# SUMMIT MAGHINE

PRODUCT CATALOG



## SUMMIT MACHINE TOOL LLC

Summit Machine Tool LLC has been delivering quality machines, critical spare parts and exceptional service to the most innovative machine shops, small and large, and the world's leading manufacturers since 1955. Our machines are sound capital investments that can help control costs, help extend the life of manufacturing equipment and meet thousands of production demands.

At Summit, we have set the highest standards in the machine tool industry. Every machine in our product line includes a vast array of features, accessories and included options as "standard", making Summit® machines the best value in the market. In addition to superior standards, we support all of our machines with excellent customer service, technical support and replacement parts.

Because we understand the critical role your machine tools play in your business, we deliver solutions that keep your organization operational, productive and profitable. For over 60 years, we have formed strategic partnerships with global manufacturers and specialty machine shops alike. That is why Summit products are equally trusted by engineers and craftsmen: we offer superior quality machines, extensive technical, mechanical and real-world expertise, a multi-million dollar inventory of machines and parts, as well as excellent after sale support. No wonder Summit is the most trusted name in the industry.

# WHY CHOOSE SUMMIT?

Exceptional Quality & After Sale Support.

Large Inventory for Quick Shipment.

Unbeatable Value.

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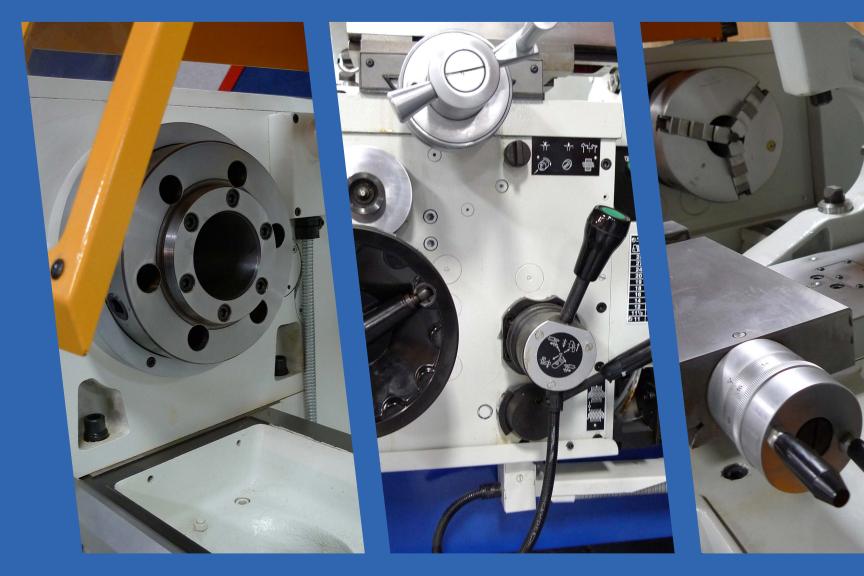
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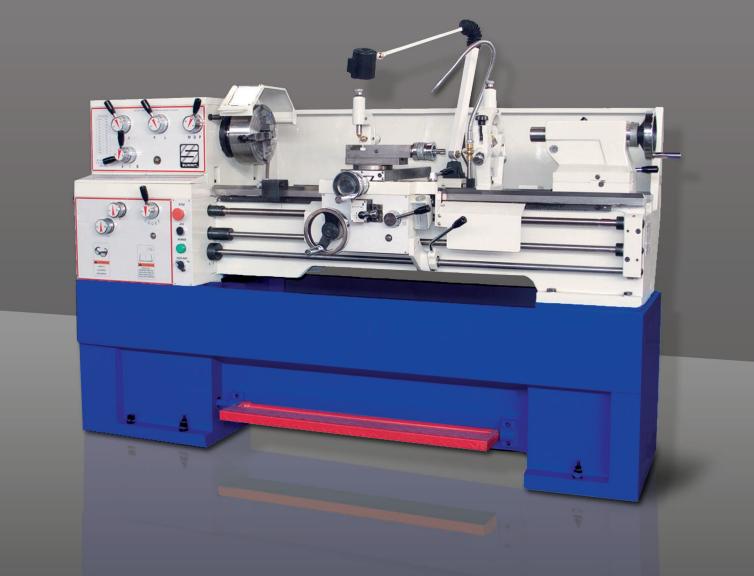
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# MANUAL LATHES

Summit® Manual Lathes are a great investment. They are affordable, rugged, reliable and easy to operate. All Summit Lathes are manufactured to rigid ISO specifications, include a vast array of features and accessories as "standard" and offer a variety of built-in safety features. Constructed from closed grain cast iron, Summit Lathes are built to last and are known for consistent performance and durability even under the most demanding work conditions.



- Inch and Metric Threading
- Hardened & Ground Bed Ways
- Removable Gap
- T-Slotted Compound
- All Cast Iron Base (No Weldmonts)
- Dual Voltage 220/440 Volt 3 Phase / 60 Hz

### INCLUDED ACCESSORIES

- 3 & 4 Jaw Chucks
- Steady Rest
- Follow Rest
- Full Length Splash Guard
- Halogen Work Light
- Taper Attachment
- Coolant System
- Thread Dial
- Micrometer Carriage Stop

### **14" MANUAL LATHES**

SPECIFICATIONS	STANDARD / METRIC
CENTER DISTANCE	<b>40"</b> / 1015mm
SWING OVER BED	<b>14"</b> / 355mm
SWING OVER CROSS SLIDE	<b>8 1/4"</b> / 210mm
SWING OVER GAP	<b>20"</b> / 510mm
CROSS SLIDE TRAVEL	<b>6 1/2"</b> / 165mm
BED WIDTH	<b>10 1/4"</b> / 260mm
SPINDLE SPEED, (NUMBER) RANGE	(12) 40 - 1800 RPM
SPINDLE BORE	<b>1.5"</b> / 40mm
SPINDLE NOSE	D1-4
THREADS (NUMBER) RANGE	(40) 4 - 112 TPI
TAILSTOCK CENTER	3 MT
DIAMETER OF TAILSTOCK SPINDLE	<b>1 3/4"</b> / 45mm
MAIN MOTOR	4 HP
SHIPPING WEIGHT	2,500 lbs







- Inch and Metric Threading
- Hardened & Ground Bed Ways
- Removable Gap
- T-Slotted Compound
- All Cast Iron Construction
- Clutched Headstock
- Dual Voltage 220/440 Volt 3 Phase / 60 Hz
- Two Speed Tailstock
- 4-Way Rapid Traverse Joystick Control

#### **INCLUDED ACCESSORIES**

- 3 Jaw Chuck
- Steady Rest
- Follow Rest
- Full Length Splash Guard
- Halogen Work Light
- Taper Attachment
- Coolant System
- Thread Dial
- Micrometer Carriage Stop

### **16" MANUAL LATHES**

SPECIFICATIONS	STANDARD / METRIC						
CENTER DISTANCE	<b>40"</b> / 1015mm <b>60"</b> / 1524mm <b>80"</b> / 20						
SWING OVER BED		<b>18"</b> / 460mm					
SWING OVER CROSS SLIDE		<b>9 3/8"</b> / 240mm					
SWING OVER GAP		<b>25 1/8"</b> / 640mm					
CROSS SLIDE TRAVEL	<b>11 3/8"</b> / 290mm						
BED WIDTH	<b>15 3/4"</b> / 400mm						
SPINDLE SPEED, (NUMBER) RANGE		(21) 20 - 2000 RPM					
SPINDLE BORE		<b>3"</b> / 75mm					
SPINDLE NOSE		D1-8					
THREADS (NUMBER) RANGE		(64) .25 - 60 TPI					
TAILSTOCK CENTER		5 MT					
DIAMETER OF TAILSTOCK SPINDLE		<b>3 1/2"</b> / 90mm					
MAIN MOTOR		10 HP					
SHIPPING WEIGHT	6,200 lbs 6,600 lbs 7,100 lbs						



#### **INCLUDED ACCESSORIES**

- 3 & 4 Jaw Chuck
- Steady Rest
- Follow Rest
- Full Length Splash Guard
- Halogen Work Light

- Taper Attachment
- Coolant System
- Thread Dial
- Micrometer Carriage Stop

#### **STANDARD FEATURES**

- Inch And Metric Threading
- Hardened & Ground Bed Ways
- Removable Gap
- T-Slotted Compound
- · All Cast Iron Construction

- Clutched Headstock
- Dual Voltage 220/440 Volt
   3 Phase / 60 Hz
- Two Speed Tailstock
- 4-Way Rapid Traverse

### 18"-20"- 22" MANUAL LATHES

SPECIFICATIONS	<b>18-3"</b> STANDARD / METRIC			<b>20-4"</b> STANDARD / METRIC			<b>22-4"</b> STANDARD / METRIC			
CENTER DISTANCE	<b>40"</b> / 1015mm	<b>60"</b> / 1524mm	<b>80"</b> / 2032mm	<b>40"</b> / 1015mm	<b>60"</b> / 1524mm	<b>80"</b> / 2032mm	<b>60"</b> / 1524mm	<b>80"</b> / 2032mm	<b>120"</b> / 3048mm	<b>160"</b> / 4064mm
SWING OVER BED	1	<b>8 1/4"</b> / 460m	m		<b>20"</b> / 510mm		<b>22"</b> / 560mm			
SWING OVER CROSS SLIDE	1	<b>1 1/4"</b> / 285mi	m	1:	3 1/4" / 335mi	m		12 1/2"	320mm	
SWING OVER GAP	<b>28"</b> / 710mm			<b>30"</b> / 760mm			<b>32"</b> / 810mm			
CROSS SLIDE TRAVEL	<b>11 1/2"</b> / 290mm			<b>11 1/2"</b> / 290mm			<b>14 3/4"</b> / 100mm			
BED WIDTH	<b>13"</b> / 75mm			<b>13"</b> / 75mm				16" / 4	05mm	
SPINDLE SPEED, (NO.) RANGE	(12	2) 32 - 1500 R	PM	(12) 32 - 1500 RPM			(12) 35 - 1250 RPM			
SPINDLE BORE		<b>3 1/8"</b> / 80mm	1	<b>4"</b> / 100mm			<b>4 1/8"</b> / 105mm			
SPINDLE NOSE		D1-8		D1-8			D1-8			
THREADS (NUMBER) RANGE		(45) 2 - 72 TP	I	(	45) 2 - 72 TP	ı		(36) 2 -	28 TPI	
TAILSTOCK CENTER		5 MT			5 MT			5 [	МΤ	
TAILSTOCK SPINDLE DIAMETER	<b>3"</b> / 75mm			<b>3"</b> / 75mm			<b>3"</b> / 75mm			
MAIN MOTOR	10 HP			10 HP			15 HP			
SHIPPING WEIGHT (POUNDS)	4,730	5,390	6,600	4,930	5,590	6,800	6,380	7,150	8,800	10,670



- Inch and Metric Threading
- Hardened & Ground Bed Ways
- · Removable Gap
- T-Slotted Compound
- All Cast Iron Construction

- · Clutched Headstock (non-VS only)
- Dual Voltage 220/440 Volt 3 Phase / 60 Hz
- Two Speed Tailstock
- 4-Way Rapid Traverse Joystick Control

- 3 Jaw Chuck
- Steady Rest (2)
- Follow Rest
- Full Length Splash Guard
- Halogen Work Light

- Taper Attachment
- Coolant System
- Thread Dial
- Micrometer Carriage Stop

## 20"-24"-28" SERIES MANUAL **LATHES**

SPECIFICATIONS	<b>20-4"</b> Inch/mm	<b>20-4"</b> Inch/m		<b>24</b> - Inch			<b>" VS</b> /mm	<b>28</b> - Inch	<b>-4"</b> /mm	_	<b>" VS</b> /mm
CENTER DISTANCE	60" / 80" / 12	20" / 160" / 200"		60	" / 80" / 120	)" / 160" / 20	00"	60" / 80" / 120" / 160" / 200"			
SWING OVER BED	20 1/4'	' / 100mm			25" / 6	35mm			28 1/2"	/ 725mm	
SWING OVER CROSS SLIDE	11 7/8"	/ 300mm			17" / 4	30mm			19 5/8"	/ 500mm	
SWING OVER GAP	27 5/8'	/ 700mm			32 5/8"	830mm			36 1/2"	/ 165mm	
CROSS SLIDE TRAVEL	11 3/8" / 290mm			12 1/8" / 310mm			15 1/4" / 100mm				
BED WIDTH	15 3/4'	/ 400mm		15 3/4" / 400mm			15 3/4" / 400mm				
SPINDLE SPEED, (NUMBER) RANGE	(12) 11.5 - 1400 RPM	(inf. var.) 16 - 14	400 RPM	(21) 20 - 1	1) 20 - 1250 RPM (inf. var.) 16 - 1400 RPM			(21) 20 - 1	1250 RPM	(inf. var.) 16	- 1400 RPM
SPINDLE BORE	4 1/8"	/ 105mm		4 1/8" / 105mm			4 1/8" / 105mm				
SPINDLE NOSE		01-8		D1-8				D1-8			
THREADS (NUMBER) RANGE	(64) .2	5 - 60 TPI			(64) .25	- 60 TPI			(64) .25	- 60 TPI	
TAILSTOCK CENTER	5	MT			5	МТ			5	MT	
DIAMETER OF TAILSTOCK SPINDLE	3.5" / 50mm			3.5" / 50mm					3.5" /	50mm	
MAIN MOTOR	10 HP	15 HP		15 HP			15 HP				
SHIPPING WEIGHT	7,200 lbs 7,700 lbs	8,600 lbs 9	,500 lbs	7,600 lbs	8,100 lbs	9,000 lbs	9,900 lbs	7,800 lbs	8,300 lbs	9,200 lbs	10,100 lbs



- Inch And Metric Threading
- Hardened & Ground Bed Ways
- Removable Gap
- T-Slotted Compound
- All Cast Iron Construction

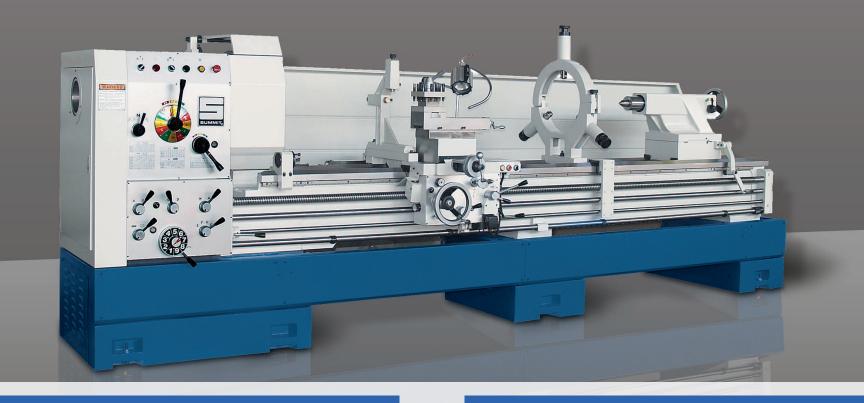
- Clutched Headstock
- Dual Voltage 220/440 Volt 3 Phase / 60 Hz
- Two Speed Tailstock
- 4-Way Rapid Traverse

- 3 Jaw Chuck
- · Steady Rest (2)
- Extra Capacity Steady Rest
- Follow Rest
- Full Length Splash Guard

- Halogen Work Light
- Taper Attachment
- Coolant System
- Thread Dial
- Micrometer Carriage Stop

### **30-5**" MANUAL LATHES

SPECIFICATIONS	STANDARD / METRIC								
CENTER DISTANCE	<b>80"</b> / 2032mm	<b>120"</b> / 3048mm	<b>160"</b> / 4064mm	<b>200</b> " / 7215mm	<b>240"</b> / 6,096mm				
SWING OVER BED			<b>29.9"</b> / 760mm						
SWING OVER CROSS SLIDE			<b>20 1/2"</b> / 520mm						
SWING OVER GAP		<b>37.4"</b> / 950mm							
CROSS SLIDE TRAVEL	<b>15"</b> / 380mm								
BED WIDTH	<b>22"</b> / 560mm								
SPINDLE SPEED, (NUMBER) RANGE			(12) 35 - 1250 RPI	M					
SPINDLE BORE			<b>5.1"</b> / 130mm						
SPINDLE NOSE			D1-11						
THREADS (NUMBER) RANGE			(76) 1.6 - 60TPI						
TAILSTOCK CENTER			#6 MT						
DIAMETER OF TAILSTOCK SPINDLE	<b>4.1"</b> / 105mm								
MAIN MOTOR	20 HP								
SHIPPING WEIGHT	10,780 lbs	12,100	lbs 1	4,100 lbs	16,500 lbs				



- Inch and Metric Threading
- · Hardened & Ground Bed Ways
- Removable Gap
- T-Slotted Compound
- All Cast Iron Construction

- Dual Voltage 220/440 Volt 3 Phase / 60 Hz
- Two Speed Tailstock
- 4-Way Rapid Traverse

- 3 & 4 Jaw Chuck (6.1" Bore)
- Front & Rear 4 Jaw Chucks (9.1" Bore)
- · Steady Rest
- Follow Rest
- Full Length Splash Guard

- Halogen Work Light
- Taper Attachment
- Coolant System
- Thread Dial
- Micrometer Carriage Stop

## 26"-30"-33" SERIES BIG HOLE **ENGINE LATHES**

SPECIFICATIONS	<b>26"</b> Inch/mm			<b>30"</b> Inch/mm			<b>33"</b> Inch/mm					
CENTER DISTANCE	80"	120"	160"	200"	80"	120"	160"	200"	80"	120"	160"	200"
SWING OVER BED		26" / 6	60mm			30" / 7	'60mm		33" / 75mm			
SWING OVER CROSS SLIDE		18" / 4	60mm			22" / 5	660mm		24 3/4" / 100mm			
SWING OVER GAP		35" / 8	90mm		39" / 990mm			41 3/4" / 1060mm				
CROSS SLIDE TRAVEL	14" / 355mm			15" / 380mm			16 1/2" / 165mm					
BED WIDTH	18" / 460mm			18" / 460mm			18" / 460mm					
SPINDLE BORE		6.	1"		6.1" / 9.1"			6.1" / 9.1"				
SPINDLE NOSE		D1	-11		D1-11 / A2-15			D1-11 / A2-15				
SPINDLE SPEED, (NUMBER) RANGE		(12) 13 -	800 RPM		(12) 13 - 800 RPM / (12) 11 - 700 RPM			(12) 13 - 800 RPM / (12) 11 - 700 RPM				
THREADS (NUMBER) RANGE		(36) 2 -	28 TPI			(36) 2	- 28 TPI			(36) 2	- 28 TPI	
TAILSTOCK CENTER		5 1	МТ			5	MT		5 MT			
DIAMETER OF TAILSTOCK SPINDLE	3 3/4" / 100mm			3 3/4" / 100mm			3 3/4" / 100mm					
MAIN MOTOR	20 HP			20 HP			20 HP					
SHIPPING WEIGHT	7,920 lbs	9,240 lbs	10,670 lbs	12,210 lbs	8,520 lbs	9,570 lbs	11,000 lbs	12,540 lbs	8,470 lbs	9,790 lbs	11,220 lbs	12,760 lbs





- Quick Change Gear Box Will Cut Inch and Metric Threads
- Hardened & Precision Ground Extra Wide Bed Ways
- 4-Way Rapid Traverse
- T-Slotted Compound

- Removable Gap
- Two Speed Tailstock
- Motorized Tailstock
- Clutched Headstock (non-VS only)

- Steady Rest (2)
- Follow Rest
- Full Length Splash Guard
- Chuck Guard

- Halogen Work Light
- Taper Attachment
- Coolant System
- Thread Dial

# 35"-42"-52" SERIES BIG SWING AND GEARED HEAD LATHES

SPECIFICATIONS	<b>35"</b> Inch/mm	35" VS Inch/mm	42" 42" VS Inch/mm Inch/mm				<b>52"</b> Inch/mm	52" VS Inch/mm	
CENTER DISTANCE	60" 120" 16	60" 200" 240"	60" 120" 16	60" 200" 240"	60" 120" 160	0" 200" 240"			
SWING OVER BED	35" / 8	390mm	42.9" /	1090mm	51.9" / 1320mm				
SWING OVER CROSS SLIDE	19.6" /	500mm	27.5" /	700mm	37.4" / 9	950mm			
SWING OVER GAP	41.7" /	1060mm	49.6" /	1260mm	59.4" / 1	510mm			
CROSS SLIDE TRAVEL	19.6" /	500mm	27.5" /	700mm	37.5" / 950mm				
BED WIDTH	27.5" /	700mm	27.5" /	700mm	27.5" / 700mm				
SPINDLE SPEED, (NUMBER) RANGE	(24) 6.3 - 1250 RPM	(Inf. Var.) 2.6 - 700RPM	(24) 6.3 - 1250 RPM	(Inf. Var.) 2.6-1000RPM	(24) 6.3 - 1250 RPM	(Inf. Var.) 2.6 - 700RPM			
SPINDLE BORE	6	.1"	6	.1"	6.1"				
SPINDLE NOSE	A2	-15	A2	-15	A2-15				
THREADS (NUMBER) RANGE	(80) 1/1	6 60 TPI	(80) 1/1	6 60 TPI	(80) 1/16	6 60 TPI			
TAILSTOCK CENTER	6	MT	6	MT	6 N	ИΤ			
DIAMETER OF TAILSTOCK SPINDLE	4.9" /	125mm	4.9" /	125mm	4.9" / 1	25mm			
MAIN MOTOR	30 HP	/ 40 HP	30 HP	/ 40 HP	30 HP /	40 HP			
SHIPPING WEIGHT (POUNDS)	8,200 16,500 17,	600 20,900 22,220	14,630 17,710 18,	810 22,110 23,430	15,380 18,590 19,6	590 22,990 24,420			



- Apron & Pendant Controls
- Hardened & Precision Ground Bed Ways
- · Sliding Chuck Guards
- Quick Change Gearbox Will Cut American (Inch), Metric and

#### Module Pitch Threads

- Rapid Traverse On Carriage (4 Way)
- Huge 6", 9", 12" & 14" Spindle Bores

- Steady Rest (5.9" 14.9")
- Follow Rest
- Complete Coolant System With Chip Pans and Splash Guards
- Taper Attachment Incremented In Both Degrees and Inches Per Foot
- 42-6 Series Equipped With 20"3 Jaw Chuck and 32" 4 Jaw Chuck
- 42-9 Series Equipped With Front and Rear 26" 4 Jaw Chuck
- 42-12 Series Equipped With Front and Rear 28" 4 Jaw Chucks
- 42-14 Series Equipped With Front and Rear 28" 4 Jaw Chucks

# 42" HOLLOW SPINDLE SERIES OIL COUNTRY LATHES

SPECIFICATIONS	<b>42"</b> Inch/mm							
CENTER DISTANCE	80"	120"	160"	200"	240"	280"	320"	360"
SWING OVER BED				41.7"	1060mm			
SWING OVER CROSS SLIDE			29	9.5" / <b>750</b> mm	(up to 200" cent	ters)		
SWING OVER GAP		63.4" / 100mm						
CROSS SLIDE TRAVEL				21.3	/ 75mm			
BED WIDTH				22" /	560mm			
SPINDLE SPEED, (NUMBER) RANGE		9 - 600 RPM	/ 6	6 - 400 RPM	/ 3 - 250 R	PM /	3 - 250 RPM	
SPINDLE BORE		6.1"	1	9"	/ 12.2"	1	14.1"	
SPINDLE NOSE		A2-11	1	A2-15	/ A2-20	) /	A2-20	
THREADS (NUMBER) RANGE				(48)	- 16 TPI			
TAILSTOCK CENTER				(	MT			
DIAMETER OF TAILSTOCK SPINDLE	4.9" / 125mm							
MAIN MOTOR	30 HP							
SHIPPING WEIGHT	22,500 lbs	25,000 lbs	27,500 lbs	30,000 lbs	32,5 00 lbs	35,000 lbs	37,500 lbs	40,000 lbs





- Big 10.2", 12.4" or 14.1" thru hole
- Inch/metric threads w/single switch lever
- Cuts most inch/metric threads without change gears
- Hardened & ground bedways
- Forced lubrication to the headstock, carriage and bedways

- Removable gap
- Precision (3) bearing spindle
- Crossfeed and threading safety interlock
- · Feed reversing at the apron
- 4-way rapid traverse
- Two Speed Tailstock
- Sliding Chuck Guards

- Standard Steady Rest (7" 16.9")
- Follow Rest
- Thread Dial
- Coolant System
- Taper Attachment

- Hydraulic Rapid Threading Device
- Carriage Stop
- Work Light
- Full Length Splash Guard
- Service Wrenches & Spanners

# EURO HOLLOW SPINDLE SERIES OIL COUNTRY LATHES

SPECIFICATIONS	<b>32-10</b> Inch/mm	<b>32-12</b> Inch/mm	<b>39-14</b> Inch/mm	
CENTER DISTANCE OPTIONS	60" TO 240"	60" TO 240"	60" TO 240"	
SWING OVER BED	31.5" /	800mm	39.5" / 1000mm	
SWING OVER CROSS SLIDE	22" / 5	60mm	29.9" / 760mm	
SWING OVER GAP	38.9" / 1	000mm	47.25" / 1200mm	
WIDTH OF GAP FROM SPINDLE TO NOSE	12.5" /	12.5" / 320mm		
BED WIDTH				
SPINDLE SPEED, (NUMBER) RANGE	(12) 10 - 480 RPM	(12) 10 - 480 RPM	(12) 9.6 - 460 RPM	
SPINDLE BORE	10.2" / 260mm	12.4" / 315mm	14.1" / 560mm	
SPINDLE NOSE	A2-20	A2-20	A2-20	
TRAVEL OF SPINDLE BARREL	8.8" / 225mm	8.8" / 225mm	8.8" / 225mm	
DIAMETER OF SPINDLE BARREL	4.1" / 105mm	4.1" / 105mm	4.1" / 105mm	
TAILSTOCK CENTER	MT #6	MT #6	MT #6	
MAIN MOTOR	20 HP	20 HP	30 HP	
WEIGHT	14,200 lbs	14,420 lbs	15,800 lbs	



- Quick Change Gear Box Will Cut Inch And Metric Threads
- Hardened & Precision Ground Extra Wide Bed Ways
- 4-Way Rapid Traverse

- T-Slotted Compound
- Removable Gap (up to 200" Centers)
- Two Speed Tailstock
- Air Kick Out For Semi-Automatic Threading (12", 14", 21" Bores)

- Front & Rear 4 Jaw Chucks
- Steady Rest
- Follow Rest
- Full Length Splash Guard
- Chuck Guards

- Halogen Work Light
- Taper Attachment
- Coolant System
- Thread Dial

# BIG SWING HOLLOW SPINDLE SERIES LATHES

SPECIFICATIONS	<b>47"</b> Inch/mm	55" Inch/mm		<b>63"</b> Inch/mm		
CENTER DISTANCE OPTIONS	80" / 120" /	160"	/ 200" /	240" / 2	280" / 320" / 360"	
SWING OVER BED	47" / 1200mm		55" / 14	400mm	63" / 1600mm	
SWING OVER CROSS SLIDE (UP TO 200" CENTERS)	32.6" / 830mm		40.5" / 1	030mm	48.4" / 1230mm	
SWING OVER GAP	68.8" / 1750mm		76" / 19	950mm	84.6" / 2150mm	
CROSS SLIDE TRAVEL	30.7" / 780mm					
BED WIDTH	31.5" / 800mm					
SPINDLE SPEED, (NUMBER) RANGE	(12) 6 - 400 RPM	(12)	5 - 300 RPM	(12) 5 - 300 F	RPM (12) 3 - 230 RPM	
SPINDLE BORE	9" / 230mm	12.	2" / 310mm	14.2" / 360r	mm 21" / 535mm	
SPINDLE NOSE	A2-15		A2-20	A2-20	A2-28	
THREADS (NUMBER) RANGE			(48) 1 -	15 TPI		
TAILSTOCK CENTER			MT	#7		
DIAMETER OF TAILSTOCK SPINDLE	7.9" (standard) or 11.4" for Rotary Quill (optional)					
MAIN MOTOR	30 HP (40 HP & 50 HP optional)					
WEIGHT (APPROX. 200" CENTER)	39,620 lbs		43,12	20 lbs	46,620 lbs	



- Quick Change Gear Box Hardened & Precision Ground Bed Ways
- 6-way Rapid Traverse

- Two Speed Tailstock
- Easy Access Control Station
- Infinitely Variable Spindle

- Steady rest
- Follow rest
- Thread dial

- Chuck Guards
- Halogen Work Light
- Coolant System
- •4 Jaw Chuck

### 70"-80"-100" BIG SWING SERIES

SPECIFICATIONS	<b>70"</b> Inch/mm	<b>80"</b> Inch/mm	<b>100"</b> Inch/mm					
CENTER DISTANCE OPTIONS	80" UP TO 600"	80" UP TO 600"	80" UP TO 600"					
SWING OVER BED	70.8" / 1200mm	78.7" / 1400mm	98.4" / 1600mm					
SWING OVER CROSS SLIDE (UP TO 200" CENTERS)	53.1" / 830mm	61" / 1030mm	80.7" / 1230mm					
WORKPIECE WEIGHT BTWN CENTERS	55,000 lbs. / 25,000kg							
CROSS SLIDE TRAVEL	49.2" / 1250mm							
SPINDLE BORE	8" / 205mm							
SPINDLE NOSE	A2-15							
SPINDLE SPEEDS: NUMBER		4						
SPINDLE SPEEDS: RANGE	6 - 400 RPM	INI	FINITELY VARIABLE					
THREADS (NUMBER) RANGE		(48) 1 - 15 TPI						
TAILSTOCK CENTER		MT #7						
DIAMETER OF TAILSTOCK SPINDLE	11.4" / 290mm Rotary Quill							
MAIN MOTOR		60 HP (75 HP optional)						
WEIGHT (APPROX. 200" CENTER)	39,620 lbs / 17,970kg	43,120 lbs / 19,560kg	46,620 lbs / 21,145kg					





# CNC LATHES

The Summit® SmartCut Lathe is a new generation of combination lathes available from Summit. The SmartCut is everything you would expect: rugged and dependable, with the precision needed for the finest finishes. It combines CNC controls with hand wheels for manual turning, providing maximum flexibility and productivity. Combined with Fagor® technology, these machines are hard to beat.

SmartCut Lathes are designed with a self-teaching controller. You can produce a part manually, and with a few simple key strokes the controller stores the machining sequences and creates a part program.

SmartCut Lathes were designed for growing companies evolving from manual lathe operations to CNC. The control language is conversational with on-screen menus and prompts to make programming virtually foolproof. The controls are equipped with multiple ports for connection to offline programming systems for more advanced users. The combination of these control features and hand wheels enable you to use a single machine for one-off or prototype work, in a semi-automatic mode for small production lots, and in its fully automatic mode for medium length production runs.

The combination of CNC technology and manual capability in a precision engineered heavyweight design, make the Summit SmartCut the new value leader in turning.



- Available In 33" 240" Center Distances
- Up To 19,600lbs Part Capacity
- · Heavily Ribbed Cast Bed and Base
- Hardened and Precision Ground Bed Ways
- Precision Ground Ball Screws
- Infinitely Variable Speed Ranges

- Yaskawa Spindle Drive
- Constant Surface Speed
- Fine Feed Electronic Hand Wheels
- Inch-Metric Capabilities
- T-Slotted Cross Slide For Multiple Accessory Compatibility

#### **ACCESSORIES**

- Steady Rest With Roller Tips
- Follow Rest
- Coolant System
- Sliding Enclosure Doors
- 3 Jaw Chuck (Except SC32)

### **SMARTCUT FLATBED** CNC LATHES

SPECIFICATIONS	SC20 Inch/mm	SC24-4 Inch/mm	SC28-4 Inch/mm	SC30-6 Inch/mm
SWING OVER BED	20" / 510mm	24" / 610mm	28" / 710mm	30" / 760mm
SWING OVER CROSS SLIDE	11.5" / 40mm	16" / 405mm	20" / 500mm	22" / 560mm
SWING OVER GAP	28" / 710mm	31" / 790mm	35" / 890mm	37" / 940mm
BED WIDTH	13" / 330mm	17.7" / 450mm	17.7" / 450mm	17.7" / 450mm
CROSS SLIDE TRAVEL	15" / 380mm	16" / 410mm	16" / 410mm	16" / 410mm
LONGITUDINAL TRAVEL 33"	31.5 / 800mm	N/A	N/A	N/A
52"	51.125" / 1300mm	N/A	N/A	N/A
75"	72.75" / 1850mm	N/A	N/A	N/A
60"	N/A	59" / 1500mm	59" / 1500mm	59" / 1500mm
80"	N/A	78.875" / 2000mm	78.875" / 2000mm	78.875" / 2000mm
120"	N/A	118" / 3000mm	118" / 3000mm	118" / 3000mm
HOLE THROUGH SPINDLE	3.312" / 85mm	4.125" / 105mm	4.125" / 105mm	6.1"
SPINDLE NOSE	D1-8	D1-11	D1-11	A2-11
SPINDLE SPEEDS (RANGES)	30 - 2000 RPM	22 - 1500 RPM	22 - 1500 RPM	22 - 1000 RPM
FEED RATE X-AXIS	0-250 IPM			
FEED RATE Z-AXIS	0-400 RPM			
TAILSTOCK QUILL DIAMETER	4.125" / 105mm	4.125" / 105mm	4.125" / 105mm	4.125" / 105mm
TAILSTOCK QUILL TRAVEL	6.25" / 160mm	8.8" / 225mm	8.8" / 225mm	8.8" / 225mm
X AXIS SERVO	1.4 HP / 1 kW	2.7 HP / 2 kW	2.7 HP / 2 kW	2.7 HP / 2 kW
Z AXIS SERVO	1.4 HP / 1 kW	1.4 HP / 1 kW	1.4 HP / 1 kW	1.4 HP / 1 kW
SPINDLE MOTOR	15 HP / 11 kW	20 HP / 15 kW	20 HP / 15 kW	20 HP / 15 kW



## 32" SMARTCUT FLATBED **CNC LATHES**

SPECIFICATIONS	SC32-10 Inch/mm	SC32-12 Inch/mm	SC32-15 Inch/mm		
SWING OVER BED		31.5" / 800mm			
SWING OVER CROSS SLIDE		20" / 500mm			
SWING OVER GAP		43.3" / 1100mm			
BED WIDTH	21.6" / 550mm				
CROSS SLIDE TRAVEL	21.6" / 550mm	21.6" / 550mm	21.6" / 550mm		
LONGITUDINAL TRAVEL 60"	52" / 1320mm	52" / 1320mm	52" / 1320mm		
80"	71.6" / 1820mm	71.6" / 1820mm	71.6" / 1820mm		
120"	111" / 2820mm	111" / 2820mm	111" / 2820mm		
160"	150.4" / 3820mm	150.4" / 3820mm	150.4" / 3820mm		
HOLE THROUGH SPINDLE	9.8" / 250mm	12" / 305mm	14.9" / 380mm		
SPINDLE NOSE	A2-15	A2	A2-20		
SPINDLE SPEEDS (RANGES)	4-600F	RPM (4)	4-400RPM (4)		
FEED RATE X-AXIS	0-250 IPM / 0-6350mm/min				
FEED RATE Z-AXIS	0-400 IPM / 0-10000mm/min				
TAILSTOCK QUILL DIAMETER	4.1" / 105mm				
TAILSTOCK QUILL TRAVEL	10.8" / 275mm				
X AXIS SERVO MOTOR	2.7 HP / 2 kW				
Z AXIS SERVO MOTOR	4 HP / 3 kW				
SPINDLE MOTOR		30 HP / 23 kW			



#### **SMARTCUT BIG HOLE** CNC LATHES

SPECIFICATIONS	SC26 Inch/mm	SC30 Inch/mm	SC33 Inch/mm		<b>.42</b> n/mm
SWING OVER BED	26.3" / 670mm	30.3" / 770mm	33" / 840mm	41.7" / 1060mm	
SWING OVER CROSS SLIDE	15.75" / 400mm	19.6" / 500mm	22.4" / 570mm	26" / 6	330mm
SWING OVER GAP			N/A		
BED WIDTH		18" / 460mm		22" / 5	560mm
CROSS SLIDE TRAVEL		16.1" / 410mm		23.6" /	600mm
LONGITUDINAL TRAVEL 80"		70.8" / 1800mm		68.9" /	1750mm
120"		110.2 / 2800mm		108.3" /	2750mm
160"		149.6" / 3800mm		147.6" /	3750mm
200"		189" / 4800mm		187" / 4	1750mm
240"		N/A		226.4" / 5750mm	
HOLE THROUGH SPINDLE	6.	.1" / 155mm or 9" / 230mi	m	6.1" / 9"	12.2" / 310mm or 14.1" / 360mm
SPINDLE NOSE	A	.2-11 / A2-1	5	A2-11 / A2-15	A2-20
SPINDLE SPEEDS (RANGES)	11-1	000RPM / 4-800I	RPM	6-800RPM / 4-600RPM	3-400RPM
FEED RATE X-AXIS	0-200 IPM		0-20	0 IPM	
FEED RATE Z-AXIS	0-200 IPM		0-200 IPM		
TAILSTOCK QUILL DIAMETER	3.7" / 95mm		4.9" / 124mm		
TAILSTOCK QUILL TRAVEL	9" / 230mm		11.8" / 300mm		
X AXIS SERVO MOTOR	2.7 HP		3.7 HP		
Z AXIS SERVO MOTOR	4.3 HP 7.1 HP		HP		
SPINDLE MOTOR		20 HP		(80"-160" TRAVEL) 30 HP	(200"-240" TRAVEL) 40 HP





## MILLS

Summit® Vertical, Horizontal and Universal Mills all have several things in common including rugged durability and the precision needed in today's manufacturing environment. Summit Mills are manufactured from closed grain castings with thick, heavily ribbed columns and extra wide knees for smooth cutting through the toughest materials.

Every Summit Vertical Mill features variable speed spindles - either mechanically through variator pulleys or electronically utilizing AC motors and frequency drives. Both designs provide quick response and eliminate the need to stop the spindle to change speeds.

The Summit SmartCut EVS Series CNC Mills feature the same heavyweight design characteristics as the manual machines with the addition of ball screws, scale feedback and a full three-axis CNC control.

The engineering excellence, fine workmanship, quality materials and robust specifications on all of the Summit Mills assures you greater production and trouble-free operation for years to come.



- Heavy Mehanite Cast Construction
- Heavy Box Saddle
- Huge Box Type Ways on Knee (350B models)
- Double Table Locks
- Turcite-B Inserted
   Guideways For Extended
   Machine Life
- Complete Electrics With Low Voltage Controls For Safer Machine Operation
- Way Wipers For Saddle And Column
- Hardened & Ground Ways
- R-8 Collet Set
- One-Shot Lubrication
- Draw Bar
- Way Covers

SPECIFICATIONS	VS-350B inch/mm	EVS-349B inch/mm	EVS-350B inch/mm	
MOTOR SIZE	3 HP	3 1	HP	
VERTICAL SPINDLE SPEEDS - NO.	INFINITELY VARIABLE	INFINITELY	VARIABLE	
VERT. SPINDLE SPEEDS - RANGE	60 - 4200RPM	0 - 430	00RPM	
VERTICAL SPINDLE TAPER	R-8	R	-8	
VERTICAL SPINDLE TRAVEL	5" / 130mm	5" / 13	30mm	
VERTICAL SPINDLE FEED RANGE	.0015 / .003 / .006 IPR	.0015 / .003	3 / .006 IPR	
HEAD MOVEMENT (SIDE TO SIDE)	+/- 90 degrees	+/- 90 degrees		
HEAD MOVEMENT (FRONT TO BACK)	+/- 45 degrees	+/- 45 degrees		
TABLE SIZE (W x L x H)	10" x 50" x 3 1/8" 254 x 1270 x 80mm	9" x 49" x 3 1/8" 10" x 50" x 3 1/8" 230 x 1245 x 80mm 254 x 1270 x 80m		
TABLE FEED (LONGITUDINAL)	36" / 915mm	31" / 790mm	36" / 915mm	
TABLE FEED (CROSS)	16" / 405mm	13" / 330mm	16" / 405mm	
MAX. WEIGHT OF WORKPIECE	850 lbs	850 lbs	1025 lbs	
ROTATION OF OVER ARM	360 degrees	360 degrees		
OVER ARM ADJUSTMENT	22" / 560mm	15" / 380mm 22" / 560mm		
SPINDLE NOSE TO TABLE	2.5" - 18.5" 65mm - 470mm	0 - 17.5" 0 - 445mm	2.5"-17.5" 65-445mm	
WEIGHT	2,900 lbs	2,200 lbs	2,900 lbs	



- Heavy Mehanite Cast Construction
- Heavy Box Saddle
- Huge Box Type Ways on Knee
- Double Table Locks
- Turcite-B Inserted Guideways For Extended Machine Life
- Complete Electrics With Low Voltage Controls For Safer Machine Operation
- Way Wipers For Saddle And Column
- Hardened & Ground Ways
- Power Raise On Knee
- Power Draw Bar
- One-Shot Lubrication
- Draw Bar
- Way Covers
- Horizontal Spindle (560B & 760B models)

	SPECIFICATIONS	VS-550B inch/mm	VS-560B HV inch/mm	EVS-550B inch/mm	EVS-560B HV inch/mm	EVS-760B VBM inch/mm
	MOTOR SIZE	5 HP	5 HP	5 HP	5 HP	7.5 HP
ш	SPINDLE SPEEDS - (NO.)	INF. VARIABLE	12		INFINITELY VARIABLE	
SPINDLE	SPINDLE SPEEDS - RANGE	80 - 3500RPM	85 - 3150RPM	0 - 3650RPM	0 - 4000RPM	70 - 3800RPM
	SPINDLE TAPER	# 40	#40	# 40	#40	#40
VERTICAL	SPINDLE TRAVEL	5.5" / 140mm				
ERTI	SPINDLE FEED RANGE	.0015 / .003	3 / .006 IPR	.0015 / .00	3 / .006 IPR	INF. VARIABLE
>	HEAD MOVEMENT (SIDE TO SIDE)	+/- 90°	+/- 45°	+/- 90°	N/A	+/- 90°
	HEAD MOVEMENT (FRONT TO BACK)	+/- 45°	N/A	+/- 45°	N/A	N/A
HORIZONTAL SPINDLE	MOTOR SIZE	N/A	3 HP	N/A	3 HP	N/A
I D I	SPINDLE SPEEDS - (NO.)	N/A	8	N/A	8	N/A
RIZ	SPINDLE SPEEDS - RANGE	N/A	80 - 1355	N/A	80 - 1355	N/A
요 **	SPINDLE TAPER	N/A	#40	N/A	#40	N/A
TABI	LE SIZE (W x L x H)	11" x 52" x 3 1/8" 280 x 1320 x 80mm	12" x 60" x 3 1/8" 305 x 1525 x 80mm	11" x 52" x 3 1/8" 280 x 1320 x 80mm	12" x 60" x 3 1/8" 305 x 1525 x 80mm	16.9" x 60" x 3 1/8" 430 x 1525 x 80mm
TABI	LE FEED (LONGITUDINAL)	32" / 810mm	47.2" / 1200mm	32.5" / 825mm	47.2" / 1200mm	51.1" / 1300mm
TABI	LE FEED (CROSS)	16" / 405mm	18" / 460mm	16" / 405mm	18.9" / 480mm	23.62" / 600mm
MAX	. WEIGHT OF WORKPIECE	1025 lbs	1200 lbs	1025 lbs	1200 lbs	2200 lbs
ROT	ATION OF OVER ARM	360 de	egrees	360 degrees		
OVE	R ARM ADJUSTMENT	24" / 610mm				
SPIN	IDLE NOSE TO TABLE	2" - 22" 50mm - 560mm	5.1" - 22.6" 130mm - 575mm	2" - 22" 50-560mm	5.1" - 22.6" 130mm - 575mm	2.5" - 30" 63mm - 760mm
WEI	ЭНТ	3,740 lbs	5,720 lbs	3,740 lbs	5,720 lbs	6,500 lbs



- Movement of Head To Various Angles Easily Obtained From Operator's Position
- Inverter Duty, High-Energy High-Efficiency Motors For Lower Utility Costs
- Fewer Moving Parts In Head For Less Maintenance and Down Time
- Centrally Located Controls
   For Ease of Operation
- Immediate Response Speed Control (0-Full Speed In 4 Sec.)
- Full Range Spindle Rpm Selection CNC Controlled
- "Turcite-B" Inserted Guideways
  For Extended Machine Life
- Complete Electrics With Low Voltage Controls For Safer Machine Operation
- Fan Cooled Electrical Enclosure
- Heavy "Mehanite" Cast Iron Construction For Excellent Damping
- Huge Box Ways on Knee
- Built-In Coolant Tank
- Automatic Way Lubrication
- Fagor<sup>®</sup> CNC 8055 MC Control System

#### **SMARTCUT** CNC MILLS

SPECIFICATIONS	SC-EVS-350B CNC Standard/Metric	SC-EVS-550B CNC Standard/Metric	SC-EVS-760B CNC Standard/Metric	
MOTOR SIZE	3 HP / 2kW	5 HP / 3.5 kW	7.5 HP / 0kw	
SPINDLE SPEEDS	ı	NFINITELY VARIABLE		
SPEED RANGE	0 - 4300 RPM	0 - 3800 RPM	70 - 3800 RPM	
SPINDLE TAPER	R-8	#40	#40	
SPINDLE TRAVEL	5" / 130mm	5.5" / 140mm	5.5" / 140mm	
SPINDLE FEED (NO.) RANGE	(INFIN	ITELY VARIABLE) 0 -	200 IPM	
HEAD MOVEMENT (SIDE TO SIDE)	+/- 90 degrees			
HEAD MOVEMENT (FRONT TO BACK)	+/- 45 degrees	N/A	N/A	
TABLE SIZE	10"x 54" x 3 1/8" 255 x 1370 x 80mm	11" x 52" x 3 1/8" 280mm x 1320 x 80mm	16.9" x 60" x 3 1/8" 430mm x 1525 x 80mm	
TABLE FEED (LONGITUDINAL)	34" / 865mm	32" / 815mm	51.1" / 1300mm	
TABLE FEED (CROSS)	14" / 3	355mm	23.62" / 600mm	
MAX. WORKPIECE WEIGHT	850 lbs	1025 lbs	2200 lbs	
ROTATION OF OVER ARM	360 degrees	360 degrees	360 degrees	
OVERARM ADJUSTMENT	22" / 560mm	24" / 610mm	24" / 610mm	
SPINDLE TO NOSE TABLE	2.5" - 17.5" 65mm - 445mm	3" - 20" 80mm - 510mm	2.5" - 30" 65mm - 760mm	
	2.900 lbs	3.740 lbs	6.500 lbs	



- Automatic Lubrication
- Conveniently Located Operator's Panel
- Rapid Traverse
- •Lead Screws on X and Y Axis
- · Alloy steel main spindle
- Saddle assembly travels on precision ground slides
- Dual control of spindle speeds

- Air power Drawbar
- Coolant
- Work Light
- Spanners & Wrenches
- Leveling Bolts and Pads
- 3 Axis Digital Readout Installed

#### **VERTICAL BED MILLS**

SPECIFICATIONS	#3VL Inch/mm	#5VL Inch/mm	#5VHL Inch/mm	#8VL Inch/mm	#8VHL Inch/mm		
TABLE AREA	15" x 67" / 380mm x 1700mm	19.6" x 86.6" / 50	00mm x 2200mm	29.5" x 106.3" / 750mm x 2700mm			
LONGITUDINAL TRAVEL (X AXIS)	39.4" / 1000mm	59" / 15	500mm	78.75" / 2	2000mm		
CROSS TRAVEL (Y AXIS)	15" / 380mm	23.6" /	600mm	31.5" / 8	800mm		
VERTICAL HEAD TRAVEL (Z AXIS)	19.7" / 500mm	27.6" /	700mm	27.6" / 7	700mm		
HORIZ. HEAD TRAVEL (W AXIS)	N/A	N/A	25.6"	N/A	25 9/16"		
TABLE TOP TO FLOOR	31.5" / 800mm	34.25" /	870mm	35.4" / 9	900mm		
NUMBER OF T-SLOTS	5	5	5	5			
NUMBER OF TABLE FEEDS	Infinitely Variable	Infinitely Variable		itely Variable Infinitely Variable			
TABLE FEED RANGES	0 -39.4 IPM	0 - 39.	4 IPM	0 - 39.	4 IPM		
TABLE RAPID TRAVERSE	110 IPM	130	IPM	122	PM		
TABLE FEED MOTOR	1.75 HP	5 H	HP .	5 H	IP		
VERTICAL SPINDLE SPEEDS, NO.	12	1	2	Infinitely	Variable		
VERTICAL SPINDLE SPEEDS, RANGE	45 - 1500 RPM	45 - 1500 RPM		45 - 1500 RPM 45 - 1500 RPM 45 - 1500 RPM		0 RPM	
VERTICAL SPINDLE FEEDS, NUMBER	Infinitely Variable	Infinitely Variable		nfinitely Variable Infinitely Variable Infinitely		Infinitely	Variable
VERTICAL SPINDLE FEEDS, RANGE	.002008 IPR	.002008 IPR		0.12 - 11	.81 IPM		
SPINDLE NOSE TO TABLE TOP	3.9" - 23.6"	- 23.6" 3.9" - 31.5" 2.7		2.75" -	30.3"		
SPINDLE CENTER TO COLUMN	14.96" / 380mm	21.6" /	550mm	31.5" / 8	800mm		
SPINDLE TAPER	#50 NMT	#50	NMT	#50 N	MT		
VERTICAL SPINDLE MOTOR	7.5 HP	15	HP	20 I	HP		
OVERALL DIMENSION (L x W x H)	126" x 79" x 95" / 3200 x 2005 x 2415mm	175" x 10 <sup>-</sup> 4445 x 2565		146" x 124 3710 x 3150			
WEIGHT	8,800 lbs	15,400 lbs	19,140 lbs	26,000 lbs	28,650 lbs		



- Alloy Steel Main Spindle
- Saddle Assembly Travels on Precision Ground Slides
- Automatic Lube System Ensures Consistent Lubrication of Speed and Feed Boxes
- Dual Control of Spindle Speeds
- Vertical Attachment With Drawbar (3UHB)
- Powered Overarm With Universal Head (-U & -Q Models)
- Coolant Pump and Piping
- Drawbar
- Backlash Eliminator
- Universal Table

- 1" Milling Arbor & 2 Arbor Supports
- Horizontal & Vertical Manual Draw Bars
- Coolant Pump & Coolant System
- Tool Box & Service Tools
- Automatic Lubrication System
- Chip Tray

# **#3 SERIES** UNIVERSAL HORIZONTAL MILL

SPECIFICATIONS	#3UH-POA-Q Inch/mm	#3UH-POA-U Inch/mm	#3UHB Inch/mm		
TABLE AREA		13.7" x 59" / 350mm x 1500mm	•		
SWIVEL OF TABLE		+/- 45 degrees			
AUTOMATIC LONGITUDINAL TRAVEL		46" / 1170mm			
AUTOMATIC CROSS TRAVEL		15.75" / 400mm			
AUTOMATIC VERTICAL TRAVEL		18.5" / 470mm			
SPINDLE TAPER		#50 NMT			
MILLING ARBOR DIAMETER	1" / 25mm				
NUMBER OF SPEEDS OF THE SPINDLE	12 (48 - 2160RPM)				
LONGITUDINAL & CROSS FEEDS	(INF. VARIABLE) .04" - 47" IPM / 10mm - 1195mm				
VERTICAL FEEDS	(INF. VARIABLE) 0.2" - 23" / 5mm - 585mm				
MAIN MOTOR		10 HP			
FEED MOTOR		2 HP			
COOLING PUMP		.10 HP			
SPINDLE TAPER	ISO	- 50	N/A		
NUMBER OF SPEEDS	12 N/A				
SPEED RANGE	45 - 1960 RPM N/A				
POWER OVERARM MOTOR	5.5 HP N/A				
UNIVERSAL HEAD QUILL FEED TRAVEL	4" / 100 mm N/A				
WEIGHT	7,040 lbs 7,040 lbs 6,820 lbs				
OVERALL DIMENSION	89" x 70" x 88" / 2,260mm x 1,780mm x 2,235mm				



# RADIAL DRILLS

The Summit® Radial Drill is designed and manufactured to provide the highest level of rigidity, strength and ease of operation. The column, base, arm and headstock are all precision machined from aged, normalized, closed grain cast iron.

The precision ground column is mounted on a fixed base. It is fitted with a large diameter cylindrical roller bearing in the lower end for maintaining position with a combination of a radial roller bearing and a roller thrust bearing in the upper end. This bearing configuration is designed to eliminate radial stress.

The engineering excellence, fine craftsmanship, quality materials and impressive specifications of the Summit Radial Drill series combine to provide years of productive, trouble free operation.

- Precision Ground Column Is Mounted
   On A Fixed Base
- Precision Spindle, Hardened & Ground
- Hydraulic Clamping On 5'H & 6'H
- Safety Limit Switches
- Pressurized Lubrication System
- Heavily Ribbed Cast Iron Base And Arm
- Hardened And Ground Gears And Shafts
- Large T-Slotted Base
- Adjustable Clutch With Automatic Depth Stop
- Optional Plain Or Tilting Box Tables

- Work Lamp
- Coolant System
- Anchor Bolts

SPECIFICATIONS	<b>3'H</b> Inch/mm	<b>5'H</b> Inch/mm	<b>6'H</b> Inch/mm
DRILLING CAPACITY	1.25" / 32mm	2" / 50mm	2.5" / 65mm
DISTANCE FROM SPINDLE AXIS AND COLUMN	7.9 - 39.4" / 200mm - 1000mm	13.8 - 63" / 350mm - 1600mm	17.7" - 80.7" / 450mm - 2050mm
COLUMN DIAMETER	9.45" / 240mm	13.8" / 350mm	17.17" / 435mm
SPINDLE TAPER	4 MT	5 MT	5 MT
SPINDLE TRAVEL	9.8" / 250mm	12.4" / 315mm	15.75" / 400mm
SPINDLE SPEEDS (NUMBER)	8	16	16
SPINDLE SPEEDS (RANGE)	85 - 2160	30 - 2400	24 - 1920
SPINDLE FEEDS (NUMBER)	4	16	16
SPINDLE FEEDS (IPR)	.005021" / .1275mm	.0015"125" / .4 - 3.175mm	.0015"125" / .4 - 3.175mm
HORIZONTAL TRAVERSE OF SPINDLE	27-9/16" / 700mm	50" / 1270mm	63" / 1600mm
ARM ELEVATING MOTOR	1 HP	2 HP	3 HP
COOLANT PUMP MOTOR	.1 HP	.12 HP	.16 HP
SPINDLE MOTOR	3 HP	5.5 HP	7.5 HP





## **BORING MILLS**

Every machine in the Summit® family of Horizontal Boring Mills is designed utilizing the latest advancements in machine building technology. We use the highest quality closed grain cast iron for the structural components, controls and drives from the most advanced suppliers. Our electrics and hydraulics come from world-class manufacturers, making part replacement as easy as a trip to your local supply store.

The Summit HBM 110 is a general purpose manual boring mill that is designed for ease of operation and durability. It incorporates a 360 degree rotary table on a 2-axis saddle, making a perfect combination for small lot manufacturing, general rework and repair on large or odd shaped work-pieces. The machine has a full 4-axis digital readout system with the display built in to the control panel. Larger hybrid designs are also available in both table and floor types to accommodate work pieces of all sizes.

The Summit HBMC 4 and HBMC 110-20T are full function CNC Horizontal Boring Mills designed using Fanuc controls, drives and axis motors along with state of the art electrics and hydraulics to provide years of profitable, trouble free operation. The HBMC 4 is a 4-axis design with a 360 degree positioning rotary table. The HBMC 110-20T is a true 5-axis design with a B axis full contouring rotary table. Both models can be coupled with automatic tool changers, feature rotary tables and large travels. Custom designs are also available for larger travel and floor type.



- Precision Hardened and Ground Bed Ways
- Fully Automatic Lubrication
   System
- Precision Ground Ballscrews With Preloaded Double Nuts On X, W & Z Axis
- State Of The Art Electrics With PLC Control
- Rapid Traverse In All Feed Directions
- Full Steel Telescoping Way Covers On X & W Axis
- Air Power Drawbar
- Built-In Rotary Table 360°
- Four Axis Electronic DRO Included (Incorporated Into The Pendant Display)
- Hydraulic Clamping (X, Y & W Axis)

SPECIFICATIONS	HBM110 Inch/mm	HBM110-H Inch/mm		
DIAMETER OF SPINDLE	4.3" / 1	10mm		
TAPER OF SPINDLE	#50	NMT		
SPINDLE SPEED (NO.) RANGE	(Infinitely Variable	e) 20 - 1500 RPM		
VERTICAL TRAVEL - Y AXIS	39.4" / 1000mm	55.1" / 1400mm		
CROSS TRAVEL OF TABLE - X AXIS	63" / 1600mm	70.8" / 1800mm		
SADDLE TRAVEL - W AXIS	49.2" / 1250mm	55.1" / 1400mm		
SPINDLE TRAVEL - Z AXIS	16" / 410mm	21.6" / 550mm		
NUMBER OF FEEDS	INFINITELY VARIABLE			
FEED RANGE (X, Y & W)	.118 - 37.4 IPM			
FEED RANGE (Z AXIS)	.118 - 15.75 IPM			
RAPID TRAVERSE (Z AXIS)	110 IPM / 2800mm/min			
SIZE OF TABLE	31.5" x 39.4" / 800mm x 1000mm 47.2" x 55.1" / 1200 x 1			
MAXIMUM WEIGHT OF WORKPIECE	6,600 lbs 11,000 lbs			
TABLE HEIGHT FROM FLOOR	49" / 1245mm	49" / 1245mm		
TABLE T-SLOT WIDTH	.875" / 25mm	.875" / 25mm		
ROTATION	MANUAL	MANUAL		
INCREMENT	1 degree	1 degree		
MAIN DRIVE MOTOR	20 HP	20 HP		
AXIS FEED MOTOR (X Y & W)	3.9 HP	3.9 HP		
SPINDLE FEED MOTOR (Z)	1.75 HP	1.75 HP		
ELECTRONICS	220 / 440 / 3 / 60 220 / 440 / 3 / 6			
DIMENSIONS	175" x 154" x 126" / 208" x 161" x 143" 4445 x 3915 x 3200mm 5285 x 4100 x 3630n			
WEIGHT	27,500 lbs 32,500 lbs			



#### STANDARD FEATURES HBMC4 CNC

- Servo Driven Built-In Indexing Table
- Hydraulic Tool Clamping
- Automatic Lubrication System
- Hardened and Precision Ground

Ways (HRC 50-58)

- · Ball Screws on X, Y, W & Z Axis
- Infinitely Variable Spindle Speeds
- Infinitely Variable Number of Feeds

#### HBM110-20T & HBM110-30T

- · Heidenhain Linear Scales
- Heidenhain Rotary Encoder on Table
- Hydraulic Tool Clamping
- Automatic Lube to the Ways
- Hydraulic Clamping on Indexing Table
- Hardened and Ground Ways
- Telescoping Steel Way Covers on X & W Axis

# CNC HORIZONTAL BORING MILLS HBMC4, HBM110-20T & 30T

SPECIFICATIONS	НВМС4	HBM110-20T	HBM110-30T	
DIAMETER OF SPINDLE	4.3" / 110mm	4.3" / 110mm		
TAPER OF SPINDLE	CAT50	CA	Г 50	
NUMBER OF SPINDLE SPEEDS	(INFINITELY VARIABLE)	(INFINITELY	VARIABLE)	
SPINDLE SPEED RANGE	5 - 2500 RPM	5 - 250	0 RPM	
HEADSTOCK TRAVEL, VERTICAL (Y AXIS)	55" / 1400mm	70.8" / 1	1800mm	
CROSS TRAVEL OF TABLE (X AXIS)	78.75" / 2000mm	78.75" / 2000mm	118.1" / 3000mm	
LONGITUDINAL TRAVEL (W AXIS)	45.2" / 1150mm	55.1" / 1	1400mm	
SPINDLE TRAVEL (Z AXIS)	19.6" / 500mm	21.6" /	550mm	
NUMBER OF FEEDS	INFINITELY VARIABLE	INFINITELY	/ VARIABLE	
RANGE OF FEEDS	(X,Y, W) .04 - 236 / (Z) 0.4 - 196 IPM	.04 - 236 IPM		
RAPID TRAVERSE	(X, W) 590 / (Y) 472 / (Z) 196 IPM	394 IPM		
SIZE OF TABLE	(Rotary Table) 39.4" x 39.4"	47" x 59" / 1200mm x 1500mm		
TABLE INDEX	360 degrees	360 degrees		
INCREMENTS	1 degree	.001 degree		
TABLE T-SLOT WIDTH	.875" / 20mm	.875" /	22mm	
MAX. TABLE LOAD	6,600 lbs / 2995 kg	11,00	00 lbs	
MAIN DRIVE MOTOR	30 HP	30	HP	
ELECTRONICS	220 / 3 / 60	220 / 3 / 60		
SERVO LINEAR AXIS FEED MOTOR	8 HP	8 HP		
SERVO SPINDLE FEED MOTOR	9.4 HP	9.4 HP		
DIMENSIONS (L x W x H)	193" x 200" x 142" 4900mm x 5080mm x 3605mm	217" x 177" x 159" 217" x 216" x 159" 5510 x 4495 x 4040mm 5510 x 5490 x 4040mm		
WEIGHT	39,600 lbs	57,800 lbs	57,800 lbs	



- Modular Travels
- Heavily-Ribbed Closed Grain Cast Iron Construction, Heat-Treated And Stress-Relieved
- Hardened And Precisioned Ground Steel Ways (As Option)
- Angular Contact Bearing Spindle Cartridge Headstock
- · Limit Switches On All Axes
- Easy Access Programmable Electrics
- Built-In Rotary Table

## OPTIONAL EQUIPMENT

- Facing Head
- Vertical Attachment
- Coolant System
- Coolant Thru
- Spindle Support
- Tailstock
- Heavy Duty Rotary Table
- Installation Assistance

SPECIFICATIONS	HTM4H-S Inch/mm	HTM4H Inch/mm	HTM5H Inch/mm	
DIAMETER OF SPINDLE	4.125" / 105mm	4.125" / 105mm	5" / 125mm	
TAPER OF SPINDLE	#50	#50	#50	
NUMBER OF SPINDLE SPEEDS	INFINITELY VARIABLE	INFINITELY VARIABLE	INFINITELY VARIABLE	
SPINDLE SPEED RANGE	10-1800 RPM	10-1800 RPM	10-1800 RPM	
SPINDLE TRAVEL (W AXIS)	31.5" / 800mm	31.5" / 800mm	31.5" / 800mm	
VERTICAL HEADSTOCK (Y AXIS)	47" / 1200mm	61" / 74.8" 1550/1900mm	78" / 2000mm	
CROSS TRAVEL OF TABLE (X AXIS)	70.8" / 1800mm	86" / 106" 2200/2700mm	100"/122"/143" 2500/3100/3650mm	
SADDLE TRAVEL W/O TAILSTOCK	59" / 1500mm	65"/84"/104" 1650/2150/2650mm	65"/84"/104" 1650/2150/2650mm	
NUMBER OF FEEDS	INFINITELY VARIABLE	INFINITELY VARIABLE	INFINITELY VARIABLE	
THREADS PER INCH/METRIC THREADS	PROGRAMMABLE	PROGRAMMABLE	PROGRAMMABLE	
RAPID TRAVERSE	118 IPM / 3000mm/min	118 IPM / 3000mm/min	118 IPM / 3000mm/min	
SIZE OF TABLE	55" x 55" 1400 x 1400mm	55" x 63" 1400 x 1600mm	70" x 78" 1800 x 2000mm	
TABLE POSITION ONLY	360°	360°	360°	
T-SLOT WIDTH	7/8" / 22mm	7/8" / 22mm	1.1" / 28mm	
FLOOR TO TOP OF TABLE HEIGHT	45.5" / 1155mm	45.5" / 1155mm	47.5" / 1185mm	
MAX. WEIGHT OF WORKPIECE	13,200 lbs. / 6,000 kg	13,200 lbs. / 6,000 kg	26,500 lbs. / 12,000 kg	
TABLE MOVEMENT	PROGRAMMABLE	PROGRAMMABLE	PROGRAMMABLE	
COLUMN - WIDTH OF WAYS	5.5" / 140mm	5.5" / 140mm	5.5" / 140mm	
COLUMN - NUMBER OF WAYS	2	2	2	
COLUMN - WIDTH ACROSS WAYS	27.5" / 700mm	27.5" / 700mm	27.5" / 700mm	
SADDLE & BASE - WIDTH OF WAYS	7.5" / 190mm	7.5" / 190mm	7.5" / 190mm	
SADDLE & BASE - NUMBER OF WAYS	2	2	2	
SADDLE & BASE - WIDTH ACROSS WAYS	39.5" / 1000mm	39.5" / 1000mm	39.5" / 1000mm	
MAIN DRIVE MOTOR	20 HP / 15kw	22 / 30 HP 17 / 22kw	40 / 50 HP 28 / 37kw	
ELECTRICS	220/440/3/60	220/440/3/60	220/440/3/60	
WEIGHT (APPROX.)	32,000 lbs / 14,500kg	48,400 lbs / 22,000kg	57,200 lbs / 26,000kg	



- High precision ballscrews for vertical and horizontal head movement
- Precision, hardened and ground gearing
- Power rapid traverse to all heads
- Constant surface speed controlled through PLC as standard feature
- Programmable taper, threading & radii
- Centralized full electric pendant control panel for all operations mounted on a swiveling pendant arm w/ built in DRO
- Full length Turcite® tapered gibbing
- All axis are driven by servo motors thru 1/7 Alpha Reducers
- Smooth, vibration-free turning
- Heat treated and stress relieved closed grain castings
- Large diameter Timken type taper roller bearing
- Axial and radial T.I.R. of 0.0005"

- One vertical head with indexing pentagonal turret or ram
- One side head with standard tool holder (optional)
- One vertical plain ram (9.5" x 9.5" cross section) head (60" models and up)
- Precision hardened and ground crossrail guideways
- Totally enclosed electrical equipment cabinet with state of the art PLC & AC unit
- Pressurized lubrication system throughout with oil sight gauges
- Set of four (4) reversible table jaws

SPECIFICATIONS	SCV60 Inch/mm	DCV80 Inch/mm	DCV120 Inch/mm
MAXIMUM DIAMETER OF SWING	65" / 1650mm	86" / 2200mm	129" / 3300mm
MAXIMUM DIAMETER OF SWING WITH SIDE HEAD	63" / 1600mm	84.6" / 2150mm	124" / 3150mm
MAXIMUM MACHINING HEIGHT ABOVE TABLE	47" / 66.75" 1200 / 1700mm	59" / 78" 1499 / 2000mm	98" / 118" 2490 / 3000mm
MAXIMUM WEIGHT OF WORKPIECE	17,640 lbs. / 8,000kg	26,500 lbs. / 12,020kg	40,000 lbs. / 18,145kg
TABLE DIAMETER	57" / 1450mm	78" / 2000mm	118" / 3000mm
TABLE SPEED (INFINITELY VARIABLE)	2 - 220 RPM	1.55 - 150 RPM	1.0 - 100 RPM
VERT. HEADS NO. (LH PLAIN, RH PENT. TUR)	1	1 or 2	1 or 2
SWIVEL OF EACH VERTICAL HEAD	+/- 35 degrees	+/- 35 degrees	+/- 35 degrees
VERTICAL TRAVEL RIGHT HAND TURRET	29.9" / 760mm	29.9" / 760mm	29.9" / 760mm
VERTICAL TRAVEL LEFT HAND BORING RAM	39.9" / 1000mm	47"/59" / 1200/1500mm	59" / 1500mm
VERTICAL TRAVEL OF SIDE HEAD	39.37/47" 1000 / 1200mm	47.24"/70.84" 1200 / 1800mm	90" / 2300mm
HORIZONTAL TRAVEL OF SIDE HEAD	27.5" / 700mm	27.5" / 700mm	39" / 1000mm
VERTICAL TRAVEL OF CROSS RAIL	35.4" / 55" 900 / 1400mm	39.37" / 59" 1000 / 1500mm	78.7"/98" 2000/2500mm
RAIL-TRAVEL FROM TABLE	N/A	12" - 78" / 300-1200mm	12" - 110" / 300-2800mm
FEEDS - VERTICAL & SIDE HEADS - (NO.) RANGE	(16) .002200 IPR	(16) .002196 IPR	(16) .002196 IPR
RAPID TRAVERSE FOR ALL HEADS	118 IPM	118 IPM	118 IPM
MAIN DRIVE MOTOR (AC BRUSHLESS)	75 / 100 HP	100 HP	75 / 100 HP
RAIL ELEVATING MOTOR	7.5 HP	10 HP	10 HP
SERVO MOTORS	4 HP	4 HP	4 HP
DIMENSIONS (L x W x H)	138" x 150" x 182" / 3500 x 3810 x 4625mm	169" x 165" x 181" / 4300 x 4200 x 4600mm	208" x 220" x 212" / 5300 x 5600 x 5400mm
WEIGHT (APPROX.)	52,000 lbs / 25,585kg	76,000 lbs / 34,475kg	108,000 lbs / 49,000kg



# PARTS & SERVICE

#### Supplies, Parts and Accessories

Nothing will slow you down with Summit on your side. We have a dedicated parts team and a million dollar inventory of ready-to-ship machine tool supplies, parts and machine tool accessories. Fast access to spare and replacement parts will help you control costs, protect capital investments, extend the life of equipment and maintain production levels.

Our extensive inventory of quick-ship parts and accessories includes components for all of our top selling equipment. Whether you need lathe parts, drill parts or mill parts for your machine tools supply, we've got you covered!

#### **Exceptional Service**

As one of the world's largest providers of precision machine tools, we know you need a trusted resource to answer your questions, offer technical support and troubleshoot problems you may encounter. Our machine tool repair experts are available and ready to help you out.

We are here to help with:

- Installation Services
- Machine Tool Calibration
- Rebuilding and Reconditioning/Retrofitting

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