

Clausing **KNEE MILLS**

Christensen Machinery & Supply
April 17, 2017

2VS

Vertical Milling Machine
Quotation

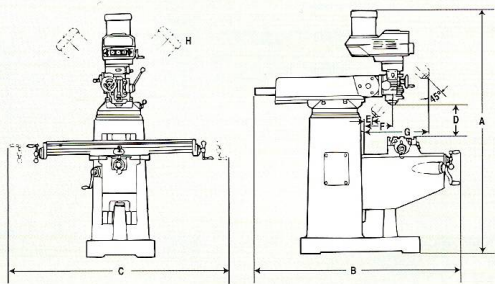
SHOW SPECIAL

\$ 9,700.00



3963 Emerald Drive, Kalamazoo, MI 49001 Phone: 269-345-7155 Fax: 269-345-5945
Clausing 2VS Mill Specifications

Table & Ways	Table Size	9" x 49"
	No. of T-slots	3
	T-slot Width	5/8"
	T-slot Center Distance	2.05"
	Table Ways	Dovetail
	Knee Ways	Dovetail
	Column Ways	Dovetail
Travels	X Longitudinal	38.18"
	Y Cross	14.17"
	Knee	13.97"
	Ram	18.50"
Motors & Spindle	Spindle Motor	3 Hp
	Amp. Draw 208v.	7
	Amp. Draw 230v.	7
	Amp. Draw 460v.	5
	Variable Spindle Speed rpm	85-4350
	Low range	75-780
	High Range	515-4350
	Main Spindle Taper	R8 or NMTB30
	Spindle Travel	5"
	Quill Feed (in/rev.)	.0015/.0031/.006
Quill Diameter	3.38"	
Construction & Weight	Column Turret Diameter	14.96"
	Knee Width	11.42"
	Column Bearing Length	16.54"
	Saddle/Table Bearing Length	19.88"
	Ram/Turret Bearing Length	16.14"
	Ram Length	28.94"
	Table Load	700 lbs.
	Net Weight	2,100 lbs.
Model	Height (A)	89"
	Depth (B)	66"
	Width (C)	99"
	Table to Spindle (D)	3.15"-17.12"
	45° Inward (E)	0-19.68"
	Spindle to column (F)	4.53" –23.03"
	45° Outward (G)	6.89"-29.39"
	Head Tilt	90° right & left



Standard Equipment

- i Meehanite Castings for superior rigidity and wear resistance
- i Hardened & Ground, X, Y & Z Ways
- i X/Y ways coated with Turcite B
- i Column & Knee Ways Covers
- i T-slots are ground to provide reference edge for positioning your workplace
- i Hardened & Ground Table Surface
- i Hardened & Ground Spindle
- i Chromed & Ground Quill
- i Chromed X, Y, & Z Leadscrews
- i Double Nut Leadscrew for backlash compensation
- i ABEC 7/CP4 Spindle Bearings
- i Coolant System w/Pump & Switch
- i Flexible Segmented Coolant Nozzle
- i Chromed Y Screw Covers and One-piece Wipers
- i 7/16"-20 Imperial Drawbar R8, or 1/2"-20 Imperial Drawbar NMTB30
- i 3 h.p. AC Motor
- i Variable Speed Drive
- i Articulating Head for Compound Angles
- i Worm gear angular positioning of head in two directions
- i Lever-operated manual rapid quill movement
- i Handwheel for fine quill feed
- i Adjustable automatic feed disengagement for quill feed in both directions
- i Micrometer depth stop
- i Reversing switch for clockwise or counter clockwise operation
- i R8 or NMTB30 Spindle
- i Spindle Brake (Hand operated)
- i One-shot lubrication
- i Tool Kit, Test and Accuracy Chart
- i Operations Manual/Parts List
- i Standard 208/230 or 460 3 Phase (other voltages require a transformer or special order)

Investment

Clausing 2VS

2VS08	VS Mill, 9" x 49", R8 Spindle, 3 Hp	\$ 9,700.00
-------	-------------------------------------	--------------------

Available Accessories

R8 Spindle Accessories Only

2VS020	R8 Milling Chuck Kit w/7 Collets	\$ 870.00
2VS030P	Horiz. Milling Attachment 3pc. Set	1,395.00
2VS031P	R8 Rt. Angle Attachment	895.00
Z384-SET-1	R8 Metric Set 2mm by 1mm, 19 Collets	460.00
Z384-SET-5	R8 Inch Collet Set 1/8 to 3/4 by 32nds, 21 Collets	785.00
Z384-SET-6	R8 Inch Collet Set 1/8 to 3/4 by 1/16ths, 11 Collets	410.00
Z384-SET-7	R8 Inch Collet Set 1/8 to 3/4 by 1/8ths, 6 Collets	205.00
FV-9031G	R8 to J2 Arbor for FV-9030G	150.00
FV-9033G	R8 to J6 Arbor for FV-9032G	150.00
FV-9041G	12pc. R8 Collet Rack	45.00
FV9050G	1/2" R8 Shell Mill Holder	100.00
FV-9051G	3/4" R8 Shell Mill Holder	100.00
FV-9052G	1" R8 Shell Mill Holder	100.00
FV-9080G	R8 End Mill Adapter Set 3/16-1 1/4 (8 pcs.)	320.00
2VS8408	Air Power Draw Bar R8 (US MFG)	1,075.00
	Drawbar Installation	\$ 200.00 NET

NMTB30 Spindle Accessories Only

2VS021	NMTB30 Milling Chuck Kit w/7 Collets	\$ 870.00
2VS030AP	NMTB30 Horiz. Milling Attachment 3pc. Set	1,395.00
2VS031AP	NMTB30 Rt. Angle Attachment	895.00
FV-9081G	NMTB End Mill Adapter Set 3/16 – 1 (7 pcs)	690.00
2VS8430	Air Power Draw Bar NMTB30 (US MFG)	1,075.00
	Drawbar Installation	\$ 200.00 NET

Available Accessories

All Accessories

2VS001P	Chip Tray	\$ 725.00
2VS002	Full Electrics w/Disconnect Box & CNTL Box (factory)	1,315.00
2VS002A	Central 110v Wiring Point w/6 Plugs & 8' Power Cord	300.00
2VS010	52 Piece Clamping Kit	210.00
2VS020A	1/4" Milling Chuck Collet Only (2VS020, 21, 22)	55.00
2VS020B	5/16" Milling Chuck Collet Only (2VS020, 21, 22)	55.00
2VS020C	3/8" Milling Chuck Collet Only (2VS020, 21, 22)	55.00
2VS020D	1/2" Milling Chuck Collet Only (2VS020, 21, 22)	55.00
2VS020E	5/8" Milling Chuck Collet Only (2VS020, 21, 22)	55.00
2VS020F	3/4" Milling Chuck Collet Only (2VS020, 21, 22)	55.00
2VS020G	1" Milling Chuck Collet Only (2VS020, 21, 22)	55.00

Available Accessories Continued

2VS040P	4" Riser Block	615.00
2VS041P	6" Riser Block	700.00
2VS042P	8" Riser Block	805.00
2VS045	X,Y Ball Screws I/O Lead Screws (factory installed)	1,760.00
2VS045F	X,Y Ball Screws (field or stock machine install)	3,260.00
2VS050	Auto Lube Pump 110V	295.00
2VSX150	X-Axis Servo Feed (USA MFG)	1,415.00
2VSXA	X-Axis Align Power Feed	1,175.00
2VSY150	Y Axis Servo Feed (USA MFG)	1,740.00
2VSYA	Y Axis Align Power	1,235.00
2VSK140	Knee Servo Feed (USA MFG)	1,545.00
2VSKA	Knee Align Power	1,235.00
FV-9010G	Kurt 6" Vise Only	660.00
FV-9011G	Kurt 6" Swivel Base for FV-9010G	455.00
FV-9012G	Vise Step Key Kit 11/16 x 5/8 (set of 2)	90.00
FV-9030G	½" Keyless Drill Chuck	280.00
FV-9032G	1/8" to 5/8" Keyless Drill Chuck	285.00
FV-9070L	LED Work Light w/3Pin 110V Plug	235.00
CS-9062	Coolant Mist System 1 Gal	975.00
AR14-40-200M	2VS 2 Axis 9"x49" Acu-Rite DRO	2,235.00
AR14-40-300M	2VS 2 Axis 9" x 49" Acu-Rite 300S DRO	2,655.00
AR4-14-40-200M	2VS 3 Axis w/Spindle 9"x49" Acu-Rite DRO	2,840.00
AR4-14-40-300M	2VS 3 Axis w/Spindle 9"x49" Acu-Rite 300S DRO	3,365.00
AR14-40-16-200M	2VS 3 Axis w/Knee 9"x49" Acu-Rite DRO	3,035.00
AR14-40-16-300M	2VS 3 Axis w/Knee 9"x49" Acu-Rite 300S DRO	3,560.00
AR4-14-40-16300M	2VS 4 Axis w/Knee 9"x49" Acu-Rite 300S DRO	4,475.00
NW16-36-DP700	2VS 2 Axis 9"x49" Newall DRO	1,915.00
NW6-16-36-DP700	2VS 3 Axis w/Spindle 9"x49" Newall DRO	2,540.00
NW16-16-36-DP700	2VS 3 Axis w/Knee 9"x49" Newall DRO	2,540.00
FG14-40-PKMC	2VS 2 Axis 9"x49" Fagor DRO 40i	2,215.00
FG14-40-PKM	2VS 2 Axis 9"x49" Fagor LED DRO 20i	1,625.00
FG06-14-40-PKMC	2VS 3 Axis w/Spindle 9"x49" Fagor DRO 40i	2,670.00
FG06-14-40-PKM	2VS 3 Axis w/Spindle 9"x49" Fagor LED DRO 20i	2,285.00
FG16-14-40-PKMC	2VS 3 Axis w/Knee 9"x49" Fagor DRO 40i	2,840.00
FG16-14-40-PKM	2VS 3 Axis w/Knee 9"x49" Fagor LED DRO 20i	2,375.00
	Servo Installation per Axis	\$ 175.00 NET
	2 Axis DRO Installation	\$ 350.00 NET
	3 Axis DRO Installation	\$ 500.00 NET

Warranty

Clousing warrants the machine and control for a period of one year from the date of installation. This warranty does not cover normal wear items such as filters and belts or damage that results from the misuse or abuse of this equipment.

Terms

Validity: Quotation valid until May 17, 2017.

FOB: Kalamazoo, Michigan or Point of Shipment

Delivery: Machine stock, subject to prior sale.

Due to continual improvements, prices and specifications subject to change without notice.