindle

Spindle Motor Horsepower (7.5kw - 11kw Inverter Type)	15 HP Peak	(10 HP 30min duty rating)
Spindle Speeds - 2 gear ranges L, H	43 - 2500 RPM	infinitely variable, in 2 gear ranges
Spindle Speed per gear range	L= 43 - 850	H= 125 - 2500 RPM
Constant Torque Ranges	L= 43 - 270	H= 125 - 800 RPM
Constant Power Ranges	L= 270-850	H=800 - 2500 RPM
Spindle Bore	2 3/8" (2.385")	(60mm)
Spindle Nose - Camlock	D1-6 Camlock	(A2-6, 4000 RPM optional)
Spindle ID Taper in Spindle Nose	MT-6	MT#6

Cross Slide X Axis

Rapid Traverse Feedrate	393 IPM	(10m/min)
X-Axis motor	FANUC	Beta IS4 0.75 kw (4,000 rpm)
Cross Slide Travel	10.63"	(270mm)
Cross Slide Dimensions - width x length	8.26" x 27.5"	(210 x 700m)
Cross Slide Ballscrew diameter / pitch	1" / 5mm	(25mm) Accuracy Grade C3
4-Way Programmable Toolpost - height / index speed	20mm tool height / 4	second tool change time
Cross Slide Thrust	1190 lbs.	(540 Kg Force)

Carriage Z Axis

Rapid Traverse Feedrate	472 IPM	(12m/min)
Z-Axis Motor	Fanuc	Beta IS4 0.75kw (4000rpm)
Z-Axis Travel	38.58"	(980mm)
Cutting Tool Height Maximum	0.79"	(20mm)
Carriage ballscrew diameter	1 1/4"	(32mm)
Carriage ballscrew pitch	5mm	Accuracy Grade C3 (H-P Laser Tested)
Carriage Slide Thrust	1190 lbs.	(540 Kg Force)

Tailstock

Quill Diameter	2 15/16"	(75mm)
Quill Stroke	6 5/16"	(160mm)
Quill Taper	MT-5	Morse Taper #5
Quill Tang Drive and drift-slot for tailstock	included	
Tailstock body set-over adjustment	±0.4"	(±1mm)

Specifications

Coolant Pump Motor / Coolant Capacity	1/8 HP / 13.2 gal.	(50 liters)
Electrical Requirements	220 vac ±5%	60 Hz / 60 amp service
Machine Weight	5072 lbs	(2300 kgs)
Shipping Weight	5734 lbs.	(2600 kgs)
Machine Dimensions (L x W x H)	100" x 55" x 73"	(2525 x 1400 x 1840mm)
Shipping Dimensions (L x W x H)	108" x 73" x 83"	(2743 x 1854 x 2108mm)



24" X 60" Heavy Duty CNC Lathe

- + 4.09" Bar Capacity
- + 24" Swing Diameter over Bedways
- + 60" Between Centers
- + Compact Footprints make it ideal for R&D and Toolroom shops
- + Easy to use Fanuc or Fagor CNC Control
- + Meehanite casting help minimize vibration for superior finish and tool life
- + Hardened & Precision ground double-Vee / Double-Flat bedways for high rigidity
- + Automatic Metered lubrication system for ball screws and way
- + Inch/metric threading, Left or right hand threading
- + Built in high capacity coolant system

Capacity & Dimensions

Swing over Bed	24"	(610mm)
Swing over Cross Slide	14.5"	(370mm)
Center Height	12"	(305mm)
Center Distance	59.05"	(1500mm)
Bed Length	102.36"	(2600mm)
Bed Way Width	15.75"	(400mm)
Bed Casting Height	13 3/8"	(340mm)

Spindle

Spindle Motor Horsepower	20 HP Peak	(15 HP 30min duty) (11Kw - 15Kw)
Spindle Speeds - Programmable	30 - 1600 RPM	infinitely variable, in 2 gear ranges
Spindle Speed 2 Gear Ranges - Programmable	M41=30 - 600	M42 = 80 - 1600 RPM
Spindle Speed	H = 80 - 1600 RPM	L = 30 - 600 RPM
Spindle Bore	ø4.09"	(104mm) (90mm with hydraulic chuck)
Spindle Nose - Camlock	D1-8 Camlock	75mm Draw tube
Spindle Bearings - 2 bearing spindle	Tapered Roller Bearings front, roller bearing rear	
Spindle ID taper in spindle nose	MT-8	MT#8 Taper

Cross Slide X Axis

Rapid Traverse Feedrate	197 IPM	(5m/min)
X-Axis motor power	FANUC	Beta IS4 0.75Kw 4000RPM
Cross Slide Travel	12.63"	(320mm)
Cross Slide Dimensions - width x length	9.05" x 29.9"	(230 x 760mm)
Cross Slide Ballscrew diameter	.984"	(25mm)
Cross Slide Ballscrew Pitch	5mm	Accuracy Grade C3 (H-P Laser Tested)
Cross Slide Thrust	1190 lbs	(540 Kg Force)

Carriage Z Axis

Rapid Traverse Feedrate	197 IPM	(5m/min)
Z-Axis Motor Power	FANUC	Beta IS4 0.75kw (4000rpm)
Z-Axis Travel	59.05"	(1500mm)
Cutting Tool Height Maximum	1"	(25mm)
Carriage ballscrew diameter	1.26"	(32mm)
Carriage ballscrew pitch	5mm	Accuracy Grade C3 (H-P Laser Tested)
Carriage Slide Thrust	1190 lbs.	(540 Kg Force)

Tailstock

Quill Diameter	2.95"	(75mm)
Quill Stroke - w/ selectable 2 speed Quill Advance	6.30"	(160mm)
Quill Taper	MT-5	Morse Taper #5
Quill Tang Drive and drift-slot for tailstock	included	
Tailstock body set-over adjustment	±0.4"	(±1mm)

Specifications

Coolant Pump Motor	1/8 HP / 13.2 gal.	
Coolant Tank Capacity	10.5 gal.	(40 liters)
Electrical Requirements	220 vac ±5%	60 Hz / 75 amp service
Machine Weight	8820 lbs.	(4000 kgs)
Shipping Weight	9260 lbs.	(4200 kgs)
Machine Dimensions (L x W x H)	129" x 75" x 80"	(3260 x 1900 x 2030mm)
Shipping Dimensions (L x W x H)	133" x 79" x 86"	



GTW-30 CNC

30" Heavy Duty CNC Big Bore Lathe

- + A2-11 Spindle w/ 6-5/8" Bore
- + 10 - 1000 RPM Standard
- + A2-15 Spindle w/ 10" Bore, 18 - 600 RPM Optional
- + 2-Gear Ranges for Increased Cutting Torque
- + 8-Station Tool Turret – Any combination of ID/OD tools
- + Dual-Turrets (Front & Rear of cross slide) Available
- + Bore-Bar Holder Available for rear of cross slide
- + Available in 60", 80", 120" & 160" Center Distances
- + FANUC Oi-TF Control and FANUC Axis & Spindle Drives

Capacity & Dimensions

Swing over Bed	30"	(760mm)
Turning Diameter (in front of cross slide w/8 station turret turning tool)	22"	(560mm)
Swing over Cross-Slide (turning diameter over cross-slide)	19"	(480mm)
Center Height	15"	(380mm)
Bed width of ways	18"	(460mm)
Bed Casing Height	15.75"	(400mm)

Spindle

Spindle Motor Horsepower (Fanuc 15Kw - 18Kw)	30 HP	(25 HP 30min. rated)
Spindle Speeds	10 - 1000 RPM	
Spindle Gear Ranges - 2 automatically selected gear ranges	L= 30 - 300RPM	H= 10 - 1000 RPMS
Spindle Bore (10" bore optional)	6.69"	(170mm)
Spindle Nose (front & rear) / bearing	A2-11 / Taper Roller Bearings	
Spindle Torque for 6 5/8" bore - low gear / high gear	1180 / 346 ft. lbs.	(1600 / 470 Nm)
Big-Bore Spindle Option - Bore Size	10" (255mm)	A2 - 15 spindle
Big Bore Spindle Speeds	18-600 rpm in 2 ranges	
Big Bore Spindle Gear Ranges	Low 18-186rpm	High 60-600rpm
Big Bore Spindle Torque for 10" bore - low gear/high gear	1475 / 442 ft. lbs	(2000 / 600 Nm)

Axis

Rapid Traverse Feedrate X & Z	394 IPM	(10m/min)
X-Axis Cross Slide Travel	19 5/8"	(500mm)
Z-Axis Travel (listed with each bed length)		
X-Axis Ballscrew Diameter / Servo Motor Power	1.25" (32mm)	2.0 HP (1.6kw)
Z-Axis Ballscrew Diameter / Servo Motor Power	2" (50mm)	4.0 HP (2.9kw)
X-Axis Thrust	2020 lbs	(920 Kgf)
X-Axis Thrust	3020 lbs	(1370 Kgf)
Cross Slide Dimensions W x L	39" x 10"	(1000mm x 258mm)
Minimum input unit	0.0001"	(0.001mm = 40 millionths)

Tool Turret

Hydraulic type / LS-200R		
Tool stations - any combination of ID/OD tooling / Index time	8 stations	
O.D. Tooling (additional I.D. & O.D. tool holders in stock)	1" tools w/8 tool clamps provided	
I.D. Tooling (40mm when specified for metric users)	4 ID (1.5" bore) holders provided	

Tailstock

<i>Air-Assisted Manual Positioning - Quill engraved with inch/metric quill graduations</i>		
Quill Diameter	4.92"	(125mm)
Quill Stroke (manual quill advance, hydraulic optional)	7.87"	(200mm)
Quill Taper	MT-6	Morse Taper#6
Tailstock body set-over adjustment	±0.4"	(±1mm)

Electrical / Hydraulic / Coolant

Power Requirements - FANUC 0i - TF control, motors & drives	30kVA / 220vac / ±5%	
Hydraulic Motor Power	2 HP	
Hydraulic Pressure	435 PSI / Mobil #32oil	
Coolant Pump	3/4 HP	
<i>Machines need stable 220 Volts, 3 Phase - Please use appropriate transformers or voltage stabilizers</i>		



GTW-34/38/42 CNC

34-42" Swing Heavy Duty CNC Big Bore Lathes

- + A2-11 Spindle with a 6-5/8" Bore (10" & 14" Spindle Bores Optional)
- + 5 - 550 RPM Spindle Speeds (4 - 440 RPM with 14" bore)
- + A2-15 Spindle w/ 10" Bore, 18 - 600 RPM Optional
- + 3 - Automatically Selected Gear Ranges for High Torque
- + 8-Station Vertical Tool Turret
- + Rear Spindle Chuck Mount provided for long workpieces
- + Large Boring Bar Holder Available for back of Cross Slide
- + FANUC Oi-TF Control & FANUC Alpha Axis & Spindle Drive

Capacity & Dimensions

Swing over Bed	34 1/4"	(870mm) 42" available
Swing over Cross Slide	20"	(510mm) 27.94" available
Center Height	17 5/8"	(450mm) 21.6" available
Distance between centers	78" - 236"	(2000 - 6000mm)
Bed Width	22"	(560mm)

Spindle

Spindle Motor Horsepower (Fanuc 22Kw - 26Kw)	40 HP Peak	(35 HP 30min. duty rating)
Spindle Speeds (Low = 5-50 / High = 50-550)	5-5550rpm	(4-400 with 13.98" spindle bore)
Spindle Speed Gear Ranges automatically selected	3 gear ranges	(infinitely variable speeds in each range)
Spindle Bore	6 5/8"	(170mm) (Optional 10" and 14" available)
Spindle Nose	A2-11	(Optional A2-15, 255mm bore / A2-20, 355mm bore)

Axis

Cross Slide Travel	21.65"	(550mm)
Cross Slide Surface Dimensions W x L	13" x 39 3/8"	(330mm x 1000mm)
X-Axis Ballscrew / Servo Motor	40mm	Pitch 5mm / 4 HP (3kw) Servo motor
Z-Axis Ballscrew / Servo Motor	63mm	Pitch 10mm / 5.5 HP (4kw) Servo motor
X and Z Axis rapid feed rate	240"/min	(6000mm/min)
X and Z Axis cutting feed rate	120"/min	(3000mm/min)
Minimum input unit	0.0001" (0.001mm = 40 millionth of an inch)	
Cross Slide Thrust	2500 lbs	1140 kg Force
Carriage Slide Thrust	5500 lbs	2500 kg Force

Tool Turret

<i>8 Station tool turret with any mix of ID and OD tools</i>		
Turret Index Time	0.55 seconds station-to-Station (adjacent)	
OD Tool Size (8 O.D. Tool Wedges included)	1.25" x 1.25"	(32mm x 32mm)
ID Tool Holder Bore (4 ID Toolholders included)	2" standard (50mm optional)	

Tailstock

<i>Engraved with inch/metric quill graduations</i>		
Quill Diameter	6.5"	(165mm)
Quill Stroke	9.8"	(250mm)
Quill Taper	MT-6	Morse Taper #6
Body Movement	Hydraulic Motor Driven w/ Hydraulic Clamping	

Specifications

Hydraulic Systems	5 HP (3.7kw) pump
Coolant Pump	3/4 HP
Electrical - FANUC 0i - TF Control, motors & drives	220 vac ±5%
<i>Machines need stable 220 Volts, 3 Phase - Please use appropriate transformers or voltage stabilizers</i>	



GTD-44-55 HK CNC

44"-55" Swing Heavy Duty Big Bore Lathes

- + 30-HP Spindle Motor (40-HP optional)
- + 6 – 500 RPM Spindle Speeds
- + 4 - Automatically Selected Gear Ranges for High Torque
- + A2-11 Spindle with a 6" Bore (9", 10", 12" & 15" Spindle Bores Optional)
- + Rear Spindle Chuck Mount available to support long workpieces
- + Boring Bar Holder Available for back of Cross Slide
- + Optional Tool Turrets Available
- + Dual Tool Turrets Available for front & back of Cross Slide

Capacity & Dimensions

Swing over Bed	44"	(1120mm)
Swing over Cross Slide	27.95"	(710mm)
Distance between centers	78" - 236"	(2000 - 6000mm)
Bed Width	32"	(810mm)

Spindle

Spindle Motor Horsepower - up to 160" bed lengths	30 HP	(22kw Fanuc) / (40 HP Optional)
Spindle Motor Horsepower - 200" + bed lights	40 HP	(30kw)
Spindle Speeds	6-500 rpm	(6-292 with A2 - 15 & A2 - 20 spindles)
Spindle speed gear ranges - automatically selected	4-gear ranges	(infinitely variable speeds in each range)
Spindle Bore	6"	(152mm) (Optional 9", 10", 12" & 15" available)
Spindle Nose	A2-11	(Optional A2-15 / A2-20 spindle nose)

Axis

Cross Slide Travel	23.62"	(600mm) (varies with turret selected)
X-Axis Ballscrew / Servo Motor	40mm	Pitch 5mm / 4 HP (3kw) Servo motor
Z-Axis Ballscrew / Servo Motor	63mm	Pitch 10mm / 5.5 HP (4kw) Servo motor
X and Z Axis rapid feed rate	196"/min	(5000 mm/min)
X and Z Axis cutting feed rate	118" / min	(3000 mm/min)
Minimum input unit	0.0001"	(0.001mm = 40 millionth of an inch)

Tool Turret

Turret Tool Stations	8 Station tool turret with any mix of ID and OD tools	
OD Tool Size	1.25" x 1.25"	(32 x 32mm)
ID Tool Holder Bore (4 ID Toolholders included)	1.97"	(50mm) (63mm Optional)

Tailstock

<i>Engraved with inch/metric quill graduations</i>		
Quill Diameter	7.87"	(200mm)
Quill Stroke	11.81"	(300mm) with 2 speed quill gearing
Quill Taper	MT-6	Morse Taper #6
Body Movement	Carried by saddle - manual lockdown	
Optional Hydraulic Tailstock available	Carried by saddle - hydraulic quill & bed lockdown	

Specifications

Cooling System	1.7 HP (1.275kw) coolant pump
Electrical needs - Fanuc 0i-TF, Drives & Motors	220 vac / ±5% / 3 Phase / 60 Hz
Warranty - 1 Year Machine	2 Year FANUC control and drives
<i>Machines need stable 220 Volts, 3 Phase - Please use appropriate transformers or voltage stabilizers</i>	