

## INDUSTRIAL GRINDERS

### 6 INCH - 1/3 HP

#### FEATURES:

- 2 grinding wheels: 6" x 3/4" x 1/2" -36 Grit and 6" x 3/4" x 1/2" -60 Grit
- Guards are non-exhaust type
- Furnished with GA10 eyeshields
- 115V, 1-phase motor, 3,600 RPM

ORDER # CAN-612  
PRICE **\$226**



## INDUSTRIAL GRINDERS

### 8 INCH - 3/4 HP

#### FEATURES:

- 2 grinding wheels: 8" x 1" x 3/4" -36 Grit and 8" x 1" x 3/4" -60 Grit
- Guards are cast iron, exhaust type
- Furnished with GA11 eyeshields
- Supplied with cast iron tool rests
- 115/230V, 1-phase motor, 3,600 RPM

ORDER # CAN-8107W  
PRICE **\$695**



## INDUSTRIAL GRINDERS

### 7 INCH - 1/2 HP

#### FEATURES:

- 2 grinding wheels: 7" x 1" x 5/8" -36 Grit and 7" x 1" x 5/8" -60 Grit
- Guards are cast iron, exhaust type
- Furnished with GA10 eyeshields
- 115V, 1-phase motor, 3,600 RPM

ORDER # CAN-712E  
PRICE **\$385**



## INDUSTRIAL GRINDERS

### 10 INCH - 1 HP

#### FEATURES:

- 2 grinding wheels: 10" x 1" x 7/8" -36 Grit and 10" x 1" x 7/8" -60 Grit
- Guards are cast iron, exhaust type
- Furnished with GA11 eyeshields
- Supplied with cast iron tool rests
- 115V, 1-phase motor, 3,600 RPM

ORDER # 1022W  
PRICE **\$890**



MACHINE TOOLS

## SURFACE GRINDERS

### ACC-ST SERIES



ACC-12.24ST  
Machine pictured with options.

#### FEATURES:

- Centralized control (pendant mount) for ease of operation, convenience and safety
- Automatic downfeed - easy reversal of the saddle actuates the automatic downfeed
- Had scraped way surfaces deliver superior accuracy and machine longevity
- Solid state control for maximum reliability and accuracy control

### Saddle Type Precision Surface Grinding Machines

**Okamoto**

	ACC-8.20	ACC-12.24	ACC-16.32
Standard chuck size (L x W)	8" x 20"	12" x 24"	16" x 32"
Max distance between wheel & table	15.7"	13.7"	21.5"
Table load capacity including chuck	440 lbs	925 lbs	1,540 lbs
Grinding wheel size (D x W x B)	8" x 1" x 1.25"	12" x 1.5" x 5"	12" x 1.5" x 5"
Grinding wheel speed (60 Hz)	3,600 RPM	1,800 RPM	1,800 RPM
Grinding wheel spindle motor	2 HP	5 HP	5 HP
Vertical feed	-	1/2 HP	-
Hydraulic oil pump	1 HP	2 HP	3 HP
Floor space (L x W x H)	94" x 64" x 68"	107" x 74" x 70"	130" x 88" x 80"
Weight	3,000 lbs	3,900 lbs	7,600 lbs
PRICE	<b>Call for Pricing</b>		

Okamoto also manufactures Cylindrical Grinders up to 13" x 60" sizes, Internal Grinders, and Large Column Surface Grinders up to 32" x 120".

**Need more information?  
Your local Machine Tools Salesperson is available to help you.**

## HIGH PRECISION SURFACE GRINDERS

### KGS-616S, KGS-250AHD & KGS-63AHD

#### KGS-616S Manual Series

#### KGS-250AHD & KGS-63AHD Automatic Series, Saddle Traveling Type

##### FEATURES:

- High precision cartridge type wheel spindle with super precision angular contact ball bearings insure accurate grinding performance, bearings are lubricated by grease for life, suitable for heavy cutting
- Sturdy double walled with symmetrical design provides utmost rigidity, minimizes thermal distortion and ensures accuracy
- Main components of the machine are made of stabilized Meehanite cast iron to achieve good shock absorption; heavy walls, heavy cross rib and superior design make this an extremely rigid machine
- X- and Z-axis way surfaces are coated with Turcite-B, match scraped to the cast iron supports
- Operators control panel accommodates all electrical controls in a clear and ergonomical fashion, with 24 V control circuit making operation particularly easy and safe
- AHD models have 2 proximity switches used for table longitudinal travel reversing control to eliminate noise and guarantee lasting performance
- AHD models provides power down feed and auto-down feed to further enhance productivity



Large column model shown.

##### STANDARD EQUIPMENT:

- Wheel balancing base and arbor
- Wheel flange and grinding wheel
- Diamond dresser
- Work light
- Auto lubricator
- Complete coolant system and splash guard
- Parallel dressing attachment

##### OPTIONAL EQUIPMENT:

- Extra wheel flanges
- Demagnetizer
- Sine bar
- Dust suction coolant system
- Magnetic separator

MACHINE TOOLS

	KGS-616S	KGS-250AHD	KGS-63AHD
Table work surface	16.14" x 6.3"	18" x 8"	23.6" x 11-13/16"
Longitudinal table travel	16.93"	21-1/4"	28"
Crossfeed table travel	7.78"	10-1/4"	13-3/8"
Max distance centre spindle to table	17.3"	18.7"	23.62"
Grinding wheel dim (OD x T x ID)	7.09" x .5" x 1.25"	7" x .5" x 1.25"	14" x 1.5" x 5"
Spindle speed	3,480 RPM	3,480 RPM	1,740 RPM
Spindle motor	2 HP	2 HP	5 HP
Hydraulic pump motor	-	1 HP	2 HP
Crossfeed motor	-	1/5 HP	1/5 HP
ORDER #	KEN-KGS616S	KEN-KGS250AHD	KEN-KGS63AHD
PRICE	\$12,500	\$22,200	\$32,200

### Automatic Surface Grinders, Large Column Travelling Type

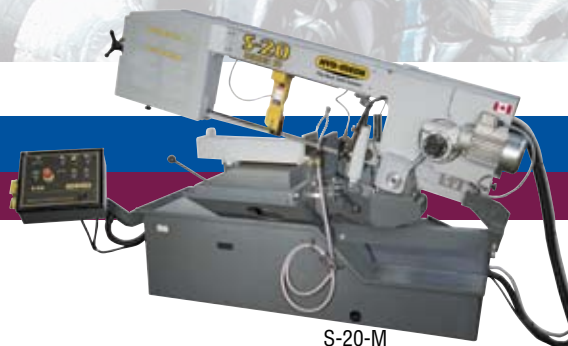
Pricing available upon request

	KGS-510AH/ AHD	KGS-515AHD	KGS-615AHD	KGS-620AHD	KGS-715AHD	KGS-820/825/ 830AHD	KGS-920/925/ 930AHD
Table work surface	20" x 40"	20" x 60"	24" x 60"	24" x 80"	28" x 60"	32" x 80"/100"/120"	36" x 80"/100"/120"
Longitudinal table travel	44.88"	62.99"	62.99"	87.8"	62.99"	88.58"/108.27"/127.95"	
Crossfeed table travel	21.26"	22.44"	25.98"		29.92"	34.84"	37.8"
Max distance centre spindle to table	22.64"	23.62"			32.68"		
Grinding wheel dim (OD x T x ID)	13.98" x 1.5" x 5"	13.98" x 1.97" x 5"	13.98" x 1.97" x 5"	13.98" x 1.97" x 5"	13.98" x 1.97" x 5"	20" x 1.97" x 5"	
Spindle speed (60 Hz)	1,740 RPM					1,150 RPM	
Spindle motor	7.5 HP	10 HP			15 HP		
Hydraulic pump motor	3 HP	5 HP			10 HP to 15 HP depending on bed length		
Crossfeed motor	1/4 HP	1/4 HP			Hydraulic		

#### All models are available as a "Wizard" Series

- WM1 - Programmable Downfeed Surface Grinder
- WMA1 - Programmable Downfeed Surface Grinder with Automatic Compensate Over-Head Dresser
- WM2 - Programmable Downfeed and Crossfeed Surface Grinder
- WMA2 - Programmable Downfeed and Crossfeed Surface Grinder with Automatic Compensate Over-Head Dresser

Call your local Machine Tools Salesperson for more information and pricing.



S-20-M

**HYD-MECH**

All Hyd-Mech Machines are  
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## BANDSAWS

### S-20 SERIES III

#### Swing Head Mitering Bandsaws

##### S-20-M FEATURES:

- 13" x 18" capacity
- 1" x 14'10" blade size
- 90° to 30° mitre capacity
- 17-3/4" cast iron band wheels
- 3 HP, 3-phase direct drive with A/C inverter offering variable band speed (45 - 330 SFM)
- Cast iron guide arms, adjustable idler guide arm, supported by linear bearings
- Safety door interlocks
- Heavy-duty vise with quick locking lever system
- Pre-set carbide guide inserts
- Mechanical blade tension with LED display on control panel ensures proper blade tension
- Gravity feed with fast approach button
- Blade breakage switch
- Ergonomically positioned "swing away" control panel
- Flood coolant system and wash down hose

##### OPTIONS:

- 34" adjustable material stop
- Work light
- Mist lubrication system
- 5' idler conveyor
- Power conveyors

\* Steel surcharges may apply

		S-20-M Manual Bandsaw	S-20-P Semi-Automatic Bandsaw	S-20-A Fully-Automatic Bandsaw
Capacity	90° rectangular	13" x 18"	13" x 18"	13" x 18"
	90° round	13" dia	13" dia	13" dia
	45° rectangular	13" x 10-3/4"	13" x 10-3/4"	13" x 10-3/4"
	45° round	12" dia	12" dia	12" dia
	60° rectangular	13" x 7-3/4"	13" x 7-3/4"	13" x 7-3/4"
	60° round	8-1/2" dia	8-1/2" dia	8-1/2" dia
Blade size	Length	14' 10"	14' 10"	14' 10"
	Width	1"	1"	1"
	Thickness	.035"	.035"	.035"
Blade speed		45 - 330 SFM	45 - 330 SFM	40 - 350 SFM
Blade wheel diameter		17-3/4"	17-3/4"	17-3/4"
Motor	Blade	3 HP	3 HP	3 HP or 5 HP with PLC option
	Hydraulic	-	1/2 HP	1 HP
Table height		31"	31"	-
Overall dimensions (W x L x H)		92" x 75" x 52"	92" x 75" x 52"	93" x 86" x 52"
Maximum workload		5,000 lbs	-	5,000 lbs
ORDER #		HYD-S20	HYD-S20P	HYD-S20A
MSRP PRICE*		<b>\$9,370</b>	<b>\$12,875</b>	<b>\$22,250</b>

MACHINE TOOLS

## BANDSAWS

### S-23 SERIES

#### Swing Head Mitering Bandsaws

##### S-23-A FEATURES:

- 16" x 18" capacity
- 1-1/4" x 15'6" blade size
- 45° single miter
- 5 HP, 3-phase blade drive
- Coolant system with coolant wash power hose
- Full stroke hydraulic vising
- Output table has a coolant return tray
- Positive hydraulic downfeed
- Blade breakage switch
- 5 HP frequency blade drive
- Sequencer

##### OPTIONS: (partial list)

- 34" adjustable material stop
- Variable vise pressure
- Out of stock limit switch
- Mitsubishi PLC
- Full capacity hydraulic overhead bundling (2 vises)

\* Steel surcharges may apply



S-23-A

**HYD-MECH**

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		S-23-M Manual Bandsaw	S-23-H Hydraulic Lift & Vise Bandsaw	S-23-P Semi-Automatic Bandsaw	S-23-A Fully-Automatic Bandsaw
Capacity	90° rectangular	16" x 18"	16" x 18"	16" x 18"	16" x 18"
	90° round	16" dia	16" dia	16" dia	16" dia
	45° rectangular	16" x 10"	16" x 10"	16" x 10"	16" x 10"
	45° round	12" dia	12" dia	12" dia	12" dia
	60° rectangular	16" x 6"	16" x 6"	16" x 6"	-
	60° round	8" dia	8" dia	8" dia	-
Blade size	Length	15' 6"	15' 6"	15' 6"	15' 6"
	Width	1-1/4"	1-1/4"	1-1/4"	1-1/4"
Blade speed		75 - 350 SFM	75 - 350 SFM	75 - 350 SFM	75 - 350 SFM
Blade wheel diameter		19"	19"	19"	19"
Motor	Variable frequency	5 HP	5 HP	5 HP	5 HP
	Hydraulic	-	1 HP	2 HP	1 HP
Table height		31"	31"	31"	31"
Overall dimensions (W x L x H)		97" x 70" x 63"	97" x 70" x 63"	97" x 70" x 63"	97" x 80" x 63"
ORDER #		HYD-S23	HYD-S23H	HYD-S23P	HYD-S23A
MSRP PRICE*		<b>\$14,625</b>	<b>\$16,925</b>	<b>\$21,685</b>	<b>\$27,250</b>



## BANDSAWS

### MODEL DM-10



### Compact Scissor Double Mitring Bandsaw

#### FEATURES:

- Easy sliding, cast iron vises
- 2-2.5 HP, 3-phase drive
- Double mitre capability from 60° left and up to 45° right
- Rotating table with single cut line
- Carbide guides for longer blade life
- Work stop
- Coolant pump for band lubrication and cooling
- Gravity feed or manual feed
- Dual blade speed selector
- Heavy duty cast iron wheels
- Conveniently located control panel within safe operator reach
- Safety limit switches
- Manual blade tension with tension meter and blade breakage switch

- UL and CSA compliance
- Compact size at a very compacted price

#### OPTIONS:

- Pneumatic vise with foot pedal
- 24" calibrated work stop
- Mist coolant system
- Single phase
- K110 5' infeed/outfeed table, 240 lb load per roller
- Adaptor plates needed when joining the K110 to the bandsaw (outfeed side only)

#### SPECIFICATIONS:

- 7-3/4" x 11" rectangular capacity
- 9" x 9" square capacity
- 9-3/4" dia round capacity
- 1" x 9' 8" blade
- 12" blade wheel diameter
- 2-2.5 HP blade drive
- 34" table height
- 70"W x 30"L x 72"H

**\$5,800**

ORDER # HYD-DM103PH  
MSRP PRICE\*

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\* Steel surcharges may apply

MACHINE TOOLS

## BANDSAWS

### M SERIES



All Hyd-Mech Machines are  
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This Pivot-Style bandsaw provides exceptional mitre cutting capability for multi-shift, high production environments. Ideal for use in tight working spaces, set-up time is reduced by the versatile swing head. The M-20-A can be programmed to handle 99 different jobs, running as many as 5 jobs consecutively in the job queue.

#### FEATURES:

- Fully automatic controls
- 60° mitre capability
- Carbide guides
- 33" shuttle stroke
- Blade breakage switch
- PLC 100 program control
- Hydraulically driven chip auger
- Hydraulic vice control
- Hydraulic head swing
- Hydraulic guide arm
- Hydraulic blade tension adjustment
- Work light

#### OPTIONS AVAILABLE:

- Full capacity hydraulic overhead bundling (2 vises)
- Out-of-stock switch
- Variable vise pressure (2 vises)
- PLC 500
- Vertical rollers
- Digital angle display
- Blade deviation monitor
- Laser beam light
- Mist lube
- Chip bucket
- Outboard vise (M-20-A only)

\* Steel surcharges may apply



### Heavy Duty Scissor Style Bandsaws

M-16-A

		M-16-A Automatic Bandsaw	M-20-A Automatic Bandsaw
Capacity	90° rectangular	16" x 25"	20" x 30"
	90° round	16" dia	20" dia
	60° rectangular	-	12" x 20"
	60° round	-	14" dia
	45° rectangular	15" x 16"	19" x 20"
	45° round	16" dia	20" dia
Blade size	Length	18' 6"	20' 6"
	Width	1-1/4"	1-1/2"
	Thickness	.042"	.050"
Blade speed		50 - 350 SFM (variable)	50 - 350 SFM (variable)
Blade wheel diameter		19"	22"
Motors	Blade	7-1/2 HP	10 HP
	Hydraulic	3 HP	3 HP
Machine weight		7,400 lbs	7,700 lbs.
Overall dimensions (W x L x H)		132" x 90" x 66"	140" x 90" x 66"
Vise control		Hydraulic	Hydraulic
Table height		32"	32"
Maximum workload		8,000 lbs	8,000 lbs
MSRP PRICE*		<b>\$43,300</b>	<b>\$51,700</b>

## BANDSAWS

### H SERIES

#### Programmable Heavy-Duty Horizontal Bandsaws

##### FEATURES:

- Extremely heavy duty cast iron guide arms and wheels
- Heavy-duty full stroke vises
- Hardened and replaceable wear strips/vises plates
- Carbide guides
- Heavy-duty gearbox and motor assembly
- Variable frequency drive
- Easy access servicing panels
- Wash down hose
- Powered blade brush
- Hydraulic guide arm positioning
- Hydraulic blade tension (not available on H-10-A)
- Hydraulic chip auger (not available on H-10-A)



H-10-A

		H-10-A Automatic Bandsaw	H-14-A Automatic Bandsaw	H-18-A Automatic Bandsaw	H-22-A Automatic Bandsaw
Capacity	90° square	10" dia	14" dia	18" dia	22" dia
	90° round	10" dia	14" dia	18" dia	22" dia
	90° rectangular	10" x 10"	14" x 14"	18" x 18"	22" x 22"
	Bundling cap (opt) w/canted head	10" x 10"	14" x 14"	18" x 18"	22" x 22"
Blade size	Length	12'6"	15'4"	19' 2"	22' 6"
	Width	1-1/4"	1-1/4"	1-1/2"	2"
	Thickness	.042"	.042"	.050"	.063"
Blade speed		50 - 350 SFM VFD	50 - 350 SFM VFD	50 - 350 SFM VFD	40 - 300 SFM VFD
Blade wheel diameter		16"	19"	22"	27"
Motor	Blade	5 HP	7.5 HP	10 HP	10 HP
	Hydraulic	1 HP	2 HP	3 HP	3 HP
Hydraulic system pressure		600 PSI	700 PSI	1,000 PSI	1,000 PSI
Shuttle stroke		0 - 24" single stroke	0 - 34" single stroke, multi-shuttle capability	0-34" single stroke, multi-index capability	0-34" single stroke, multi-index capability
Maximum workload		4,000 lbs	6,000 lbs	10,000 lbs	15,000 lbs
Overall dimensions (W x L x H)		83" x 68" x 67"	94" x 81" x 74"	127" x 88" x 92"	141" x 88" x 92"
MSRP PRICE*		\$28,850	\$40,150	\$53,400	\$66,950

##### Features continued...

- Blade breakage switch
- Hydraulic vise control
- H-10-A, H-14-A, H-18-A and H-22-A are available with split vise
- PLC 100 control (except H-10-A which has NC control with PLC memory)
- Work light
- Readily available and easy-to-replace parts

MACHINE TOOLS

##### OPTIONS:

- Full capacity hydraulic overhead bundling
- Variable vise pressure
- Vertical rollers
- 6° cant head (not available on all models)
- Out-of-stock switch (standard on H-10-A)
- Mist lubrication
- Blade deviation
- Laser light (H-22-A, H-28-A and H-32-A only)
- Outboard vise (H-22-A and H-28-A only)

		H-28-A Automatic Bandsaw	H-26/42 Semi-Automatic Bandsaw	H-32-A Automatic Bandsaw	H-40/40 Semi-Automatic Bandsaw
Capacity	90° round	28" dia	32" dia	32" dia	40" dia
	90° rectangular	28" x 28"	42" w x 26" h	32" x 32"	40" x 40"
	6° cant head	24" h x 28" w	-	26" h x 32" w	-
Blade size	Length	25'	33'	30' 4"	37'
	Width	2"	2-5/8"	2-5/8"	3"
	Thickness	.063"	.063"	.063"	.063"
Blade speed		40 - 300 SFM VFD	75 - 300 SFM VFD	40 - 300 SFM VFD	45 - 225 SFM VFD
Blade wheel diameter		38"	38"	38"	45"
Motor	Blade	10 HP	20 HP	20 HP	20 HP
	Hydraulic	5 HP	3 HP	5 HP	5 HP
Hydraulic system pressure		1,200 PSI	1,300 PSI	1,300 PSI	1,200 PSI
Shuttle stroke		0-32" single stroke, multi-index capability	-	0-32" single stroke, multi-index capability	-
Maximum workload		30,000 lbs	30,000 lbs	30,000 lbs	50,000 lbs
Overall dimensions (W x L x H)		161" x 92" x 120"	217" x 82" x 137"	182" x 92" x 120"	215" x 102" x 145"
MSRP PRICE*		\$89,250	\$92,650	\$108,000	\$139,640



All Hyd-Mech Machines are F.O.B. WOODSTOCK, ON

\* Steel surcharges may apply

Larger machines available. Contact your local Machine Tools Salesperson for details.

## BANDSAWS

### V SERIES

#### Vertical Mitering Bandsaws

The innovative design and rugged construction of these bandsaws makes sure they're going to be around long after the competition has quit. Heavy duty hydraulics give these saws the dependability that you have come to expect from the Hyd-Mech line.

#### FEATURES:

- 2nd machine vise (V-18 only)
- Hydraulic downfeed pressure
- Hydraulic positioned head swing 45° left or right (V-18 and V-18-APC only)
- Hydraulically positioned guide arms (V-18 and V-18-APC only)
- Hydraulic full stroke vise
- Flood coolant and flush hose
- Head frame carriage moves on linear guideways
- Powered blade brush

The control console allows the operator control of all machine functions. This means never having to push or pull - simply flip a switch. The machine incorporates Hyd-Mech's excellent hydraulic feed system with "fast approach". The machine features full stroke hydraulic vises and hardened replaceable table wear plates.

#### OPTIONS:

- Digital angle display (V-18 only)
- Hand powered drag chain chip conveyor (V-18 only)
- 6° cant head (V-18 and V-18-APC only)
- Hydraulic 'pop-up' lift rollers (V-18 and V-18-APC only)
- Tall 'square vise inserts'
- Hydraulic chip conveyor (V-18 and V-18-APC only)
- Chip bucket
- Extended head (V-18 and V-18-APC only)
- Hydraulic overhead bundling
- Mist lubrication
- Variable vise pressure
- Outfeed vise (V-18 only)
- Workstop (VW-18II only)



V-18  
Manual Bandsaw



V-18-APC  
Automatic Bandsaw

**HYD-MECH**

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MACHINE TOOLS

		VW-18II Bandsaw	V-18 Bandsaw	V-18-APC Automatic Bandsaw
Capacity	90° rectangular	18" x 20"	18" x 20" (18" x 31"**)†	18" x 20" (18" x 31"**)†
			18" x 28"**)†	18" x 28"**)†
			18" x 18"†	18" x 18"†
	90° round	18" dia	17-1/2" dia	17-1/2" dia
	45° rectangular	18" x 15"	18" x 13" (18" x 21"**)†	18" x 13" (18" x 21"**)†
			18" x 19"**)†	18" x 19"**)†
			18" x 12"†	18" x 12"†
	45° round	15" dia	13" dia (18" dia**)†, 12"†, 17-1/2"**)†	13" dia (18" dia**)†, 12"†, 17-1/2"**)†
	60° rectangular	18" x 10-1/4"	-	-
	60° round	10-1/4" dia	-	-
90° rectangular w/ bundling option	-	18" x 12" (18" x 10"**)†	18" x 12" (18" x 10"**)†	
45° rectangular w/ bundling option	-	18" x 6"	18" x 6"	
Blade size	Length	16' 3"	14' 11" (16' 11"**)†	14' 11" (16' 11"**)†
	Width	1-1/4"	1-1/4"	1-1/4"
Blade speed (variable)		65 - 385 SFM	65 - 385 SFM	65 - 385 SFM
Blade wheel diameter		19"	19"	19"
Motors	Blade	5 HP VFD	7-1/2 HP	7-1/2 HP
	Hydraulic	1/2 HP VFD	2 HP	2 HP
Machine weight		2,700 lbs	4,500 lbs	7,500 lbs
Overall dimensions (W x L x H)		36" x 94-1/2" x 96"	80" x 120" x 97"	120" x 143" x 97"
Vise control		Hydraulic full stroke		
Table height		36-1/2"	38"	38"
MSRP PRICE*		\$24,650	\$34,100	\$67,600

\* Steel surcharges may apply

\*\* With extended head option

† With 6° cant option

Larger machines available. Contact your local Machine Tools Salesperson for details.

## BANDSAWS

### LIGHT DUTY SAWS

These light duty horizontal saws are a good value for the shop that requires occasional cutting.

They are long lasting machines with hardened and ground gears in the transmission and include coolant systems, for longer blade life and faster cutting.



#### RF-712N & RF-712DR

#### Horizontal/Vertical Bandsaw

An industrial quality 7" x 12" capacity bandsaw at an affordable price.

Capacity 7" round

RF-712N: 7" x 12" rectangular

RF-712DR: 7" x 8-1/4" rectangular

Blade size 3/4" x 7'9"

Blade speeds 85, 130, 180, 235 FPM

Motor 1 HP, 220V, 1-phase, 60Hz

Transmission Hardened and ground worm gears

Includes coolant pump

RF-712DR



RF-712DR is also available with 45° swivel head.

#### RF-712GDR

#### 2 Way Swivel Geared Drive Bandsaw

Capacity 7" round  
7" x 8-1/4" rectangular

Blade size 3/4" x 7'9"

Blade speeds Gear step 135, 195, 256 FPM

Motor 1 HP, 220V, 1-phase, 60Hz

Transmission Hardened and ground worm gears

Includes coolant pump

ORDER # RON-RF712GDR

PRICE \$2,350



RF-712N



ORDER # RON-RF712N

PRICE \$1,350

ORDER # RON-RF712DR

PRICE \$1,995

## BANDSAWS

### MEDIUM DUTY SAWS

Great machines where larger size parts need to be cut on a non-production basis. Hardened and ground gears, coolant systems, cast blade guides and full cast iron frames provide rigid cutting and long life.



#### RF-1018V

#### Variable Speed Bandsaw

Capacity 10" round  
6" round at 45°  
7" x 9-3/8" rectangular  
5" x 18-3/8" rectangular

Blade size 1" x 10'9"

Blade speeds 95 - 402 FPM

Motor 2 HP, 220V, 1-phase, 60Hz

Includes coolant pump

ORDER # RON-RF1018V

PRICE \$3,770



#### JFC-330

#### Variable Speed Bandsaw

Capacity 13" round  
12" round at 45°  
8" round at 60°  
12" x 12" square  
11" x 11" square at 45°  
8" x 8" square at 60°  
5" x 19" rectangular  
9" x 12" rectangular at 45°  
7" x 8" rectangular at 60°

Blade size 1" x 12'6"

Blade speeds 98 - 393 FPM

Motor 2 HP, 220V, 3-phase, 60Hz

Includes coolant pump

ORDER # RON-JFC330

PRICE \$6,650



#### JFC-250S

#### 2-Way Swivel Head Bandsaw

Capacity 10" round  
3" x 18" rectangular

Blade size 1" x 11'

Blade speeds 74 - 402 FPM

Motor 2 HP, 220V, 1-phase, 60Hz

Includes coolant pump

ORDER # RON-RF250S

PRICE \$5,200



MACHINE TOOLS

Shown with optional black stand

Our Customer Service Department is here to help you with all your Cutting Needs. Open Weekdays, 6am to 5pm, Pacific Time.

## BANDSAWS

### VERTICAL

#### STANDARD FEATURES:

- Infinitely variable speed
- Cushioned blade tension
- Blade welder with grinder and annealer
- Rubber bonded saw wheels
- Brush for cleaning lower drive wheel
- Air pump to remove chips from point of cut
- Adjustable carbide blade guides and roller guides (2 sets)

- Machine light
- 4-way tilting table
- Rip fence (except Model 450)

# T-JAW



	450	500	600	1000
Height under guides	8-1/2"	12-7/8"	10-3/4"	12-5/8"
Throat, band to column	18"	20"	24"	39-3/4"
Blade speeds	82 - 384 ft/min	82 - 1,496 ft/min	82 - 1,496 ft/min	65 - 1,292 ft/min
Blade widths	1/8" - 5/8"	1/8" - 1"	1/8" - 1"	1/8" - 1"
Blade length	11' 8-1/2"	13' 4"	14' 4"	15' 4"
Size of table	22-1/4" x 19-5/8"	29" x 26-3/4"	29" x 26-3/4"	29" x 26-3/4"
Tilt, main table	15° all directions	15° all directions	15° all directions	15° all directions
Motor	1 HP, 1-Phase	2 HP, 3-Phase	2 HP, 3-Phase	2 HP, 3-Phase
Table height	38"	39-3/8"	39-3/8"	39-3/8"
Overall height	73-5/8"	80-5/8"	81-1/8"	80-3/8"
Net weight	902 lbs	1,386 lbs	1,540 lbs	1,782 lbs
Ship weight	1,078 lbs	1,606 lbs	1,760 lbs	2,002 lbs
ORDER #	TJA-450	500*	TJA-600	1000*
PRICE	<b>\$4,500</b>	<b>\$7,260</b>	<b>\$7,250</b>	<b>\$11,000</b>

\* Factory order

MACHINE TOOLS

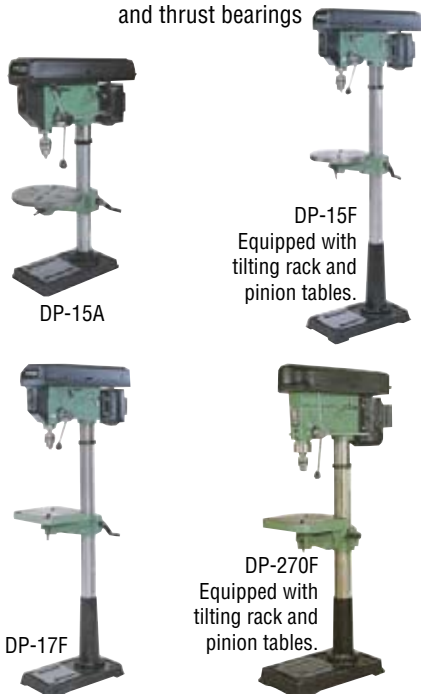
## DRILLING MACHINES

### FINEST QUALITY

#### Finest Quality Drill Presses Manufactured to Strict Tolerances

#### FEATURES:

- Bases and tables are extra heavy for stable support with minimum vibration
- Spindle and drivers are supported by stacked ball and thrust bearings
- CSA Motors provided with Advance drill presses are all rated and designed for continuous operation
- All RDM Advance drill presses are equipped with drill chucks, arbour and drill drift



	DP-15A	DP-15F	DP-17F	DP-270F
Type of drill	Bench	Floor	Floor	Floor
Capacity	5/8"	5/8"	3/4"	1"
Spindle taper	2MT	2MT	2MT	3MT
Max drilling capacity	5/8"	5/8"	3/4"	1"
Max spindle travel	3-5/16"	3-5/16"	3-5/16"	5"
Swing	14-3/16"	14-3/16"	14-3/16"	17-3/4"
Max dist spindle to table	12-1/2"	17-1/2"	30"	26-3/4"
Max dist from spindle to base	19-5/8"	19-5/8"	43-3/4"	46-1/4"
Dia of column	2-7/8"	2-7/8"	3-1/8"	3-3/8"
Size of table	13-15/64"	13-15/64"	14-1/4"	18-1/2"
Tilt of table	+/- 45°	+/- 45°	+/- 45°	+/- 45°
Size of base	20-3/8" x 11-1/8"	20-3/8" x 11-1/8"	20-3/8" x 11-1/8"	22-7/8" x 13-3/4"
Overall height	39-3/8"	64"	65-1/2"	65-1/2"
# of speeds	12	12	16	12
Range of speed	195 - 3,630 RPM	195 - 3,630 RPM	200 - 3,630 RPM	150 - 2,220 RPM
Motor size 110/160	1/2 HP	1/2 HP	3/4 HP	1 HP
Net weight	150 lbs	161 lbs	180 lbs	286 lbs
Gross weight	158 lbs	170 lbs	187 lbs	343 lbs
ORDER #	REX-DP15A	REX-DP15F	REX-DP17F	REX-DP270F
PRICE	<b>\$395</b>	<b>\$425</b>	<b>\$460</b>	<b>\$695</b>

## MILLING & DRILLING MACHINES

### MODELS RF-31LH & RF45

#### FEATURES:

- Rigid construction, the head is a single massive cast piece
- Head is easily raised and lowered with crank
- Precision ground milling table
- Adjustable stops on table
- Heavy-duty tapered gibs to take up wear
- Down feed has both rapid and fine feed controls with easy-to-read front mounted depth gauge
- 12- or 6-speeds for extended cutting range
- Reversing switch
- 1/2" drill chuck and arbor
- 3-1/2" vise



RF-31LH  
Not exactly as shown

Shown with optional stand.

#### MODEL RF-31LH INCLUDES:

- 2 HP, 1-phase motor wired 220V
- Extended column that increases the maximum distance from spindle nose to table to 26"
- Extra large table 9-1/2" x 32"
- Reversing switch
- 3" facemill and arbour

#### MODEL RF-45 INCLUDES:

- Geared head
- Head mounted on solid dovetail ways for rigid end milling
- 3" facemill and arbor

	RF-31LH	RF-45
Drilling capacity	1-1/4"	1-9/16"
Facemill capacity	3"	4"
Endmill capacity	3/4"	1-1/4"
Swing	15-7/8"	21-5/8"
Max distance spindle nose to table	26"	17-1/2"
Spindle taper	3MT	R-8
Spindle stroke (Z-axis)	5"	5"
Diameter of spindle sleeve	3"	3"
Head swivel	360°	90° L & R
Diameter of column	4-1/2"	-
Overall dimensions (w/o stand)	55"H x 35"L x 40"W	69"H x 31"L x 43"W
Motor	2 HP, 1-phase, 220V	2 HP, 1-phase, 220V
Spindle speeds	(12) 120 - 2,500 RPM	(6) 60 - 1,500 RPM
Cross travel of table (z-axis)	7"	9-1/2"
Longitudinal travel of table (X-axis)	23"	20"
T-Slot (#/width)	4 / 5/8"	4 / 5/8"
Working area of table	9-1/2" x 32"	9-1/2" x 32"
ORDER #	RON-RF31LH	RON-RF45
PRICE	<b>\$2,495</b>	<b>\$4,495</b>

#### ACCESSORIES:

DESCRIPTION	ORDER#	PRICE
Cabinet stand	RON-RF31STAND	\$269.95
Power feed	RON-RF31FEED	\$785.00

MACHINE TOOLS

## DRILLING MACHINE

### MODEL RF-40HC

#### FEATURES:

- Geared head
- Rigid construction, the head is a single massive cast piece
- Head is easily raised and lowered with crank
- Precision ground milling table
- Adjustable stops on table
- Heavy-duty tapered gibs to take up wear
- Down feed has both rapid and fine feed controls with easy-to-read front mounted depth gauge
- Reversing switch
- 1/2" drill chuck and arbor
- 3-1/2" vise

#### SPECIFICATIONS:

- 23" x 7.5" cross table
- 3MT spindle taper
- 13.38" longitudinal travel
- 7.09" cross travel
- 1 HP, 1-phase, 220VAC motor
- 6-speeds, 60 - 1,500 RPM
- 1-1/4" drilling capacity in mild steel
- 4" facemill capacity in mild steel
- 3/4" endmill capacity in mild steel
- 3/4" tapping capacity in mild steel
- 1-1/4" capacity in light alloy
- 10.24" spindle nose to column surface



ORDER # RON-RF40HC  
PRICE **\$4,450**



## HIGH END DRILLING MACHINES MADE IN SWEDEN

### GEARED HEAD

#### FEATURES:

- Drill head can be raised, lowered and turned around the column (I-40M fixed head)
- Gear wheels are made of steel and fabric laminate for quiet running; all shafts are made of toughened steel
- Motor is of a squirrel cage type and wound as a 2-speed motor and therefore not dual voltage
- Drill spindle is made of steel and adjustably jounalled in ball and roller bearings; roller bearing is fitted round the spindle taper giving firm mounting of the tools; spindle is counterbalanced by means of a powerful, adjustable spring
- Depth stop is located at the front of the machine
- Table arm can be raised, lowered and turned around the column; table is provided with T-slots and oil groove
- Equipped with a built-in tool ejector to facilitate tool changing
- Model I-30M and I-40M are equipped with automatic spindle feed

#### ACCESSORIES:

- Hand reversing switch
- Foot operated reversing switch and start switch
- Automatic reversing for tapping
- Coolant equipment complete
- Machine base plate with t-slots and oil groove
- Milling chuck with collets
- Milling table
- Threaded spindle nose
- 3-spoke handle (std on I-30M)

MACHINE TOOLS

	I-30	I-30	I-30M
Drilling capacity in cast iron	1-3/16"	1-3/16"	1-3/16"
Drilling capacity in steel	1-3/32"	1-3/32"	1-3/32"
Automatic feed	-	-	.004", .006", .012"
Spindle speeds	130 - 3,480 RPM	130 - 3,480 RPM	130 - 3,480 RPM
Motor	1.4 HP/1.85 HP 230V, 3-Ph, 60 Hz	1.4 HP/1.85 HP 575V, 3-Ph, 60 Hz	1.4 HP/1.85 HP 230V, 3-Ph, 60 Hz
Spindle taper	3MT	3MT	3MT
Max distance spindle to table	23"	23"	23"
Weight	400 lbs	400 lbs	433 lbs
ORDER #	IMA-130220V	IMA-130575V	IMA-130M220V
PRICE	\$4,250	\$4,250	\$6,250

Call us for all your Drilling needs.

	I-40M
Drilling capacity in cast iron	1-3/4"
Drilling capacity in steel	1-5/8"
Automatic feed	.004", .006", .01", .013"
Spindle speeds	108 - 1,800 RPM
Motor	3 HP, 230V, 3-Ph, 60 Hz
Spindle taper	4MT
Max distance spindle to table	32.67"
Weight	688 lbs
ORDER #	I40M220V
PRICE	\$8,883



## RADIAL DRILLS

### KMR SERIES



#### FEATURES:

- Hardened and ground nickel chrome gears
- Arm elevating motor
- Feed depth indicator for spindle
- 24V control voltage
- Spindle is counter-balanced with an adjustable spring
- Upper and lower safety limit switches
- Hardened and ground spindle with precision bearings
- Manual clamping of column, arm and drill on KMR-700S and KMR-1100S
- Hydraulic clamping of column, arm and drill head on KMR-1250DH and KMR-1600DH for maximum rigidity



#### ADDITIONAL FEATURES OF KMR-1250DH & KMR-1600DH:

- Clutch driven main spindle for smooth starting and stopping
- Spindle speeds can be preselected for the next operation, increasing speed and efficiency
- Feed overload safety device prevents damage
- Auto tool ejector button for longer spindle bearing life

#### STANDARD EQUIPMENT ON ALL MODELS:

- Box table
- Complete coolant system
- Work lamp
- Manuals and service tools

	KMR-700S	KMR-1100S	KMR-1250DH	KMR-1600DH
Operation	Manual		Hydraulic	
Column dia	7-7/8"	11-13/16"	13-3/4"	15-3/8"
Distance between spindle centre & column face	(max)	28"	43-5/16"	63"
	(min)	7-15/32"	14"	14-9/16"
Spindle head longitudinal travel	20-1/2"	29-3/4"	35"	48-1/2"
Distance of spindle to base surface	(max)	42"	50"	62"
	(min)	12-5/8"	13-9/16"	15-3/8"
Vertical arm travel	21-1/16"	27-9/16"	27-9/16"	32-7/8"
Work area of base	35-5/32" x 24-13/16"	49-5/8" x 29-7/8"	54-27/32" x 32-9/32"	64-11/16" x 36-5/8"
Box table dimensions (W x L x H)	16" x 21" x 16"		20" x 30" x 16"	
Morse taper spindle	4MT		5MT	
Spindle travel	8-1/4"	8-5/8"	11-3/4"	11-3/4"
Spindle speed ranges	(6) 88 - 1,500 RPM	(9) 49 - 1,524 RPM	(12) 30 - 1,580 RPM	
Spindle feed ranges	.003-.0052-.009 (3)	.003-.0137 (3)	.0023-.044 (12)	.0023-.044 (12)
Motor for main spindle	2 HP/220V/3-Ph/60Hz	3 HP/220V/3-Ph/60Hz	5 HP/220V/3-Ph/60Hz	7.5 HP/220V/3-Ph/60Hz
Motor for arm elevating	1 HP	2 HP	2 HP	
Motor for clamping device	Manual		1 HP	
Height of column	77-1/2"	83"	105-3/4"	117-3/4"
Measurement (L x W x H)	55" x 31" x 77"	81" x 41" x 93"	88.5" x 39" x 100"	108" x 46" x 117"
Net weight	2,557 lbs	5,235 lbs	7,626 lbs	10,557 lbs
Working capacity in drilling steel	1-1/2"	1-3/4"	2"	2-1/4"
Working capacity in cast iron	2"	2-1/4"	2-3/8"	2-5/8"
Working capacity in boring steel	2-3/4"	4"	4-3/4"	5"
Working capacity in cast iron	4-1/8"	6"	7"	7-3/8"
Working capacity in tapping steel	5/8"	1"	2"	
Working capacity in cast iron	7/8"	1-1/2"	2-3/8"	
ORDER #	KAO-KMR700DS	KAO-KMR1100S	KAO-KMR1250DH	KAO-KMR1600DH
PRICE	\$11,100	\$19,250	\$35,550	\$38,850

Other Kao Ming products are available including Double Column Machining Centres. Contact your local Thomas Skinner Machine Salesperson for details.

## MILLING MACHINE

### MODEL LC 1-1/2VSL

#### Turret Milling Machine

##### FEATURES:

- The quality is in the details
- Dynamically balanced motor shaft, vari-drive pulleys
- Genuine mehanite castings for high quality and uniform structure
- The underside of the saddle is hand scraped and with oil grooves giving maximum lubrication and oil retention
- One shot simple and reliable lubrication system
- Table and saddle are mounted with thrust bearings that pre-load the feed screws, eliminating end play

##### SPINDLE UNIT:

- Made from 1 piece of Ni-Cr alloy steel
- Supported by 2 precision angular contacts and 1 ball bearing to ensure rigidity

- Inner taper surface is induction hardened and precision ground to ensure durability

MACHINE TOOLS



Shown with optional chip tray.

##### HEAD TILTING SYSTEM:

- Head knuckle is design patented
- Structure greatly increases the stability and rigidity when vertical head is tilted at all angles, front and back, to perform complicated work
- 6 T-bolts lock the knuckle to the ram



##### LEADSCREW UNIT:

- Unique double nuts and backlash adjusting design and contact face enlarged to ensure accuracy over the long term and for easy backlash adjustment

##### MILLING HEAD:

- The quietest and smoothest running head you will ever experience
- Uses dynamically balanced pulleys, precision bearings and selectively fitted quill and housing for smooth speed changing, free of noise and vibration

##### GEAR AND QUILL:

- Hardened and ground spindle backgears running in a greased packed housing ensures the best quality, fatigue strength and low noise
- Chrome coated and mirror ground quill to fit individual housing offers extreme high spindle accuracy and stability

##### STANDARD EQUIPMENT:

- Mitutoyo KA 2-axis DRO
- R-8 spindle
- Rubber chip covers (front and back)
- One shot lubrication
- Complete coolant system
- Tools and tool box
- Chromed bedways

##### OPTIONAL ACCESSORIES:

- Power drawbar\*
- Servo power feed systems x, y, z\*
- Digimatic quill kit
- 3-axis DRO
- 4" riser blocks
- Chip tray
- \* Installation extra

Table size	42" x 9"
Longitudinal travel	36"
Cross travel	12"
Vertical travel (knee)	16"
Vertical spindle motor	3 HP, 220V, 3-Ph, 60 Hz
Weight (approx)	2,222 lbs
Spindle speeds (60HZ)	60 - 4,500 (variable speed)
Spindle taper	R8
Quill travel	5"
Vertical feeds (per revolution of spindle)	.0015, .003, .006
Head swivel/tilt	(R&L - 90°) (F&B - 45°-38°)
Overarm travel	12"
Overarm swivel	360°
Spindle nose to table	0" - 18-1/2"
Spindle centreline to column surface	6-3/4" - 18-3/4"
Shipping dimensions (W x D x H)	60" x 60" x 72"
ORDER #	LON-LC112VSL
PRICE with Mitutoyo KA 2-Axis DRO installed	<b>\$10,600</b>

## MILLING MACHINE

### MODEL LC-185VS

#### Vertical Milling Machine

##### FEATURES:

- Dynamically balanced motor shaft, vari-drive pulleys
- Extra lubrication design between quill and housing
- One piece quill pinion and shaft
- Quill and housing are selectively fitted
- Meehanite castings for high quality and uniform structure
- 25-1/2" extra wide saddle
- Unique double nut and anti-backlash design ensures accuracy and ease of adjustment
- Spindle is made of 1-piece Ni-Cr alloy steel
- Spindle is mounted on 2 angular contact bearings and 1 ball bearing for maximum rigidity
- Table and saddle are mounted with thrust bearings that preload the feed screws, eliminating end play
- Rigid square ways on Y-axis are hardened and ground with Turcite-B coating on both sides of saddle
- X, Y, leadscrews have special coating treatment

##### STANDARD EQUIPMENT:

- R-8 spindle
- One shot lubrication
- Rubber chip cover
- Complete coolant system
- Halogen worklight
- Hardened and ground box way cross feed and vertical column

##### OPTIONAL EQUIPMENT:

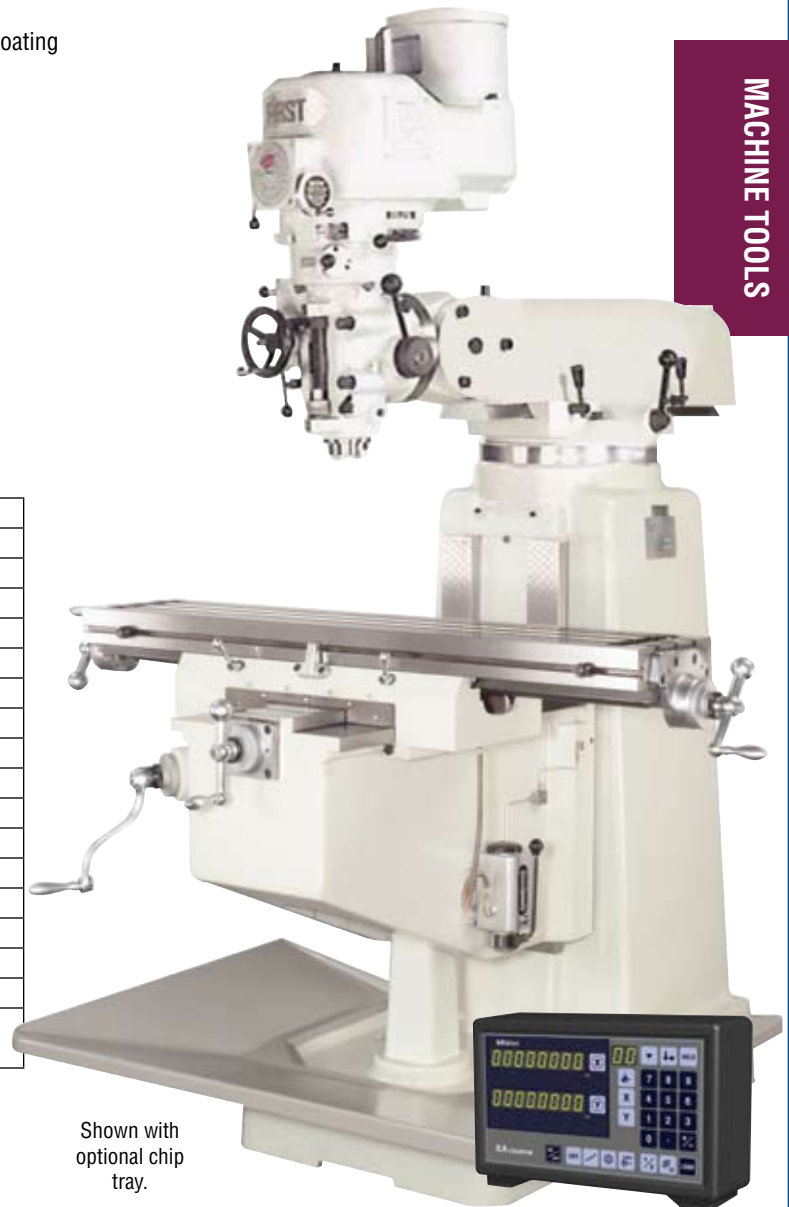
- 4" riser block
- Servo power feed
- Lower voltage control system
- 3-axis DRO
- Chip tray

Table size	50" x 10"
Longitudinal travel	31"
Cross travel	16.3"
Vertical travel (knee)	15.3"
Vertical spindle motor	3 HP, 220V, 3-Ph, 60 Hz
Spindle speeds	60 - 4,500 RPM (variable speeds)
Spindle taper	R8
Quill travel	5"
Vertical feeds (per revolution of spindle)	.0015, .003, .006
Head swivel/tilt	(R&L - 90°) (F&B - 45°)
Overarm travel	18.5"
Overarm swivel	360°
Spindle nose to table	5.31" - 20.7"
Spindle centreline to column surface	9.6" - 21.8"
Weight (approx)	2,750 lbs
Shipping dimensions (W x D x H)	66" X 64" X 70"
ORDER #	LON-LC185VS
PRICE with Mitutoyo KA 2-Axis DRO installed	<b>\$12,250</b>

# FIRST

#### All First Machines are made in a World Class Manufacturing Facility:

- More than 100 equipments in machining facility including Machining Centres, CNC Lathes and CNC grinders
- Air conditioned facility and ISO 9001 certified ensures the stability of quality mass productions
- Fully computerized network station offers an efficient production line and great service



Shown with optional chip tray.

MACHINE TOOLS

## HEAVY DUTY MILLING MACHINES

### LC-20 SERIES

The First LC-20 heavy duty vertical turret mill is built to be the best vertical mill in the industry. Accurate, precise, durable, trouble free. It's manufactured from superior materials using state of the art equipment like Okuma 5-sided machining centres. First mills have a solid 35 year reputation for quality, precision, reliability and service. Take a closer look at the LC-20 Series, you'll find First means enduring quality.



#### FEATURES:

- Turcite-B coated ways
- Centre mounted crossfeed screw
- Nickel-chrome spindles
- Super precision three bearing support
- Enlarged turret clamping surfaces
- Backlash adjustment on X- and Y-axis
- Heavy duty variable speed head
- Unique 8 T-bolt tilt head locking

#### STANDARD EQUIPMENT:

- Mitutoyo KA 2-Axis DRO
- Complete coolant system
- Coolant tray
- Halogen worklight
- One shot lubrication system
- Box way design for heavy duty work
- Power feed and rapid on longitudinal travel
- Power rapid travel on knee
- Pendant control panel
- 2-speed spindle motor
- Turcite coated ways for wear resistance

Machines include a Mitutoyo KA 2-axis DRO installed!

#### OPTIONAL EQUIPMENT:

- Power drawbar\*
- Y-axis Servo power feed\*
- Digimatic quill kit
- 3-axis DRO
- \* Installation extra



MACHINE TOOLS



LC-20VSG



LC-20VHS

	LC-20 VSG Vertical	LC-20 VHS Vertical/ Horizontal
Table size	56" x 10"	56" x 10"
Longitudinal travel (manual max)	36.2"	36.2"
Cross travel	16.3"	16.3"
Vertical travel (knee)(manual max)	18"	18"
Longitudinal feeds	.8" - 27.2"/min.	.8" - 27.2"/min.
Longitudinal rapid feeds	82-7"/min	82-7"/min
Vertical feeds (knee)	31.5"/min	31.5"/min
Vertical spindle motor	5 HP, 220V, 3-Ph, 60 Hz	5 HP, 220V, 3-Ph, 60 Hz
Horizontal spindle motor	-	5 HP, 220V, 3-Ph, 60 Hz
Table longitudinal feed	1 HP	1 HP
Vertical feeds	1.5 HP	1.5 HP
Coolant pump	1/8 HP	1/8 HP
<b>Vertical main spindle</b>		
Spindle speeds variable	60-4,500 RPM	60-4,500 RPM
Spindle taper	ISA 40 INT	ISA 40 INT
Quill travel	5"	5"
Vertical feeds	.0016, .0031, .0063/rev	.0016, .0031, .0063/rev
Head swivel/tilt	(R & L - 90°)(F & B - 45°)	(R & L - 90°)(F & B - 45°)
Overarm travel	18.5"	18.5"
Overarm swivel	360°	360°
Spindle nose to table	3.1" - 21.3"	4.5" - 21.7"
Spindle centreline to column surface	14" - 32.5"	14" - 32.5"
<b>Horizontal main spindle</b>		
Spindle speeds	-	55-1,180 RPM
Spindle taper	-	ISA 40 INT
Spindle centreline to table surface	-	-1" to +16.1"
Spindle centreline to overarm underside	-	5.7"
Spindle nose to column surface	-	1.1"
Weight	3,960 lbs	4,422 lbs
Shipping dimensions (W x D x H)	74.8" x 83.1" x 73"	74.8" x 83.1" x 73"
ORDER #	LON-LC20VSG	LON-LC20VHS
PRICE with Mitutoyo KA 2-Axis DRO installed	<b>\$19,795</b>	<b>\$24,595</b>

## BORING & MILLING MACHINES

### MODEL CS-VBM-4V & CS-VBM-5VL

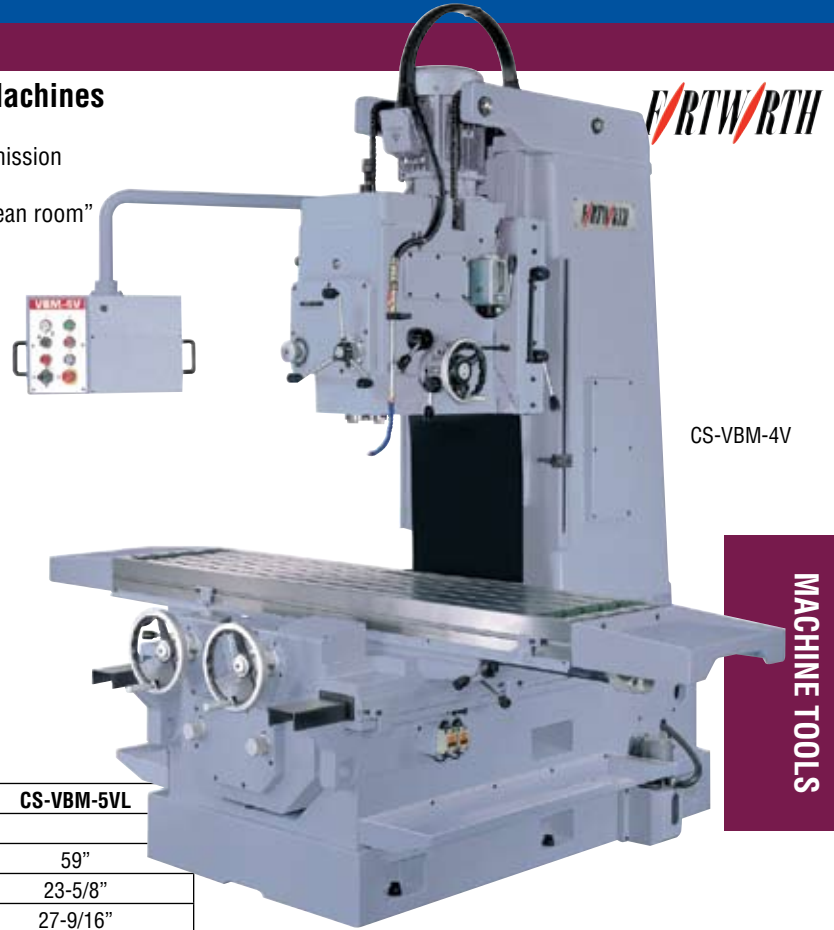
#### Heavy-Duty Bed Type Vertical Boring & Milling Machines

##### FEATURES:

- These heavy duty bed mills offer high rigidity with the bed transmission slung low between the wide Y-axis ways
- The extra high precision head and spindle are assembled in a “clean room” for smooth, long lasting accuracy
- Hand scraped way surfaces
- Heavy duty box ways
- High quality ribbed castings
- Automatic central lube system
- Pendant control
- Chrome moly hardened and ground gears
- Extremely rigid bedway construction
- Hydraulic head clamping (4V and 5V)
- Power drawbar
- Coolant system
- All controls are centralized for operator’s convenience
- Ball screws are available on request

##### CS-VBM-5VL ADDITIONAL FEATURES:

- Hydraulic table clamping
- Variable inverter feed control



CS-VBM-4V

MACHINE TOOLS

	CS-VBM-4V	CS-VBM-5VL
<b>Capacity</b>		
Table travel(longitudinal)	47-1/4"	59"
Table travel (cross)	17-11/16"	23-5/8"
Vertical spindle head travel (vertical)	21-5/8"	27-9/16"
Vertical spindle nose to table top	4" ~ 25-5/8"	4" ~ 31-1/2"
Vertical spindle centre to column front	17-11/16"	21-5/8"
<b>Table</b>		
Table working area	74-13/16" x 17-11/16"	86-5/8" x 19-11/16"
T-Slot(wide x no. x pitch)	.709" x 5" x 3-1/8"	.709" x 5" x 3-9/16"
Table top to floor	33-1/2"	33-7/8"
<b>Spindle head</b>		
Spindle nose	ISO No.50	ISO No.50
Vertical spindle speeds	45 - 1,500 RPM	45 - 1,500 RPM
# of vertical spindle speeds	12 steps	12 steps
Feeds (vertical spindle)	.002 - .008 IPR	.002 - .008 IPR
<b>Feed</b>		
Rapid traverse (longitudinal & cross)	113-3/8 IPM	129-7/8 IPM
Feed rates (longitudinal & cross)	1-1/8 ~ 34-7/16 IPM	0 ~ 39-3/8 IPM
Change of feed	12 steps	infinitely variable
<b>Motors</b>		
Vertical spindle	10 HP/220V/3-PH/60 Hz	15 HP/220V/3-PH/60 Hz
Feed	2 HP	2 HP
<b>Machine size</b>		
Machine height	102"	113"
Floor space (longitudinal x cross)	150" X 87"	175" X 100"
Net weight (approx)	11,440 lbs	15,400 lbs
Shipping dimensions (W x D x H)	75" x 70" x 92"	86" x 100" x 98"
ORDER #	CSVBM4V	CSVBM5VL
PRICE	<b>\$69,850</b>	<b>\$86,895</b>

##### COMMON OPTIONS:

- Mitutoyo 2- or 3-Axis DRO
- Large machine vises
- ISO 50 spindle tooling
- Large dividing heads

Also available from Forworth...  
**CS-VBM-3V** (with 39-3/8" table travel)  
**CS-VBM-5VHL** (with 59" table travel)

Call your local Machine Tools  
 Salesperson for more  
 information and pricing.

## MILLING MACHINE

### MODEL CS-G450B

#### Vertical & Horizontal Milling Machine

##### INCLUDES:

- Extra wide 2-axis ways for precision without deflection
- 3-axis power feed and rapid traverse table
- Electromagnetic spindle brake
- Auto central lube system
- Handwheel on saddle for table travel
- Complete coolant system including chip tray
- Turret type milling head
- Backlash elimination on table travel allows for climb milling
- Variable speed vertical spindle
- Headstock gears and shafts are precision ground, hardened chrome moly
- “Joystick” controls instant spindle reverse for tapping
- Vertical quill is chromed 115mm dia and individually fitted to each quill housing)
- Power drawbar
- Mitutoyo 2-axis DRO

##### OPTIONAL:

- Digimatic quill kit



Many more models are available.  
Call your local Machine Tools  
Salesperson for more  
information and pricing.

MACHINE TOOLS

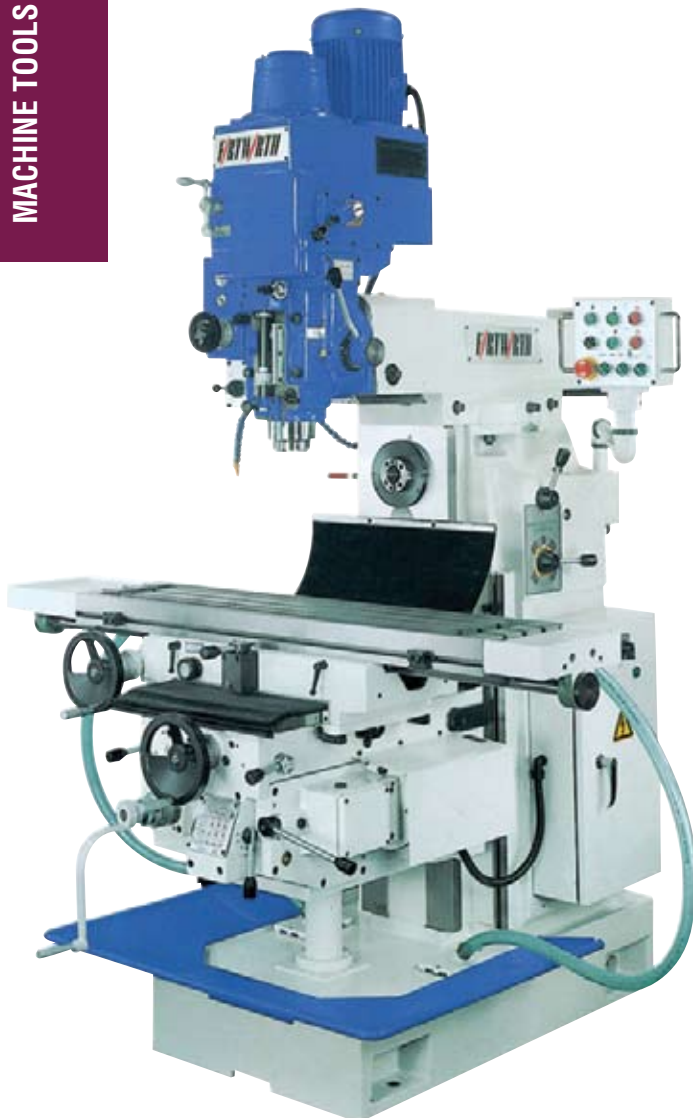


Table size	59" x 12"
Longitudinal travel	41.3"
Cross travel	12.6"
Vertical travel	18.5"
Horizontal spindle motor	7.5 HP
Vertical spindle motor	5 HP
Table longitudinal, cross & vertical feed motor	3 HP
Coolant pump motor	1/8 HP
Max height	100"
Net weight	5,975 lbs
Floor space	26.5" x 47.25"
Shipping dimensions (W x D x H)	59" x 60" x 80"
<b>Vertical spindle</b>	
Spindle speeds (at 60Hz)	120 - 3,600 RPM (variable speed)
Quill travel	5.1"
Quill feeds (3 steps) "/rev	.002, .0038, .0075
Taper	ISO 40
Swivelling angle of spindle head (R&L)	45°
Cross travel ram	20"
Horizontal rotating angle of ram	360°
Distance of spindle end to table top	5.1" - 23.6"
Distance of spindle centre to column surface	4" - 24"
<b>Horizontal main spindle</b>	
Spindle speeds (12 steps) (at 60Hz)	45 - 1,700 RPM
Taper of spindle nose	ISO 40
Distance of spindle centre to table top	.875" - 19.4"
Distance of spindle centre to overarm bottom	7.16"
ORDER #	CHU-CSG450B
PRICE	<b>\$43,995</b>

## LATHES

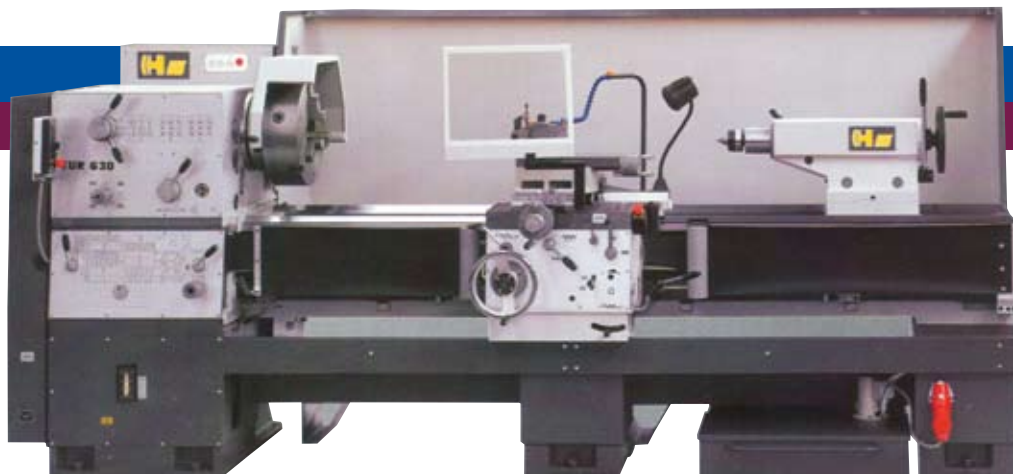
### TUR SERIES



### High Speed Heavy Duty CNC Lathes

#### FEATURES:

- Choose from 4-1/8" or 5-1/2" spindle bore with Camlock nose D1-8 or D1-11
- 4-way rapid traverse with "come-along" tailstock
- Hardened and ground gears and bedways
- Antifriction turcite lined carriage
- Modern heavy duty construction with double-walled bed
- Unique double V-ways for precise carriage movements
- Reversible leadscrew for "double" threading life
- Heavy duty 20 HP main drive motor
- Inch/metric cross screw dial
- Fully clutched headstock (forward, reverse, brake)



#### HEADSTOCK BEARINGS:

- "S" series SKF angular contact (8.2")
- "A" series Timken taper roller (9.6")
- Automatic headstock lubrication
- Longitudinal and cross stop dogs

\*Stock machines. All other factory order.

	TUR-560S	TUR-630S	TUR-630A	TUR-710S	TUR-710A
Swing over bed	22"	25"	25"	28"	28"
Swing over carriage	12-1/2"	15"	15"	17-3/4"	17-3/4"
Distance between centres	60", 80"*, 120", 160"	60", 80", 120", 160"	60", 80", 120"*, 160"	60", 80", 120", 160"	60", 80", 120", 160"
Bed width	17"	17"	17"	17"	17"
Headstock spindle speed	24	24	21	24	21
Headstock spindle range	18 - 1,800 RPM	18 - 1,800 RPM	15 - 1,400 RPM	15 - 1,400 RPM	15 - 1,400 RPM
Main drive motor	20 HP, 440V, 3-Phase				
Spindle bore	4-1/8"	4-1/8"	5-1/2"	4-1/8"	5-1/2"
Spindle nose	D1-8	D1-8	(2) D1-11	D1-8	(2) D1-11
Net weight (80" centres)	9,100 lbs	9,500 lbs	9,500 lbs	9,900 lbs	9,900 lbs

Call your Thomas Skinner Machine Tools Salesperson for pricing information.

#### OPTIONS AVAILABLE ON MANUAL AND CNC LATHES:

- .4" to 7" steady rest
- .4" to 15" steady rest
- 5.5" to 11.8" steady rest
- Taper attachment

### Manual/CNC Combination Lathes

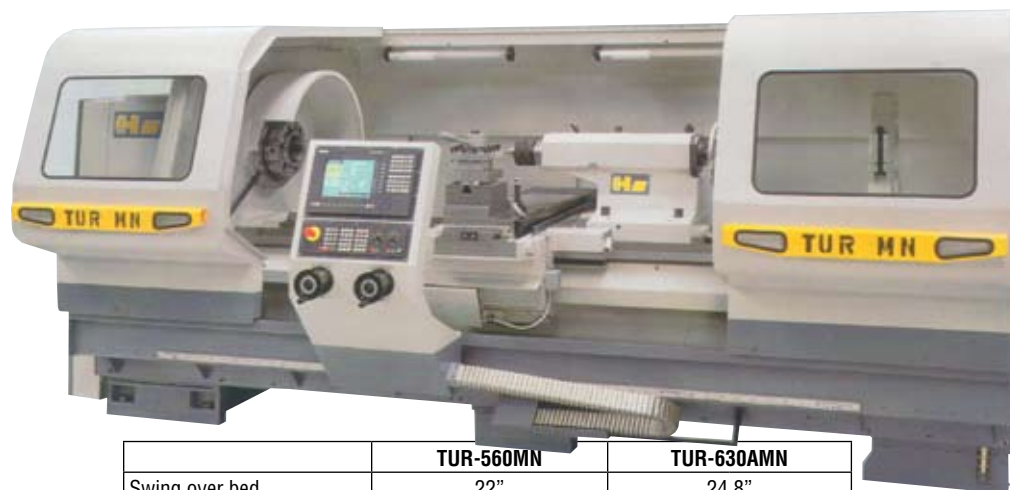
#### FEATURES:

- Siemens 810D control
- Anti-triction turcite lined carriage
- Hardened and ground bedways
- Precision Timken spindle bearings
- 2-speed auto gearbox

#### INCLUDES:

- Multifix "C" toolpost
- Come along tailstock
- Second reference point
- T-Slot on cross slide
- Automatic gear change

Series 800, 900 and 1150 with larger beds and bores are available. Call for details.



	TUR-560MN	TUR-630AMN
Swing over bed	22"	24.8"
Distance between centres	80"	80"   120"
Swing over carriage	11.81"	14.5"
Bed width	17"	17"
Main drive motor	25 HP/440V/3-PH/60 Hz	25 HP/440V/3-PH/60 Hz
Headstock range	2 - 2,500 RPM	2 - 1,850 RPM
Spindle bore (nose)	4-1/8" (D1-8)	5.5" (2 x D1-11)

Call your local Thomas Skinner Machine Tools Salesperson for pricing information.

## HIGH SPEED PRECISION LATHES

### CH SERIES

#### FEATURES:

- 7-1/2 HP motor
- Gap/bed hardened and ground
- D1-6 camlock spindle
- Multiple feed stop bar
- Force fed lubrication to headstock feed gear box and carriage
- Foot brake
- Spindle 3 point support
- Cross slide is hardened and ground
- Inch/metric threading without using change gears
- Overload protection on apron to prevent damage

#### STANDARD EQUIPMENT:

- 2-axis Mitutoyo DRO
- Multifix "B" toolpost
- Taper attachment (on all models except CH-400x1100)
- Bison 8" 3-jaw chuck (D1-6) on CH-400X800 only
- Bison 10" 3-jaw chuck (D1-6) on all other models
- Bison 10" 4-jaw chuck (D1-6) on CH-400X800 only
- Bison 12" 4-jaw chuck (D1-6)
- Complete coolant system
- Steady rest
- Multi-position length stop
- Centre sleeve 6MT x 4MT

- 4MT dead centre (1 pc carbide) (1 pc carbon)
- 7" drive plate
- Service kit
- Splash guard

#### OPTIONAL EQUIPMENT:

- 14" face plate D1-6
- 3.54" follow rest
- Micrometer carriage stop
- 4MT live centre



CH-530X1700

	CH-400X800	CH-400X1100	CH-430X1700	CH-530X1700
<b>Capacity</b>				
Swing over bed	16"	16"	17"	21"
Swing over cross side	9.5"	9-1/2"	10-3/4"	14-1/2"
Swing in gap	22.25"	22-1/4"	24"	28"
Gap width in front of face plate	6"	6"	6"	6"
Distance between centres	31-1/2"	44"	67"	67"
Width of bed	12"	12"	12"	12"
Length of bed	49"	61"	84"	84"
Total travel of compound	4-3/4"	4-3/4"	4-3/4"	6"
Total travel of cross slide	10-1/2"	10-1/2"	10-1/2"	10-1/2"
Height of centre from leg bottom	42-3/8"	42-3/8"	42-3/8"	44-3/8"
<b>Headstock</b>				
Spindle bore	2"	2"	2-1/4"	2-1/4"
Taper of spindle bore & centre	6MT x 4MT	6MT x 4MT	6MT x 4MT	6MT x 4MT
Type of spindle nose	D1-6	D1-6	D1-6	D1-6
Number of spindle speeds	16	16	12	12
Range of spindle speeds	35 - 1,800 RPM	35-1,800 RPM	35-2,000 RPM	35-2,000 RPM
<b>Threads &amp; feeds</b>				
Number of feeds	36	36	36	36
Range of longitudinal feeds	.0027" - .0196"	.0027" - .0196"	.0012" - .034"	.0012" - .034"
Range of cross feeds	1/2 of longitudinal feeds	1/2 of longitudinal feeds	1/2 of longitudinal feeds	1/2 of longitudinal feeds
Lead screw diameter & pitch	1-3/8 - 4 TPI	1-3/8 - 4 TPI	1-3/8 - 4 TPI	1-3/8 - 4 TPI
Range of inch threads	4-42 TPI (36 kinds)	4-42 TPI (36 kinds)	2-72 TPI (44 kinds)	2-72 TPI (44 kinds)
Range of metric pitches	.4mm-.7mm (36 kinds)	.4mm-.7mm (36 kinds)	.2mm-14mm (39 kinds)	.2mm-14mm (39 kinds)
<b>Tailstock</b>				
Total travel of tailstock quill	6"	6"	6"	6"
Tailstock quill diameter	2-3/8"	2-3/8"	2-3/8"	2-3/8"
Taper in tailstock quill	4MT	4MT	4MT	4MT
<b>Motors</b>				
Spindle drive motor	7-1/2 HP/220V/3-Ph/60 Hz	7-1/2 HP/220V/3-Ph/60 Hz	7-1/2 HP/220V/3-Ph/60 Hz	7-1/2 HP/220V/3-Ph/60 Hz
Coolant pump motor	1/8 HP	1/8 HP	1/8 HP	1/8 HP
<b>Machine dimensions</b>				
Space required (LxWxH)	79" x 39" x 55"	90" x 39" x 55"	114" x 39" x 55"	114" x 39" x 55"
Shipping dimensions (L x W x H)	79" x 41" x 59"	90" x 41" x 59"	116" x 41" x 59"	116" x 41" x 59"
Net weight (approx)	3,197 lbs	3,400 lbs	3,750 lbs	3,958 lbs
ORDER #	CHI-CH400800	CHI-CH4001100	CHI-CH4301700	CHI-CH5301700
PRICE	<b>\$21,100</b>	<b>\$21,750</b>	<b>\$24,500</b>	<b>\$25,500</b>

## MID-SIZE PRECISION LATHES

### CHD SERIES



CHD-560X2300

**ADVANCE**  
MACHINE TOOLS

**FEATURES:**

- 15 HP motor
- 4-1/8" spindle bore
- Spindle is supported by 3 P-grade taper roller bearings
- Headstock gears are precision ground chrome molybdenum
- Rapid traverse (longitudinal)

**STANDARD EQUIPMENT:**

- 2-axis Mitutoyo DRO
- Multifix "C" toolpost
- Taper attachment
- Bison 12" 3-jaw chuck (D1-11)
- Bison 16" 3-jaw chuck (D1-11)
- Complete coolant system
- 10" roller steady rest
- 2-speed tailstock (1:1 and 5:1 ratio)
- Full length rear splash guard
- Multi-position length stop
- Centre sleeve 7MT x 5MT
- 5MT dead centre (1 pc carbide) (1 pc carbon)
- 12" drive plate
- Service kit

**OPTIONAL EQUIPMENT:**

- 16" dia 3-jaw chuck D1-11
- 20" dia 4-jaw chuck D1-11
- Follow rest
- Micro carriage stop
- 7.5" - 16" roller steady rest
- 5MT live centre

MACHINE TOOLS

	CHD-560X2300	CHD-660X2300	CHD-660X3000
<b>Capacity</b>			
Swing over bed	22"	26"	26"
Swing over cross slide	13-3/8"	17-1/2"	17-1/2"
Swing in gap	31-3/8"	35"	35"
Gap width in front of face plate	10-5/8"	10-5/8"	10-5/8"
Distance between centres	87-1/4"	87-1/4"	117"
Width of bed	15-3/4"	15-3/4"	15-3/4"
Total travel of compound	9-1/2"	9-1/2"	9-1/2"
Total travel of cross slide	15-3/4"	15-3/4"	15-3/4"
Height of centre from leg bottom	44-1/2"	46-3/4"	46-3/4"
<b>Headstock</b>			
Spindle bore	4-1/8"	4-1/8"	4-1/8"
Taper of spindle bore & centre	7MT x 5MT	7MT x 5MT	7MT x 5MT
Type of spindle nose	D1-11	D1-11	D1-11
Number of spindle speeds	12	12	12
Range of spindle speeds	13 - 1,200 RPM	13 - 1,200 RPM	13 - 1,200 RPM
<b>Threads &amp; feeds</b>			
Number of feeds	36	36	36
Range of longitudinal feeds	.0015-.0409"	.0015-.0409"	.0015-.0409"
Range of cross feeds	1/2 of longitudinal feeds	1/2 of longitudinal feeds	1/2 of longitudinal feeds
Lead screw diameter & pitch	1-3/4 - 4 TPI	1-3/4 - 4 TPI	1-3/4 - 4 TPI
Range of inch threads [optional]	2-72 TPI (44 kinds) [1-42 TPI (48 kinds)]	2-72 TPI (44 kinds) [1-42 TPI (48 kinds)]	2-72 TPI (44 kinds) [1-42 TPI (48 kinds)]
Range of metric pitches [optional]	.0079-.5512 (39 kinds) [.0157-1.1024 (44 kinds)]	.0079-.5512 (39 kinds) [.0157-1.1024 (44 kinds)]	.0079-.5512 (39 kinds) [.0157-1.1024 (44 kinds)]
<b>Tailstock</b>			
Total travel of tailstock quill	7"	7"	7"
Tailstock quill diameter	3"	3"	3"
Taper in tailstock quill	5MT	5MT	5MT
<b>Motors</b>			
Spindle drive motor	15 HP/220V/3-PH/60 Hz	15 HP/220V/3-PH/60 Hz	15 HP/220V/3-PH/60 Hz
Coolant pump motor	1/8 HP	1/8 HP	1/8 HP
<b>Machine dimensions</b>			
Space required (L x W x H)	145" x 47-1/4" x 59"	145" x 47-1/4" x 59"	174" x 47-1/4" x 59"
Shipping dimensions (L x W x H)	148" x 50" x 62"	148" x 50" x 62"	180" x 50" x 62"
Net weight (approx)	6,200 lbs	6,300 lbs	7,000 lbs
ORDER #	CHI-CHD5602300	CHI-CHD6602300	CHI-CHD6603000
PRICE	<b>\$39,995</b>	<b>\$41,500</b>	<b>\$43,500</b>

## CNC UNIVERSAL LATHES

### CL SERIES



### Powerful and Rigid CNC Lathes

#### FEATURES:

- Machine body is made of high quality meehanite cast iron with rigid box construction which not only minimizes the vibration, but also provides high rigidity and consistency even under long term operation
- Induction hardened and precision ground V-shaped slideway ensures high accuracy
- Fanuc OiTC control with 2-year control/drive warranty
- Chip conveyor
- Horizontal 6-station Servo turret (H6)
- Vertical 8-station Servo turret (V8)
- (2) A2-15 flanges, mounted
  - CSA approved electrical components
  - 10.4" LCD colour monitor
  - Hydraulic system
  - High power coolant system
  - Double doors and splash guard
  - Coolant pan and worklight
  - Hydraulic/Manual tailstock
  - Steady rest 1.57" - 9.25"
  - Toolbox and manuals
  - Chucks extra

#### OPTIONS AVAILABLE: (partial list)

- Horizontal 4-station Servo turret
- 12", 15" or 18" 3-jaw hydraulic chuck, hollow
- 20", 22" or 24" 4-jaw manual chuck
- 16" or 18" SMW Autoblok air chuck
- Hydraulic steady rests

The CL-38 is a perfect balance between heavy duty turning and high precision requirement.

Designed to be a universal CNC turning lathe suitable for medium to large workpieces, for barstock, shaft, and chucking machining.

Incorporated with choice of turrets, the CL-38 offers flexible working modes in both production and non-production jobs.

	CL38Cx2000	CL38Cx3000
Max swing	23.62"	26"
Distance between centres	80"	118"
Spindle bore	7"	7"
Spindle nose	A2-15	A2-15
# of speed ranges	2	2
Range of spindle speeds	3 - 1,000 RPM	3 - 1,000 RPM
Taper in tailstock quill	5MT	5MT
Spindle motor	30 HP	30 HP
Weight	15,880 lbs	17,857 lbs
ORDER #	CHI-CL38C2000	CHI-CL38C3000
PRICE USD	<b>\$165,995</b>	<b>\$192,995</b>

MACHINE TOOLS

