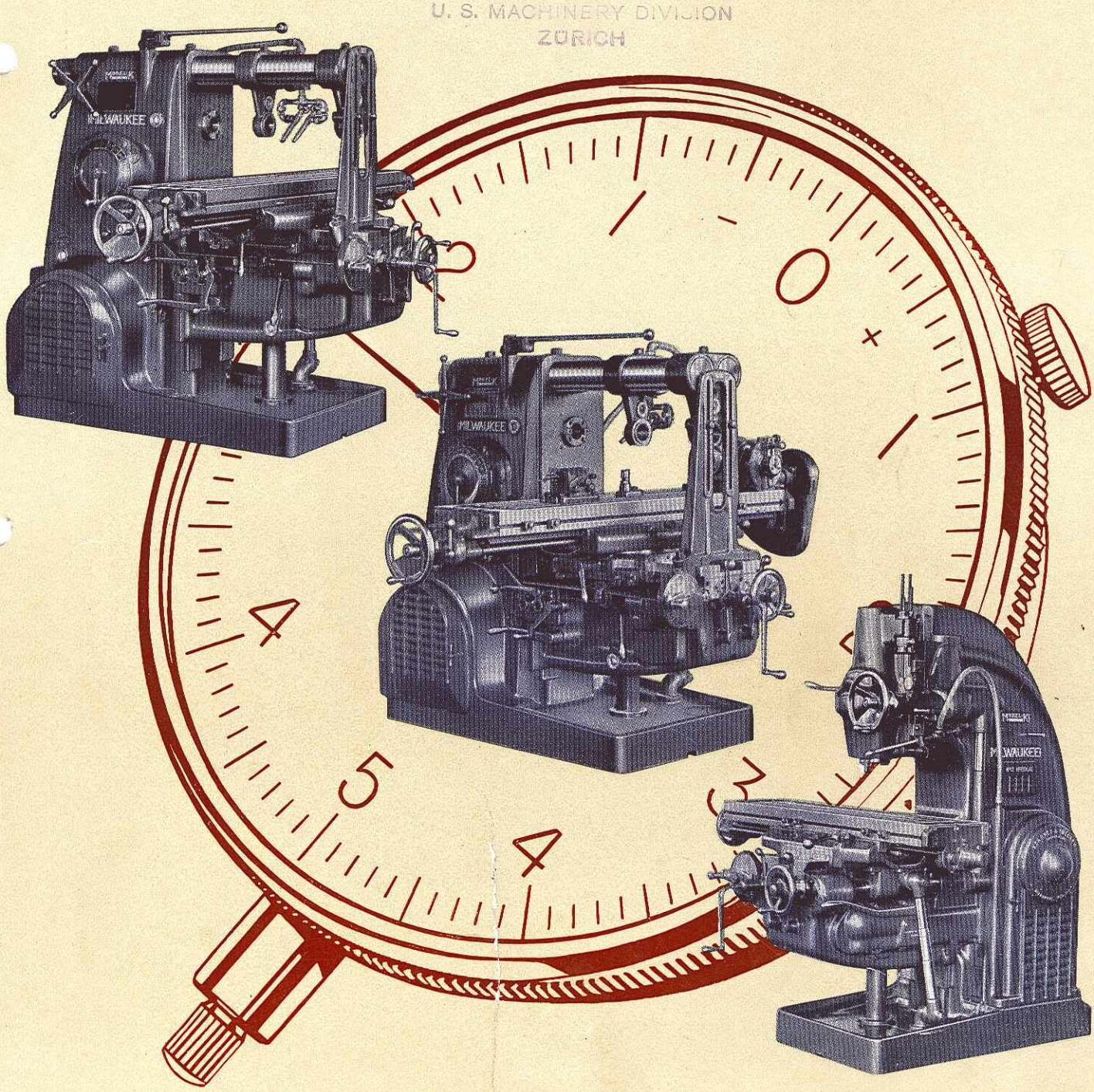
MILWAUKEE MILLING MACHINES

2K·3K

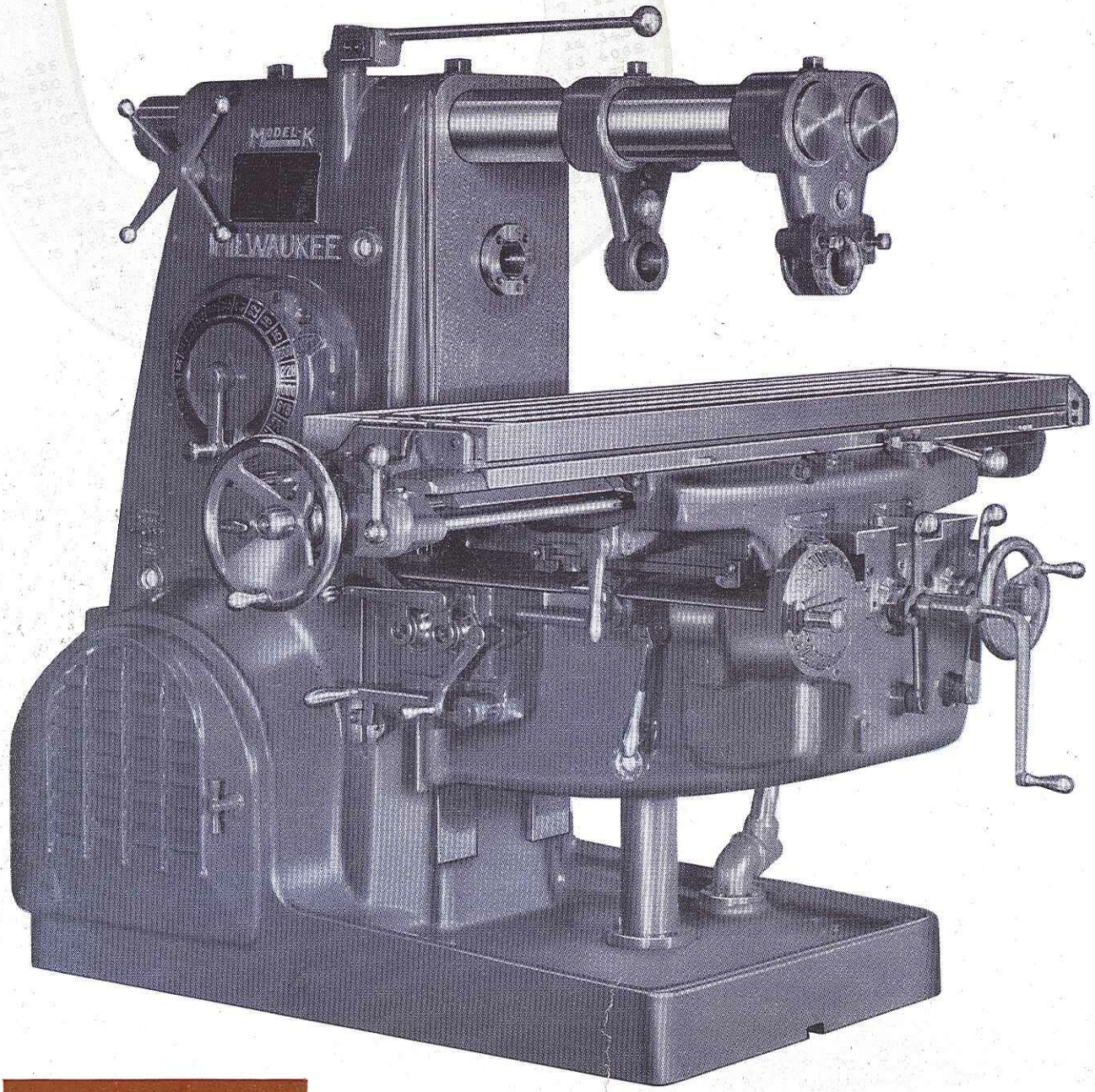
CATALOG No. K10

PLAIN • UNIVERSAL • VERTICAL

KEARNEY & TRECKER CORPORATION • MILWAUKEE, WISCONSIN



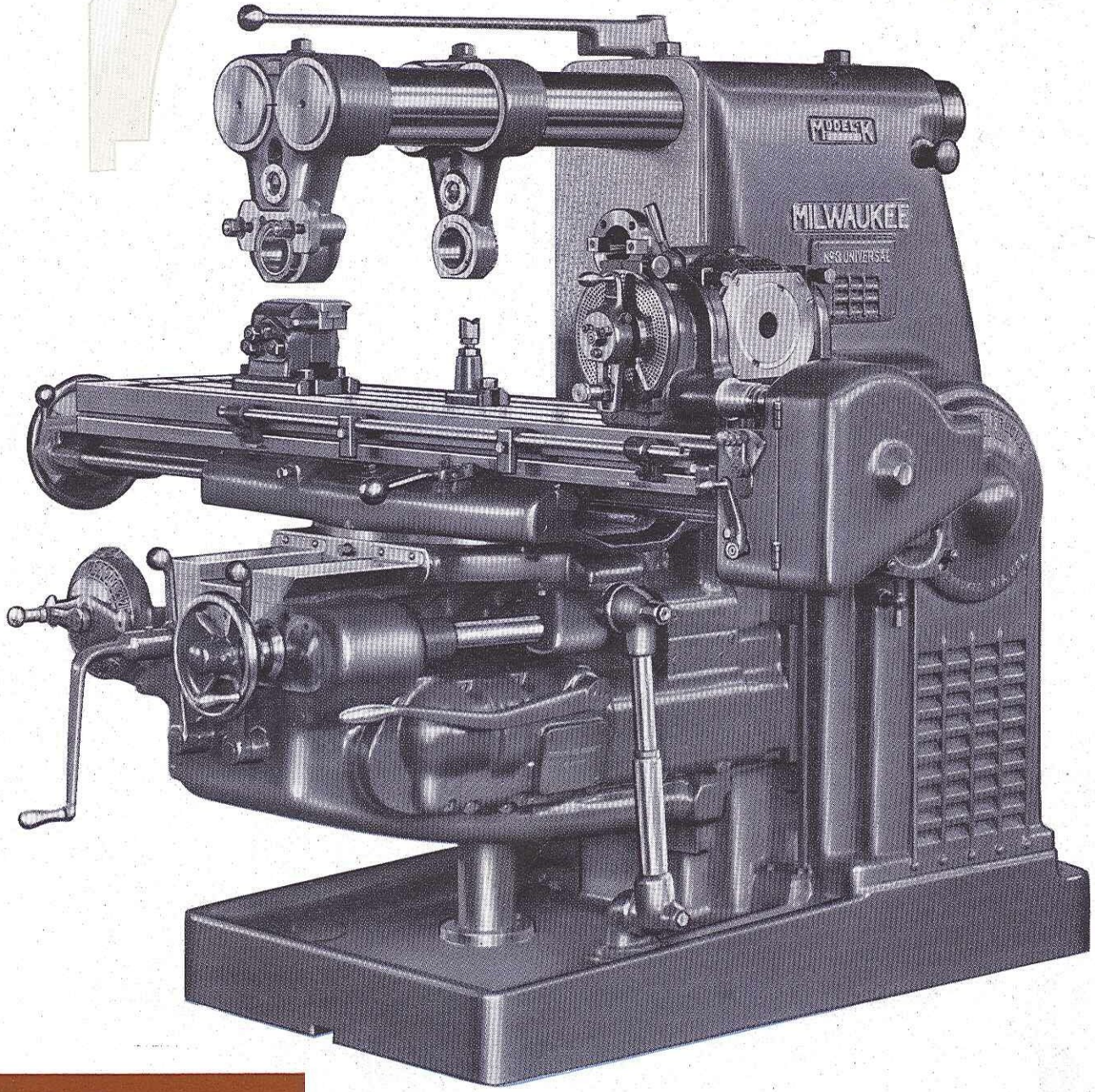
DESIGN



2K PLAIN

Over 47 years' experience in building fine milling machines
is incorporated in the design and construction of Model K Milling Machines.

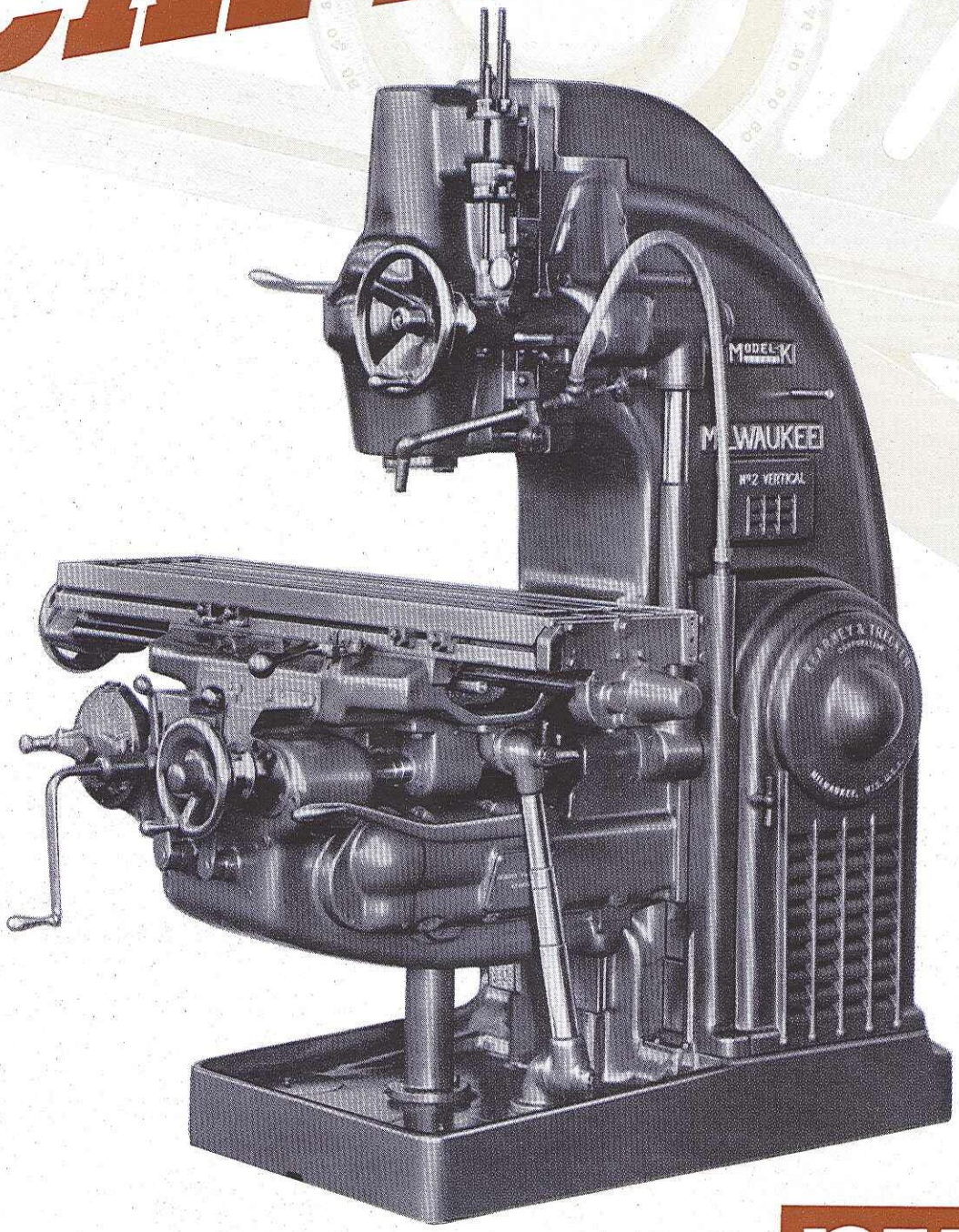
UTILITY



3K UNIVERSAL

Proper Working Height—Simple, Convenient Controls—Strict Safety Standards—
and the other qualities you demand and expect in your milling machine.

CAPACITY

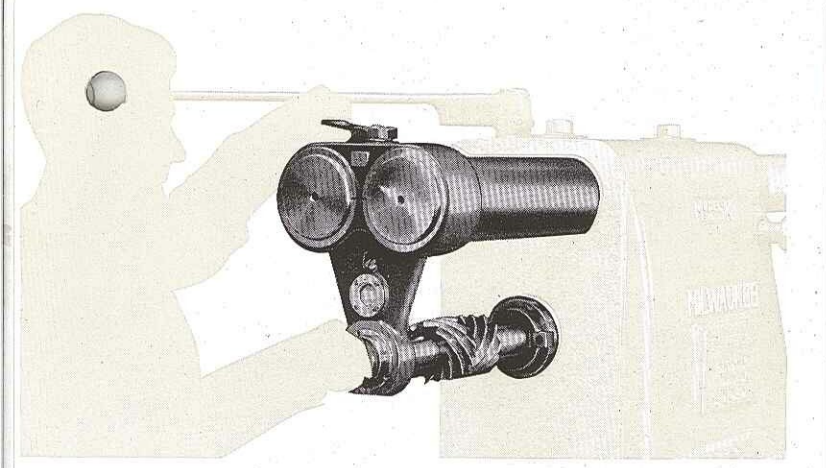


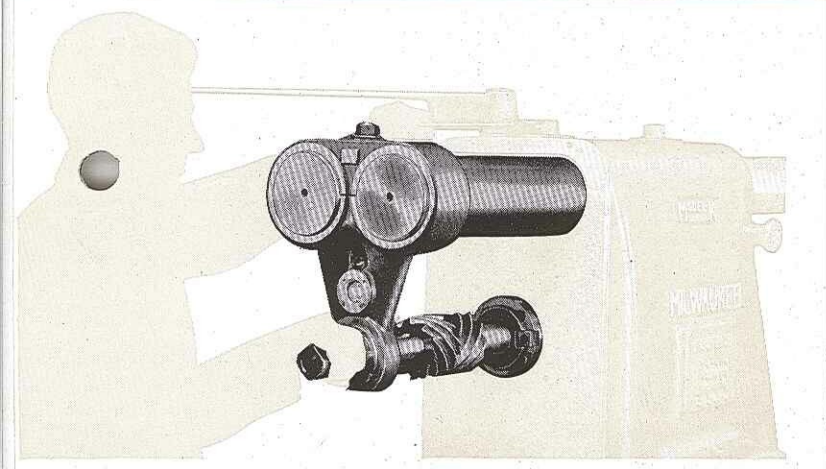
2K VERTICAL

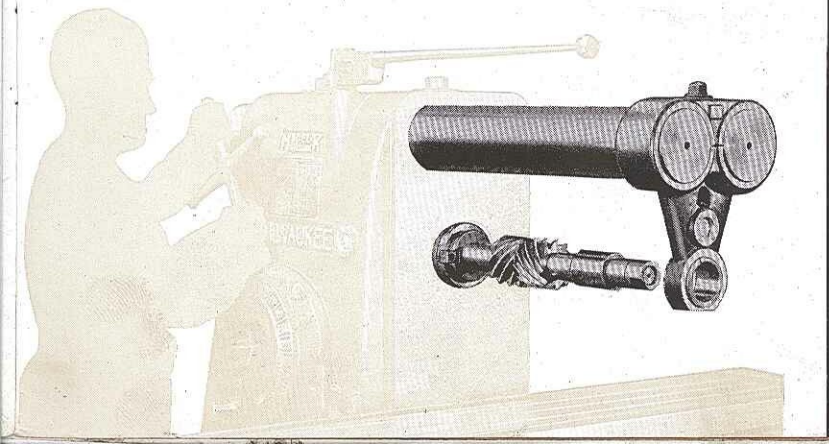
These milling machines, power engineered to do the job, will operate efficiently at any feed or speed.

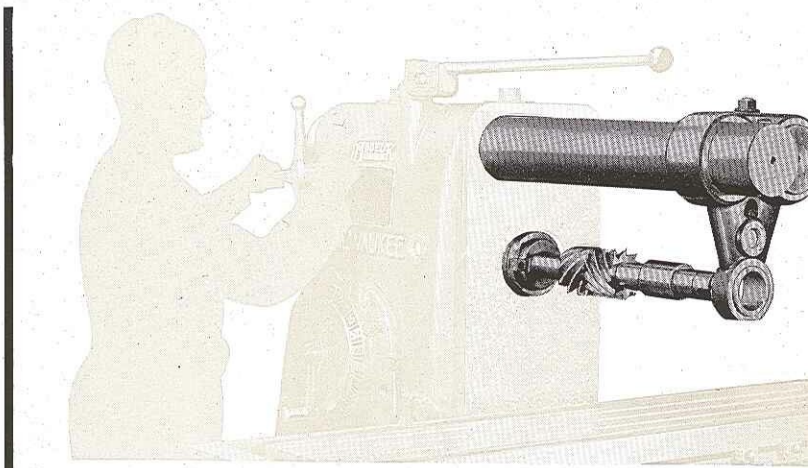
Double OVER ARMS

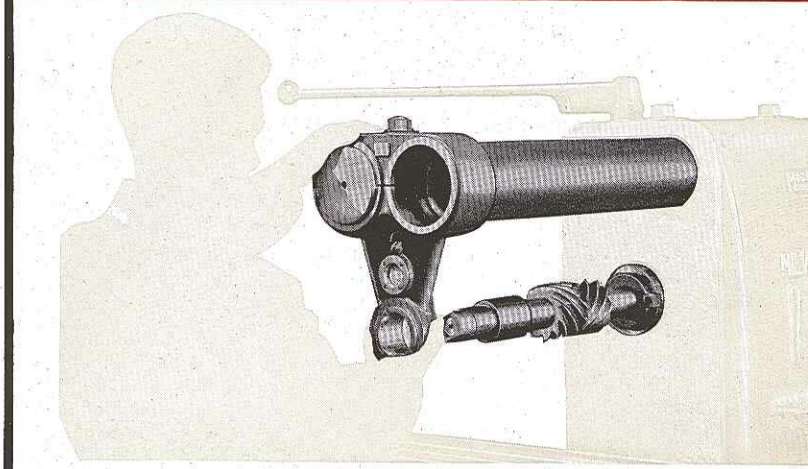
Double Overarms — the most convenient, rigid and simple means of arbor support ever devised. The double overarm construction allows easy access to the cutter and enables the operator to change arbors and cutters without removing the arbor support. An overarm pilot wheel facilitates moving one or both overarms in or out.

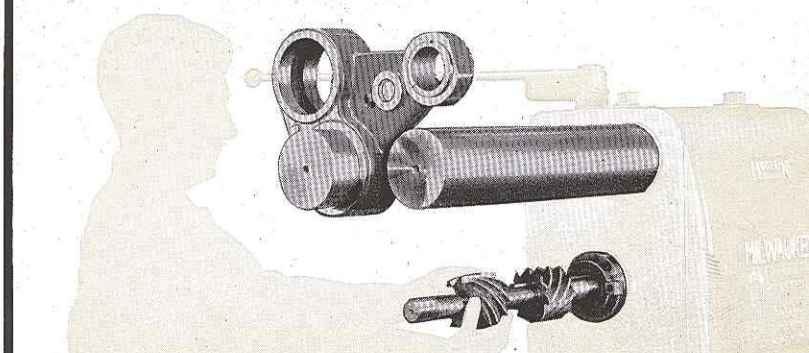






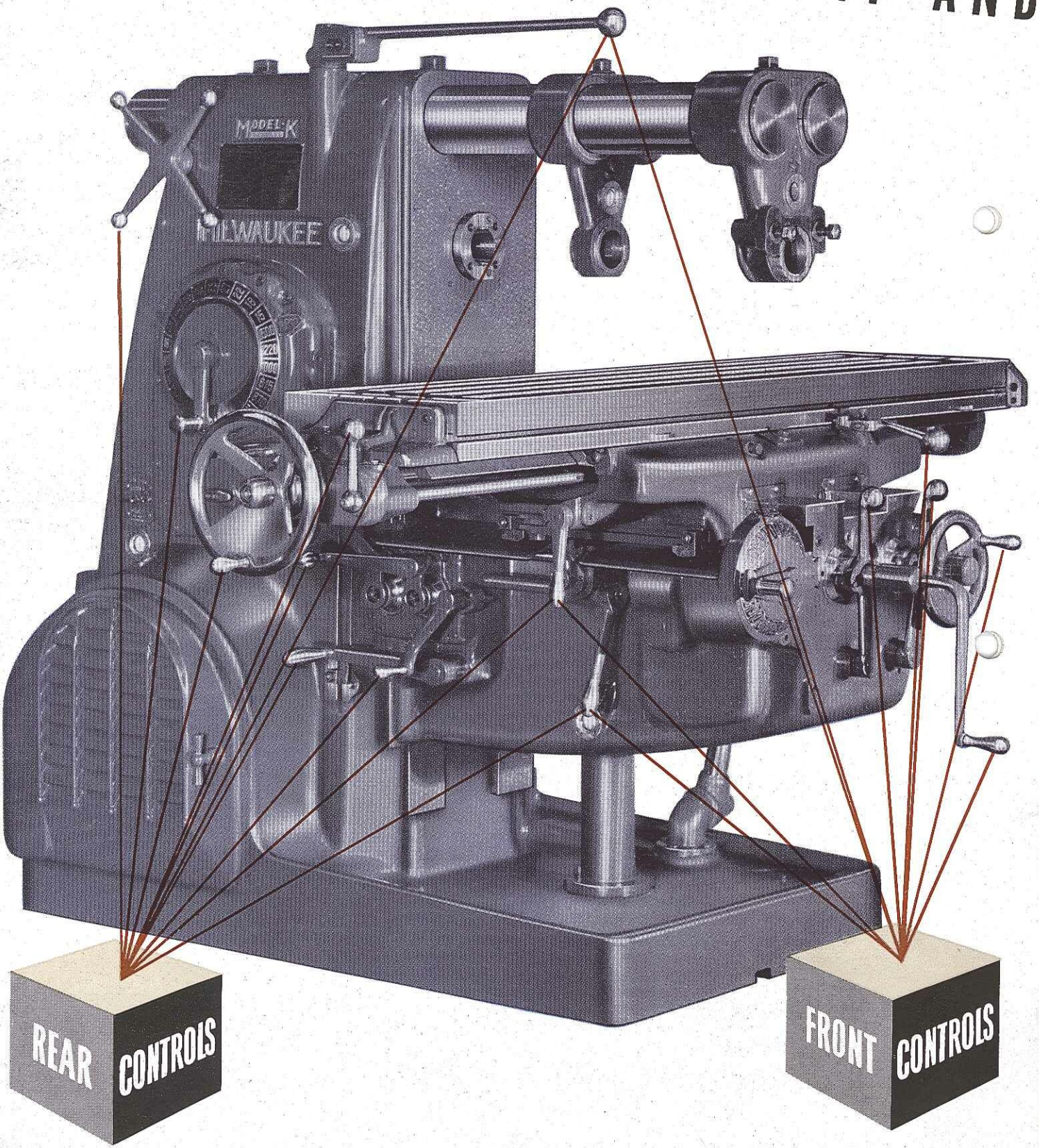






CENTRALIZED AND

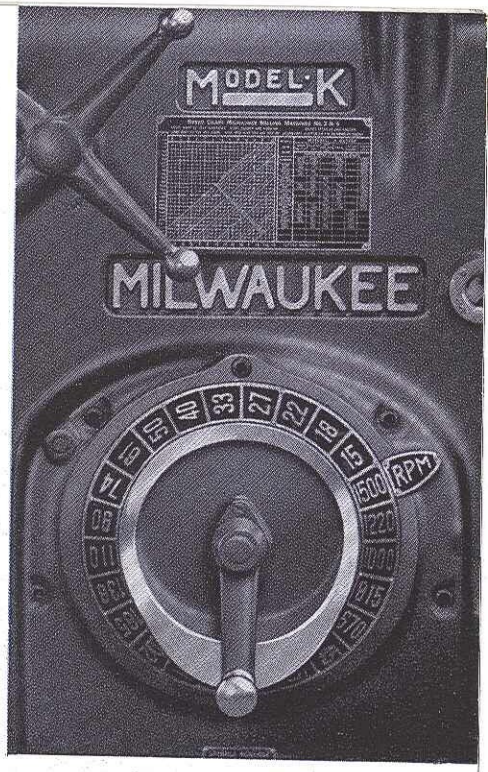
FRONT AND



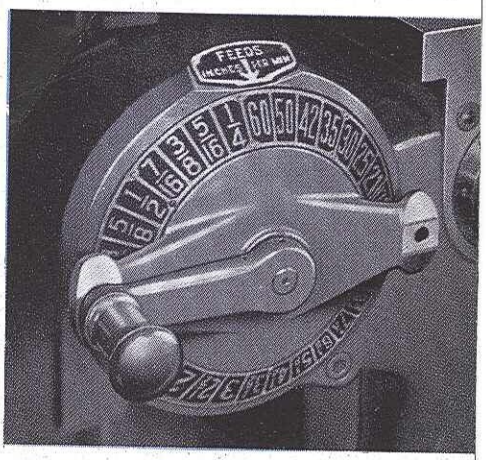
DIRECTIONAL

REAR CONTROLS

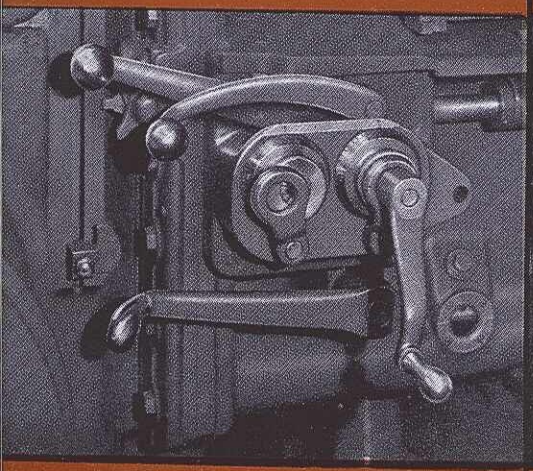
An operating feature of the MODEL K machines is the duplicate front and rear directional controls. Equipped with positive safety interlocks that prevent spinning handwheels and handcranks, these controls are arranged for convenient, efficient machine operation. ★ Single lever, direct reading feed and speed dials are provided. 24 speed selections are available ranging from 15 to 1500 revolutions per minute and 32 feed selections ranging from ¼ to 60 inches per minute. Both the speed and the feed selections are in one continuous series in approximate geometric progression. Any speed or feed is easily obtained by rotating the lever in either direction to the desired selection. ★ A speed chart giving correct cutter speed for various sizes and types of cutters, valuable when machining a variety of metals, is mounted directly above the speed dial.



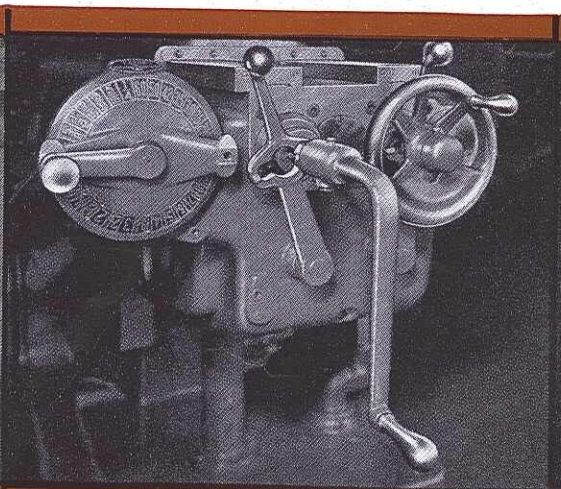
The Spindle Speed Selection Dial provides a choice of 24 speeds ranging from 15 to 1500 rpm. One complete turn of the speed dial lever, either forward or reverse, will increase or reduce the speed one step.



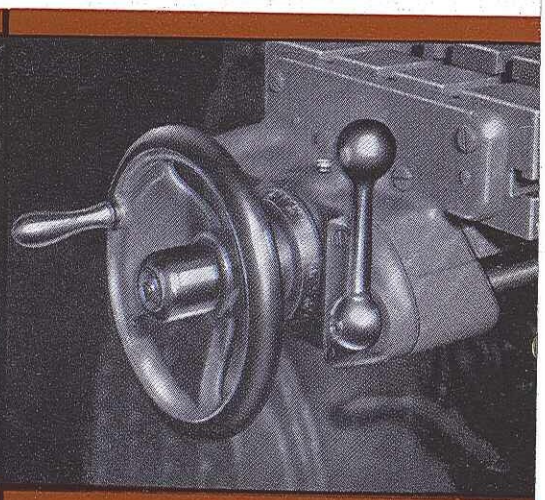
The Feed Selection Dial permits a choice of 32 feeds ranging from ¼ to 60 inches per minute. Feeds range in approximate geometric progression with only one-half revolution of the lever required to increase or decrease the feed one step.



● These conveniently located rear controls are equipped with micrometer dials and provide for hand feed, power feed, and rapid traverse movement of the knee and saddle.

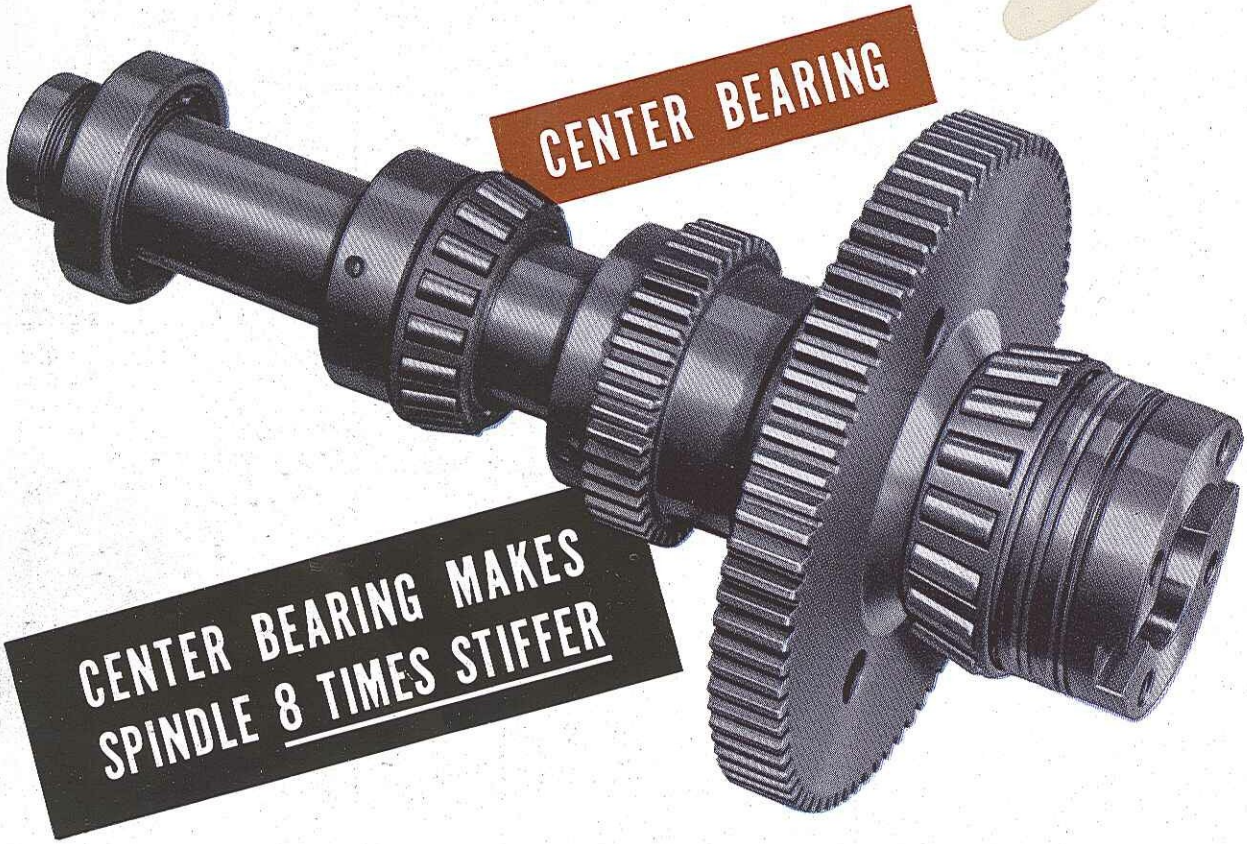


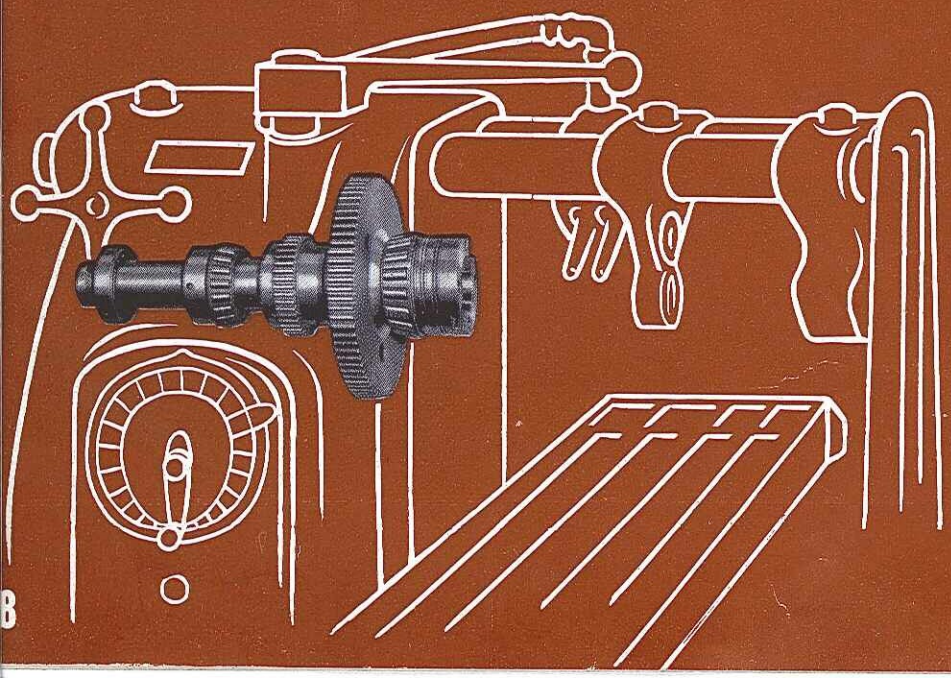
● Convenient, directional front controls, equipped with micrometer dials, provide for movement of the table, saddle, and knee by hand feed, power feed, and power rapid traverse.



● The table handwheel and feed control lever are convenient and simple to operate. Large, easy to read micrometer dials, graduated in thousandths, facilitate adjustments.

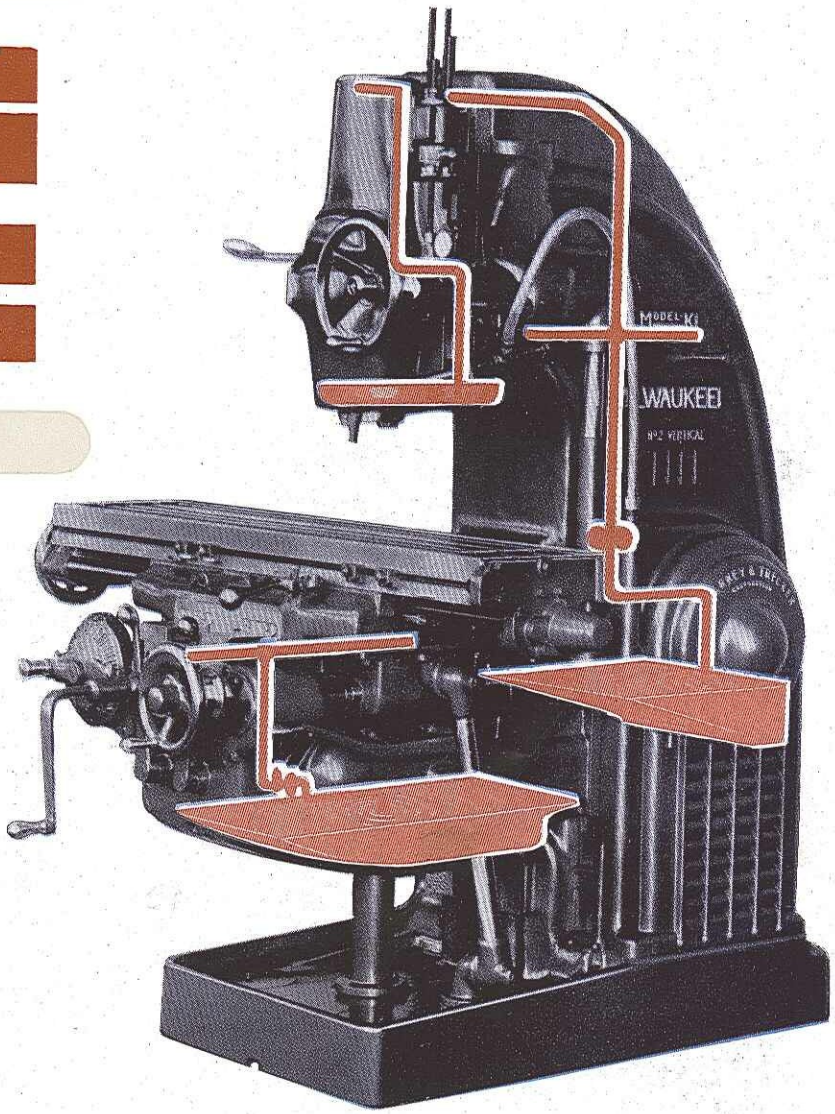
Built for





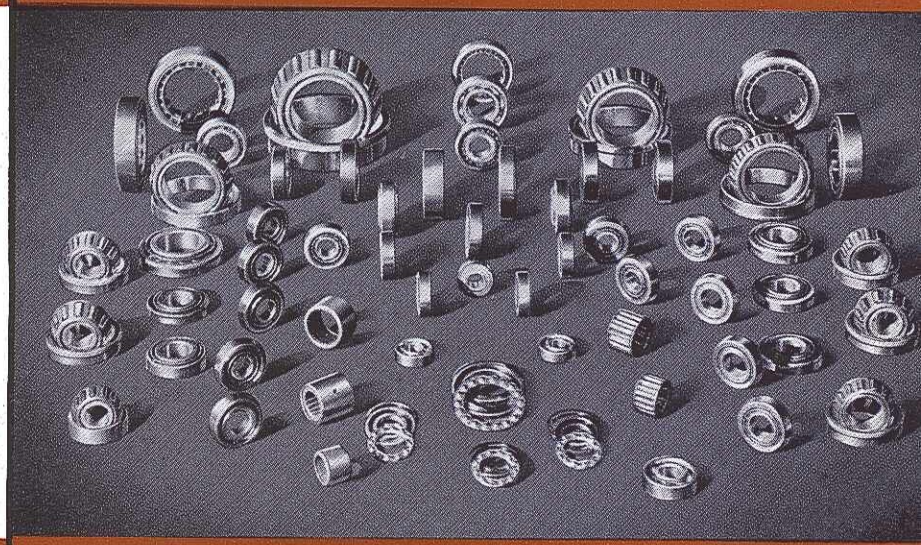
● Spindle deflection, destroyer of precision, varies directly as the cube of the unsupported length between bearings. With the addition of the center bearing, spindle rigidity is increased eight times. This feature, on all horizontal and vertical knee type machines, adds much to the built-in precision of Milwaukee Machine Tools.

LONG LIFE

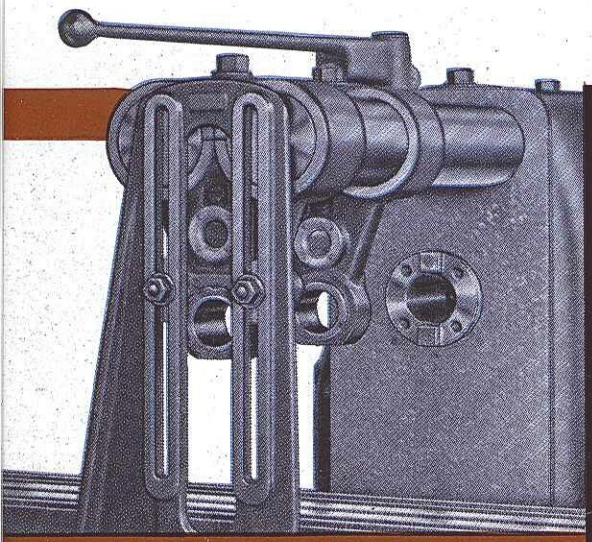


Automatic pressure lubrication is a prime factor in the long life and the precision results obtained with these machines. Pressure pumps in the column, knee, and in the sliding head of vertical machines, are fully automatic and provide a constant flood of lubricant over the entire driving mechanism.

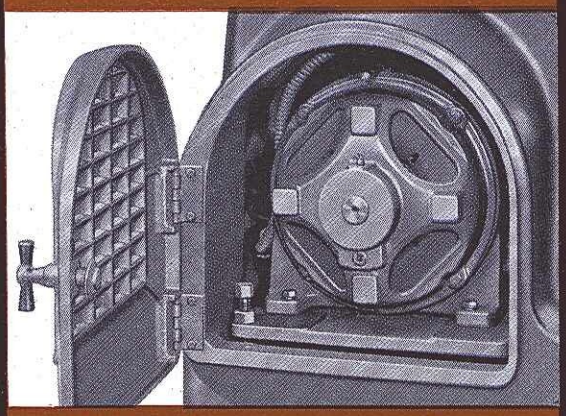
Gear trains of the Model K machines employ short, stubby shafts for maximum strength, and crowned gears for smooth noise-free operation.



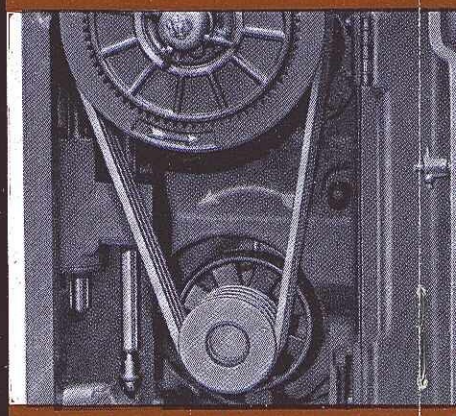
Anti-friction bearings are used wherever they will increase the over-all efficiency and long life of the machines—and they have been used generously.



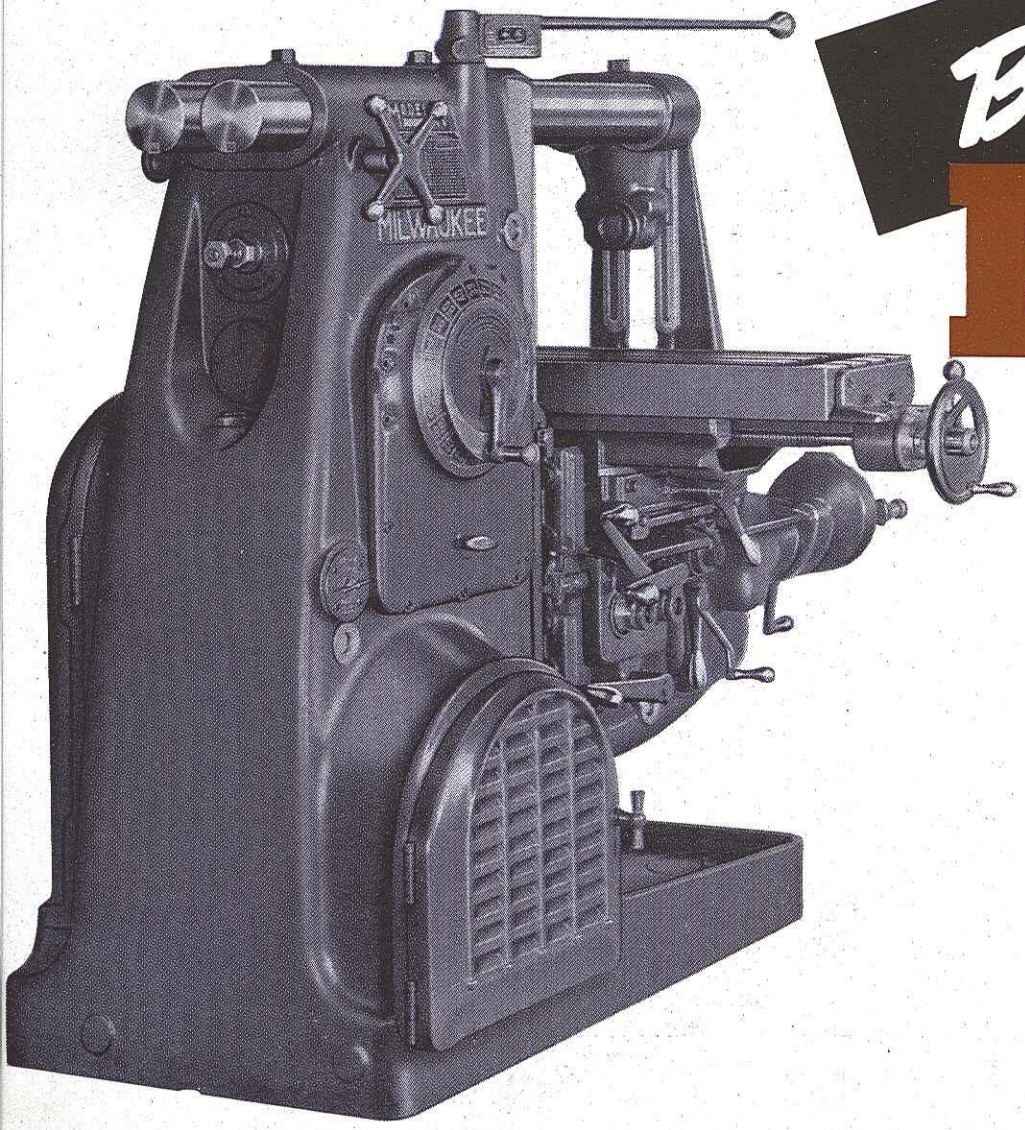
Triangular arbor supports form a broad base triangle, the most rigid geometrical structure possible. This triangular construction provides a firm arbor support and effectively resists distortion induced by cutting forces. Arm braces tie the overarms, arbor supports, and knee together to provide additional support for heavy milling cuts.



Solid back column construction permits cross-mounting the motor in the base, making the motor readily accessible. The inverted V-shaped arch of the motor chamber is heavily ribbed providing additional reinforcement to the column face and back. Cross ventilation for the motor is provided through the louvred motor chamber door.



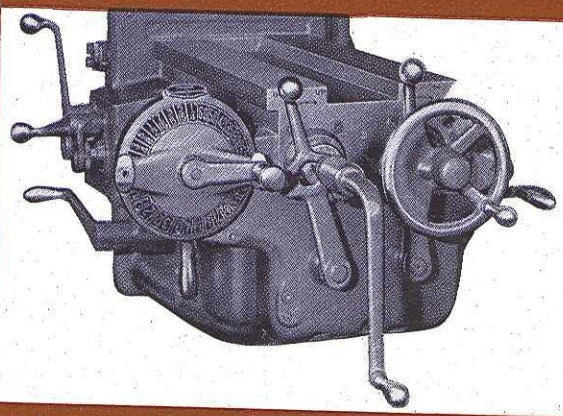
Silent multiple V-belts transmit power f pulley to the main drive clutch. These unit through small openings in a heavy transve wall which extends from the to the back A louvred safety door encloses the drive m



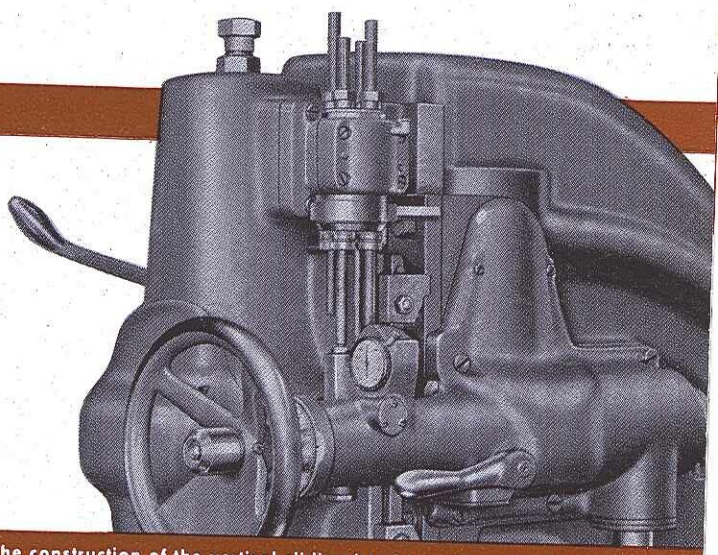
Built-in RIGI

- Thorough engineering analysis of the problems involved in milling has resulted in a machine design recognized the world over for rigidity in construction and precision in performance.
- The following structural features illustrate the "built-in rigidity" of Milwaukee Milling Machines:
- A solid back column. This rugged, one piece, box section, semi-steel casting is the foundation for the machine's strength and rigidity.
- A sturdy reinforced knee. The heavy box section construction is reinforced with cross members, built to withstand heavy cutting forces. Additional strength is provided by an exceptionally long bearing contact on the column face (22¼″ on the Model 2K, 22¾″ on the Model 3K).
- A wide heavy saddle. This heavy semi-steel casting affords maximum bearing surface and support for the table. Its drop-center construction keeps knee-table

r from the drive
units are mounted
sverse reinforcing
ack of column.
e mechanism.

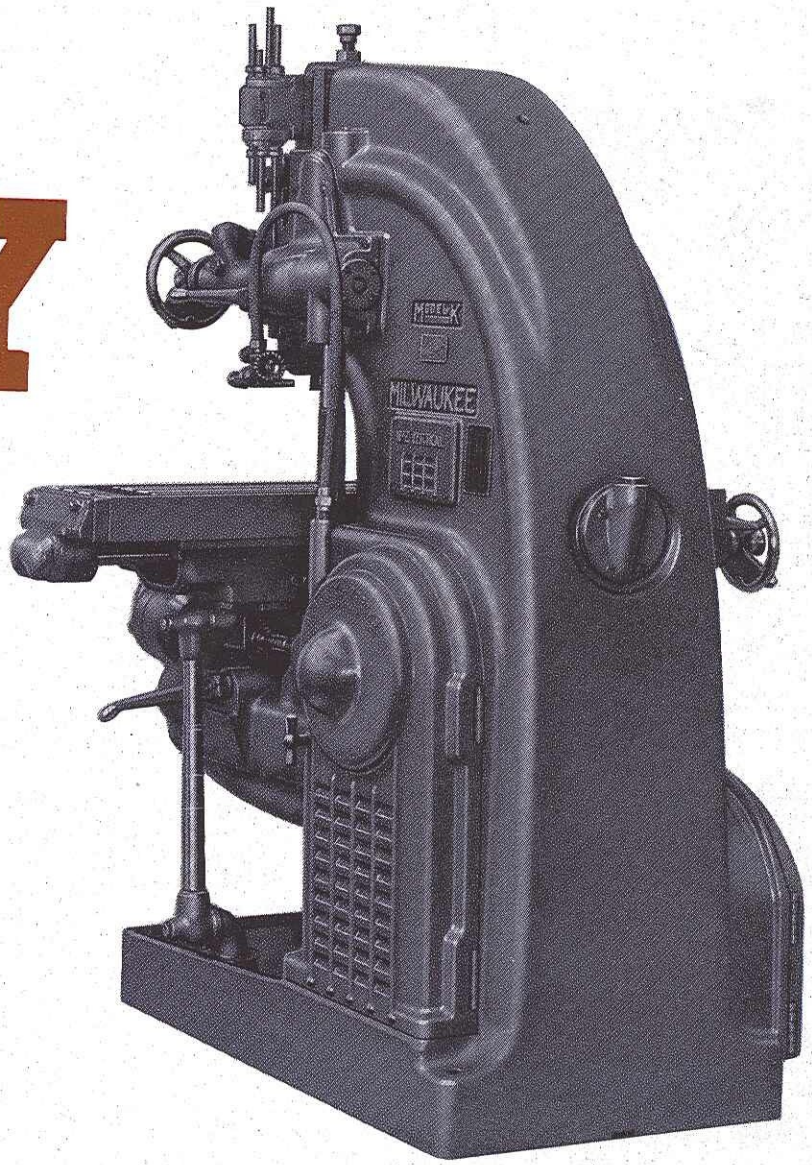


Drop-center knee construction brings the table close to the top of the knee. The heavily reinforced thick box section walls form a solid supporting structure. Over 22" of knee bearing surface, with the apron extending above the top of the knee, provides rigid support for the knee, saddle, and table.



The construction of the vertical sliding head permits vertical adjustment of the entire unit while the hand and power controls remain at a fixed convenient height. Power is transmitted to the three bearing vertical spindle by means of high speed, low torque, multiple splined shafts.

DITY



top distance to a minimum (7⅛" on Model 2K Plain, 7⅝" on Model 3K Plain).

- A heavy duty table. A massive block of semi-steel, cast solid and machined all over; it provides rigid support and accurate alignment for the workpiece under all milling conditions.

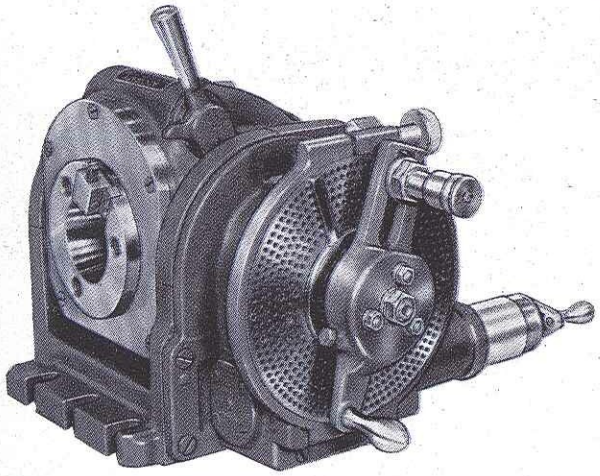
- A three bearing spindle. The deflection in a shaft varies directly as the cube of its unsupported length. The addition of a center bearing on the spindle makes it eight times more resistant to deflection.

- Double Overarms. The double overarm and triangular arbor support form the most rigid possible geometric structure. This structure affords maximum support to both arbors and cutters.

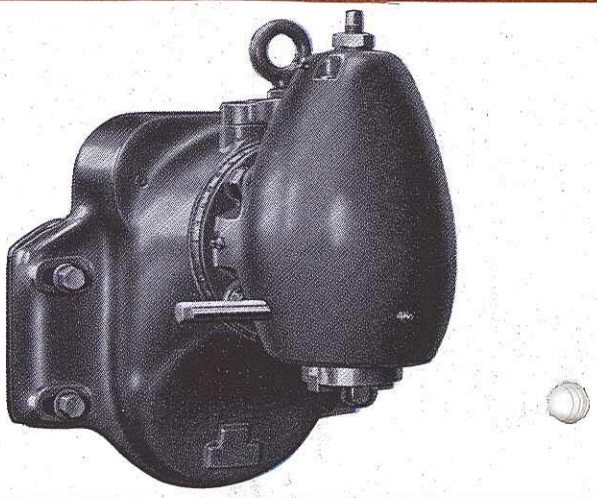
- The experienced shop man recognizes the dependable rigidity and accuracy of Milwaukee Milling Machines when he says, "If it's a tough job, better put it on a Milwaukee"

STANDARD *Attachments and*

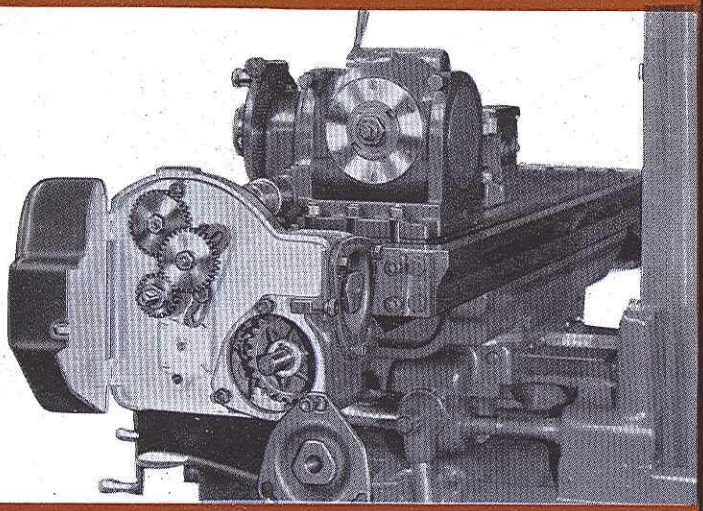
FOR MILWAUKEE 2K - 3K MILLING MACHINES



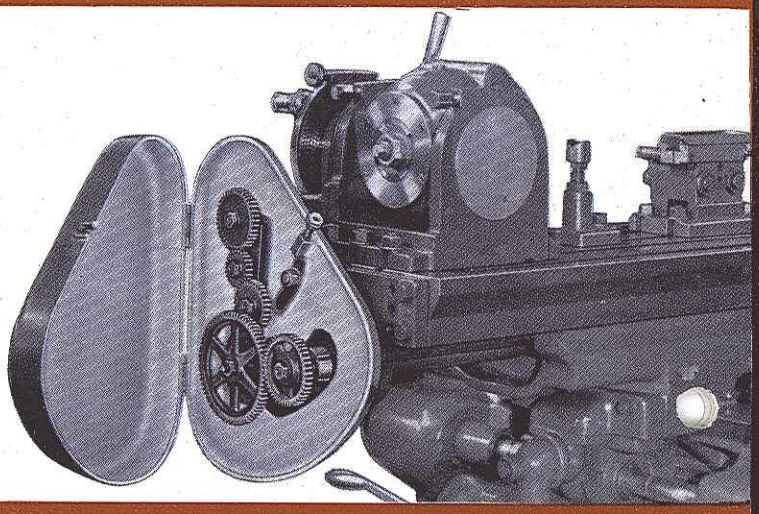
The Model K Universal Spiral Dividing Head with the exclusive 5 to 1 indexing ratio and the positive distortion free clamping mechanism, assures quick accurate indexing. Write for Bulletin WA12.



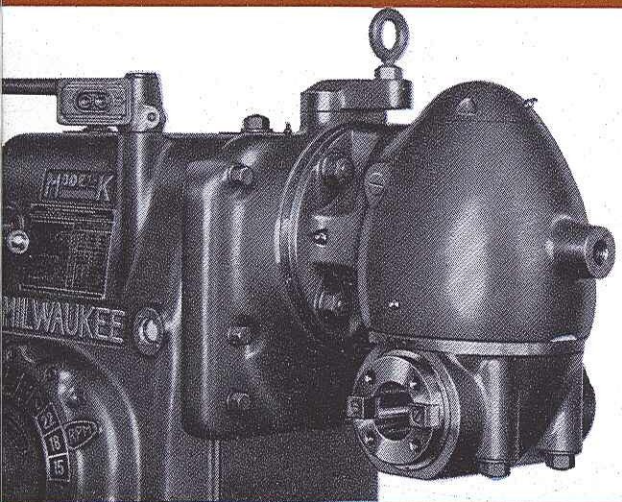
The Swivel Head Vertical Milling Attachment is used to temporarily adapt a horizontal milling machine for vertical milling operations. Write for Bulletin CA12.



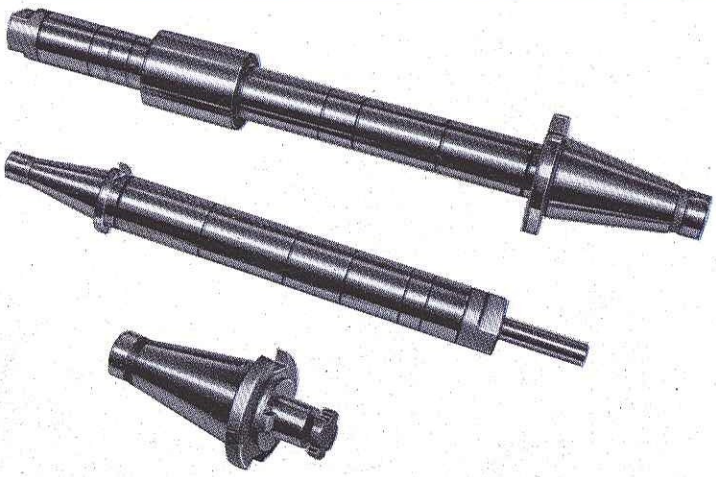
The Low Lead Attachment used with the Model K dividing head is capable of cutting over 40,000 leads by power. It may be used in conjunction with the rotary table for circular milling operations. Write for Bulletin WA12.



The Conventional Lead Attachment is used to mill leads from .670″ to 149″. It is used with the Model K dividing head. Write for Bulletin WA12.



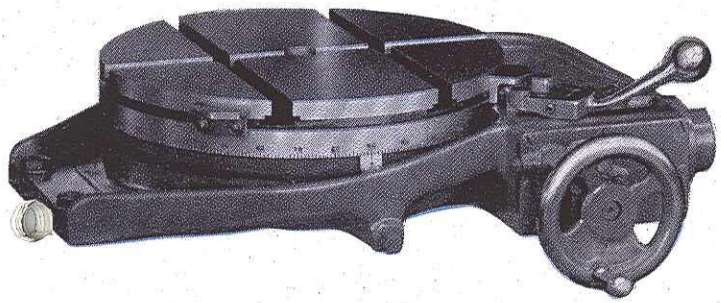
The Heavy Duty Universal Milling Attachment spindle swivels on two circular graduated faces at right angles to each other, permitting the setting of the spindle at compound angles. Write for Bulletin CA15.



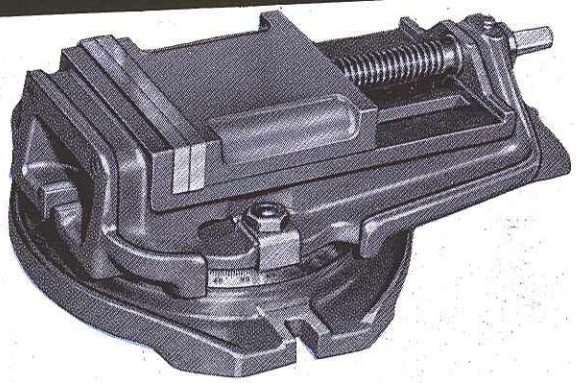
Milwaukee Arbors, style A, B, and C, collet holders, centering plugs, etc. Equipped with National Standard spindle taper, they fit all standard milling machines. Write for Catalog C10.

Accessories

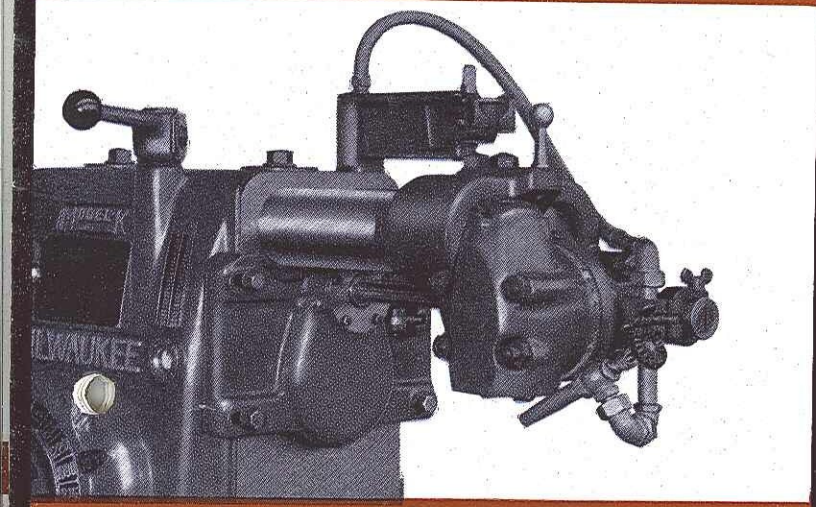
A well engineered milling machine must be adaptable to a wide range and type of operations. It is well to remember that adaptability can be as necessary in the milling department as it is in the toolroom. ★ On this page is illustrated a complete line of standard attachments and accessories, designed to fulfill almost any milling need that may arise. These attachments are standardized to fit every 2K, 3K Milwaukee Milling Machine, whether purchased with the machine or at a later date.



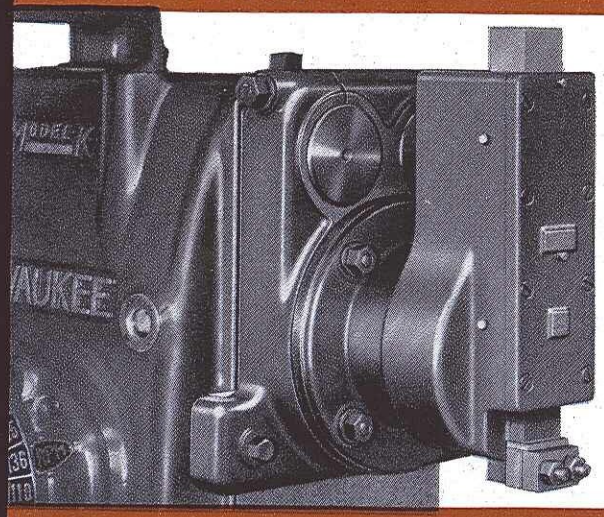
Rotary Tables of rigid and accurate construction are available in four sizes, 12″, 16″, 20″, and 24″ diameter and in two types—one for hand feed only and the other for power feed. Write for Bulletin WA14.



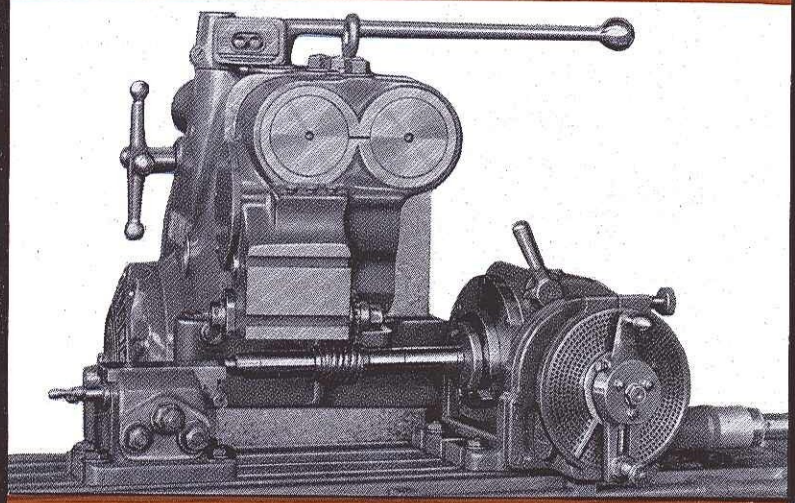
Plain and Swivel Vises, sturdily built of the finest material and workmanship, are available in 5″, 6″, 7″, 8″, and 9″ sizes and can be used on any standard milling machine. Write for Catalog C10.



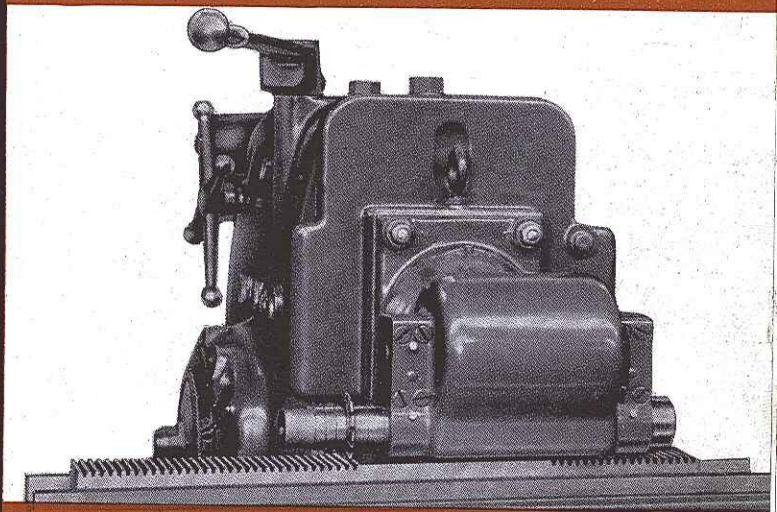
The Standard High Speed Adjustable Universal Milling Attachment because of its versatility is adapted to a wide variety of uses. It has 10″ of cross adjustment with spindle speeds up to 2500 rpm. Write for Bulletin CA11.



The Slotting Attachment is sturdy and rigid in construction and can be swiveled through 360°. It is especially versatile when used with a rotary table or dividing head. Write for Bulletin CA16.



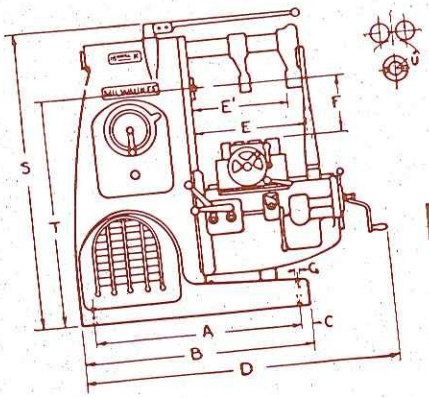
The Thread Milling Attachment, in conjunction with the low lead attachment, will quickly convert a 2K or 3K Universal Milling Machine into a practical and efficient thread miller. Write for Bulletin CA17.



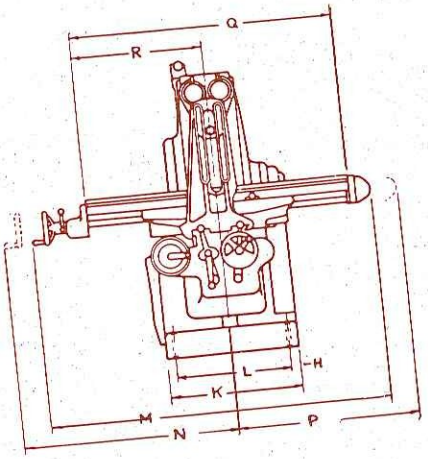
The Rack Milling Attachment adapts the Milwaukee 2K & 3K Milling Machine for rack milling and cross slot milling on long workpieces. Write for Bulletin CA18.

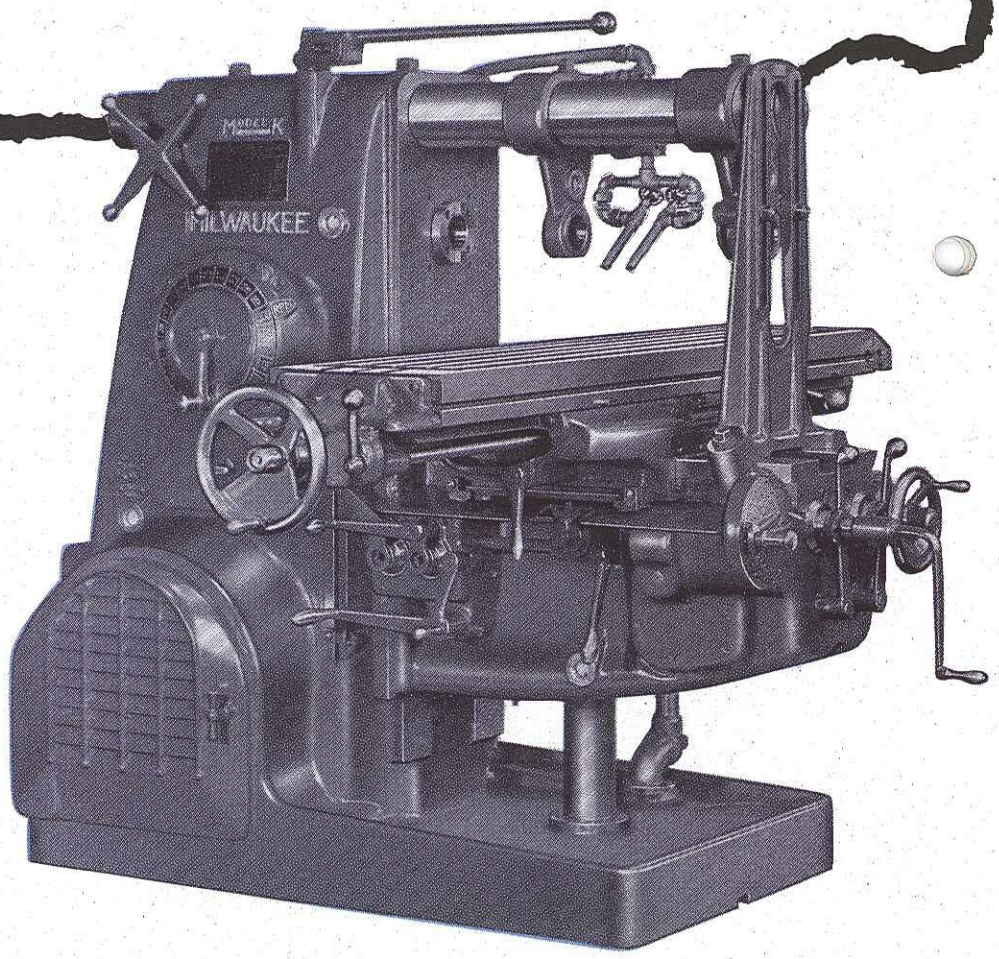
PLAN DIMENSION DATA

	A	B	C	D	E	E¹	F Min	F Max	G	H	K	L	M	N	P	Q	R	S	T	U
2K Plain (inches)	43L 45R	49	2	69¼	26⅞	23¾	0	17 1/16	13/16	2	28	24F 24½R	71⅛	50⅝	49⅛	56	41	62½	48	6⅜
3K Plain (inches)	48½L 51R	55	2	75¾	31 1/16	27¾	0	18⅛	13/16	2	32	28F 28⅞R	83¼	60⅞	56⅞	64	48	66¼	50	7¼
2K Plain (mm)	1092L 1143R	1245	51	1759	682	604	0	434	21	51	711	610F 622R	1806	1286	1248	1422	1041	1588	1219	162
3K Plain (mm)	1232L 1295R	1397	51	1924	789	706	0	461	21	51	813	711F 733R	2102	1556	1432	1626	1219	1683	1270	184



PLAN DIMENSIONS





PLAIN TYPE

Double Overarms

Duplicate Front and Rear Controls

Safety Interlocks on all Control Levers

Center Bearing Spindle

Easy-to-Read Dials

Cross-Mounted Motor

Automatic Lubrication System

Solid Rear Wall Column

"Live" Rapid Traverse

Correct Working Height

24 Speed changes

32 Feed changes

GENERAL SPECIFICATIONS

	No. 2K PLAIN		No. 3K PLAIN	
	Inches	Millimeters	Inches	Millimeters
TABLE—				
Working Surface	56″x12″	1422x305	64″x15½″	1625x394
Size Over-all	56″x12″	1422x305	64″x15½″	1625x394
T-Slots—Number and Width	Three—11/16″	Three 17.5	Three—11/16″	Three 17.5
—Center Distance	2¾″	70	2¾″	70
Back Edge of Table to Center of First T-Slot	3¼″	82.5	5″	127
FEED RANGE—				
Longitudinal Power Feed (front and rear control)	28″	711	34″	864
Cross Power Feed (front and rear control)	10″	254	12″	305
Vertical Power Feed (front and rear control)	17″	432	18″	457
HEIGHT—Low Spindle Height Eliminates Hazardous Platforms—				
Center-line of Spindle to Floor	48″	1220	50″	1270
Center-line of Spindle to Top of Table, Maximum (Minimum 0″)	17 1/16″	434	18⅛″	461
WIDTH—				
Column to Adjustable Overarm Brace—Maximum	26⅞″	682	31 1/16″	789
Column to Inside of Arbor Support—With Brace in Place (Maximum)	23¾″	603	27¾″	706
Column to Inside of Arbor Support—Without the Brace (Maximum)	24¾″	628.7	29¾″	757
DOUBLE OVERARMS—Two Round Solid Steel Bars—				
Diameter of each Overarm	4¼″	107.95	5″	127
Width Across Both Arms (provides broad base triangular arbor support)	9⅝″	245	11¼″	286
Center-line of Spindle to Underside of Overarms—Radial Distance	6⅜″	162	7¼″	184
ARBOR SUPPORTS—Self-oiling with Adjustable Bronze Bushing— See Standard Equipment listed below for details.				
SPINDLE—Chrome Nickel Steel, Heat Treated, Hardened and Ground—				
Center Bearing (increases stiffness 8 to 1)	Yes	Yes	Yes	Yes
No. 50 National Standard, Taper Hole 3½″ per Foot	Yes	Yes	Yes	Yes
Diameter of Nose	5 1/16″	128.6	5 1/16″	128.6
Size of Hole Through for 1″ Diameter Draw-In Rod	1 1/16″	27	1 1/16″	27
SPEEDS—100 to 1 Ratio—One Complete Single Series (single lever)—				
Number	24	24	24	24
Range—In Geometrical Progression	15 to 1500 rpm	15 to 1500 rpm	15 to 1500 rpm	15 to 1500 rpm
Reverse	Yes	Yes	Yes	Yes
FEEDS—240 to 1 Ratio—One Complete Single Series (single lever)—				
Number—In Geometrical Progression	32	32	32	32
Range—Longitudinal and Cross (rate per minute)	¼″ to 60″	6 to 1440	¼″ to 60″	6 to 1440
—Vertical (rate per minute)	⅛″ to 30″	3 to 720	⅛″ to 30″	3 to 720
Front and Rear Feed Controls—Hand and Power—	Included	Included	Included	Included
RAPID TRAVERSE—With Spindle Stopped or Running—				
Longitudinal—Rate per Minute (front and rear control)	150″	3600	150″	3600
Cross—Rate per Minute (front and rear control)	150″	3600	150″	3600
Vertical—Rate per Minute (front and rear control)	75″	1800	75″	1800
DRIVE—Silent Multiple V-belt from Motor—				
Pulley Speed	600 rpm	600 rpm	600 rpm	600 rpm
Motor Speed	1800 rpm	1800 rpm	1800 rpm	1800 rpm
Horsepower Recommended	7½	7½	10	10
CODE WORD—(For Belt Driven Machines, Add the Word "BELT.") (*) Indicates Metric Lead Screws and Dials are required.	KIDAB	KIFAD*	KIDNO	KIFLO*
SHIPPING DATA—				
Net Weight	6100 lb	2769 kg	7800 lb	3541 kg
Shipping Weight (Domestic)	6600 lb		8300 lb	
Shipping Weight (Foreign)	6950 lb	3155 kg	9000 lb	4086 kg
Size of Case (Foreign)	42″x75″x69″	1067x1905x1753	48″x85″x73″	1219x2159x1854
Cubic Measurements (Foreign)	126 cu ft	3.56 cu meters	172 cu ft	4.86 cu meters

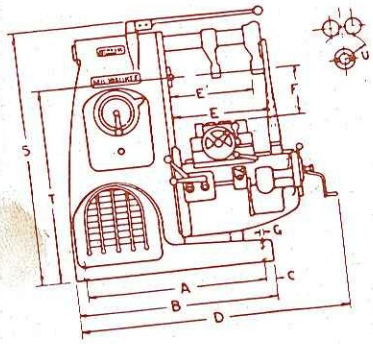
STANDARD EQUIPMENT INCLUDES: Duplicate front and rear power and hand feed controls; spindle reverse; oil filter; cutter coolant system; power rapid traverse in both directions for longitudinal, cross and vertical movements of table; arbor draw-in rod; adjustable arm brace; two style B arbor supports—one outer support with studs for bolting to arm brace and one intermediate arbor support without studs—(style B arbor supports have adjustable bushings with 2⅛″, No. 3 diameter hole on No. 2K Plain Machines and with 2¾″, No. 4 diameter hole on No. 3K Plain Machines); built-in push button station for starter, and necessary wrenches.

EXTRA EQUIPMENT (Available at additional cost); Plain and swivel vises, universal and vertical milling attachments, slotting attachment, rack milling attachment, rack indexing attachment, rotary tables, hinged arbor support, arbors and collets. (see pages 12 & 13)

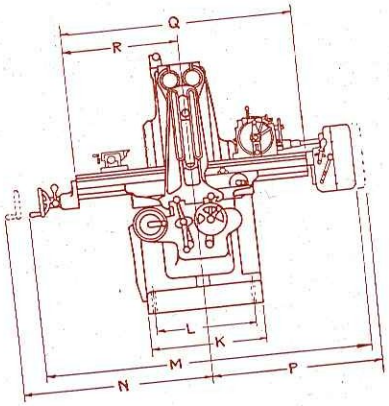
The manufacturer reserves the right to improve, change or modify the construction of these milling machines or attachments or any part thereof as he may see fit, without incurring any obligation to make like changes on K&T MILWAUKEE Milling Machines or attachments previously sold.

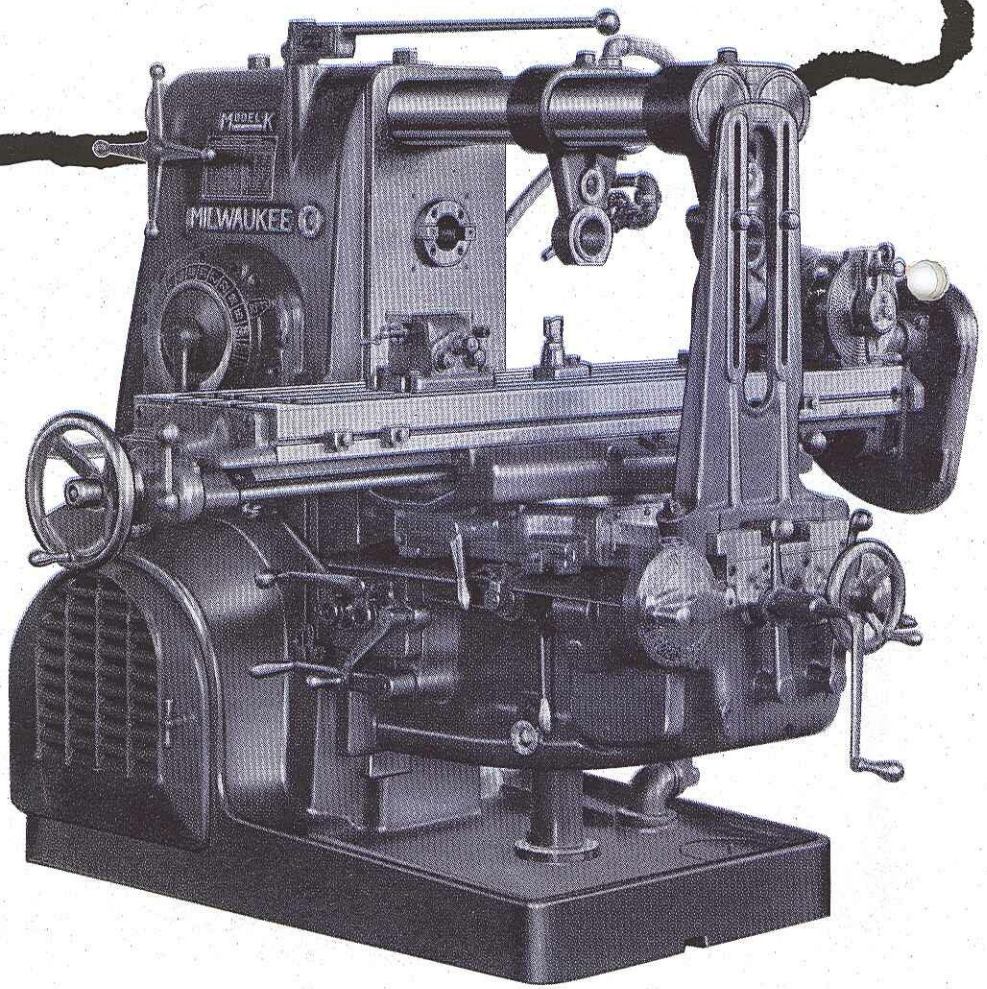
PLAN DIMENSION DATA

	A	B	C	D	E	E¹	F Min	F Max	G	K	L	M	N	P	Q	R	S	T	U
2K Universal (inches)	43L 45R	49	2	69 1/4	26 7/16	23 3/8	0	15 11/16	13/16	28	24F 24 1/2R	78 1/2	50 5/8	56 1/2	56	41	62 1/2	48	6 3/8
3K Universal (inches)	48 1/2L 51R	55	2	75 3/4	30 9/16	27 7/16	0	16 1/2	13/16	32	28F 28 7/8R	90	60 7/8	63 5/8	64	48	66 1/4	50	7 1/4
2K Universal (mm)	1092.9L 1143R	1245	51	1759	671	594	0	398	21	711	610F 622R	1995	1286	1445	1422	1041	1588	1219	162
3K Universal (mm)	1232L 1295R	1397	51	1924	776	696	0	419	21	813	711F 733R	2286	1546	1615	1626	1219	1682	1270	184



PLAN DIMENSIONS





UNIVERSAL TYPE

- Double Overarms
- Duplicate Front and Rear Controls
- Solid Rear Wall Column
- Center Bearing Spindle
- Safety Interlocks on all Control Levers
- Cross-Mounted Motor
- Automatic Lubrication System
- Easy-to-Read Dials
- "Live" Rapid Traverse
- Correct Working Height
- 24 Speed Changes
- 32 Feed Changes

GENERAL SPECIFICATIONS

	No. 2K UNIVERSAL		No. 3K UNIVERSAL	
	Inches	Millimeters	Inches	Millimeters
TABLE—				
Working Surface	56″x12″	1422x305	64″x15½″	1625x394
Size Over-all	56″x12″	1422x305	64″x15½″	1625x394
T-Slots—Number and Width	Three—11/16″	Three 17.5	Three—11/16″	Three 17.5
—Center Distance	2¾″	70	2¾″	70
Back Edge of Table to Center of First T-Slot	3¼″	82.5	5″	127
Swivels—Right or Left	47°	47°	47°	47°
FEED RANGE— Longitudinal Power Feed (front and rear control)	28″	711	34″	864
Cross Power Feed (front and rear control)	10″	254	12″	305
Vertical Power Feed (front and rear control)	17″	432	18″	457
HEIGHT— Low Spindle Height Eliminates Hazardous Platforms—				
Center-line of Spindle to Floor	48″	1220	50″	1270
Center-line of Spindle to Top of Table, Maximum (Minimum 0″)	15 13/16″	398	16½″	419
WIDTH— Column to Adjustable Overarm Brace (Maximum)	26 1/16″	671	30 9/16″	776
Column to Inside of Arbor Support—With Brace in Place (Maximum)	23 3/8″	594	27 7/16″	696
Column to Inside of Arbor Support—Without the Brace (Maximum)	24¾″	628	29¾″	756
DOUBLE OVERARMS— Two Round Solid Steel Bars—Diameter Each	4¼″	107.95	5″	127
Width Across Both Arms (provides broad base triangular arbor support)	9⅝″	245	11¼″	286
Center-line of Spindle to Underside of Overarms—Radial Distance	6⅜″	162	7¼″	184
ARBOR SUPPORTS— See Standard Equipment listed below for details.				
DIVIDING HEAD—MODEL K TYPE— Preloaded Ball Bearings—				
5 to 1 Ratio—				
Spindle Nose—No. 50 National Standard (Same as Machine Spindle)	Yes	Yes	Yes	Yes
Swings	10″	254	12″	304
Takes in Length (between centers)	35⅜″	899	43″	1092
SPINDLE— Chrome Nickel Steel, Heat Treated, Hardened and Ground—				
Center Bearing (increases stiffness 8 to 1)	Yes	Yes	Yes	Yes
No. 50 National Standard, Taper Hole 3½″ per Foot	Yes	Yes	Yes	Yes
Diameter of Nose	5 1/16″	128.6	5 1/16″	128.6
Size of Hole Through for 1″ Diameter Draw-In Rod	1 1/16″	27	1 1/16″	27
SPEEDS— 100 to 1 Ratio—One Complete Series (single lever)—Number	24	24	24	24
Range—In Geometrical Progression	15 to 1500 rpm	15 to 1500 rpm	15 to 1500 rpm	15 to 1500 rpm
Reverse	Yes	Yes	Yes	Yes
FEEDS— 240 to 1 Ratio—One Complete Series (single lever)—Number	32	32	32	32
Range—Longitudinal and Cross (rate per minute)	¼″ to 60″	6 to 1440	¼″ to 60″	6 to 1440
—Vertical (rate per minute)	⅛″ to 30″	3 to 720	⅛″ to 30″	3 to 720
Front and Rear Feed Controls—Hand and Power	Included	Included	Included	Included
RAPID TRAVERSE— With Spindle Stopped or Running—				
Longitudinal—Rate per Minute (front and rear control)	150″	3600	150″	3600
Cross—Rate per Minute (front and rear control)	150″	3600	150″	3600
Vertical—Rate per Minute (front and rear control)	75″	1800	75″	1800
DRIVE— Silent Multiple V-belt from Motor—Pulley Speed	600 rpm	600 rpm	600 rpm	600 rpm
Motor Speed	1800 rpm	1800 rpm	1800 rpm	1800 rpm
Horsepower Recommended	7½	7½	10	10
CODE WORD— Machine with Model K Dividing Head	KIDEF	KIFBE*	KIDOP	KIFOS*
For Belt Driven Machines, Add the Word "BELT."				
(*) Indicates Metric Lead Screws and Dials are required.				
SHIPPING DATA— Net Weight	6400 lb	2905 kg	8250 lb	3745 kg
Shipping Weight (Domestic)	6750 lb		8700 lb	
Shipping Weight (Foreign)	7250 lb	3291 kg	9560 lb	4340 kg
Size of Case (Foreign)	42″x75″x69″	1067x1905x1753	48″x85″x73″	1219x2159x1854
Cubic Measurements (Foreign)	126 cu ft	3.56 cu meters	172 cu ft	4.86 cu meters

STANDARD EQUIPMENT INCLUDES: Duplicate front and rear power and hand feed controls; Model K Universal Spiral Dividing Head with preloaded precision ball bearings, 5 to 1 index ratio, with one double index plate, combination side and top center adjustable tailstock, center rest, dividing center and work driver, and Lead Attachment index and lead charts; spindle reverse; oil filter; cutter coolant system; power rapid traverse in both directions for longitudinal, cross and vertical movements of table; arbor draw-in rod; adjustable arm brace; built-in push button station for starter; arbor supports; and necessary wrenches.

NOTE: Machines can be furnished with CONVENTIONAL LEAD ATTACHMENT with lead change gears for obtaining leads by power from 2½″ to 149″, or with LOW LEAD ATTACHMENT with built-in reverse, lead change gears and interchangeable worm and wormwheel sets for obtaining 40,000 leads by power from .022″ to 2918″ as desired at a differential in price.

ARBOR SUPPORTS: Two furnished with each machine—one style B outer support with studs for bolting to arm brace and one intermediate arbor support without studs (except No. 2K—See note). Style B outer arbor supports have adjustable bushings with 2⅛″, No. 3 diameter hole on No. 2K Universal Machines and with 2¾″, No. 4 diameter hole on No. 3K Universal Machines.

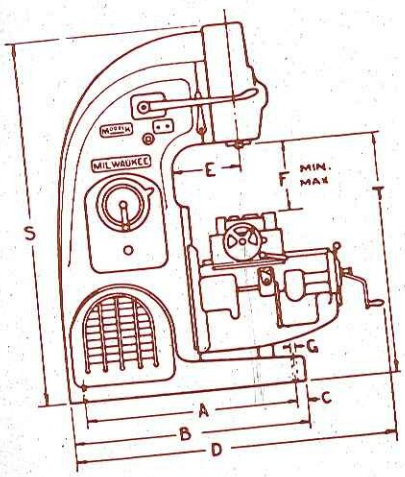
(NOTE: No. 2K Universal Machine is furnished with style A arbor support with adjustable bushing with 23/32″ diameter hole for style A (pilot end) arbors, in place of style B intermediate arbor support.

EXTRA EQUIPMENT (Available at additional cost): Plain and swivel vises, three-jaw universal chucks, right angle drive attachment for dividing head, astronomical divider for dividing head, universal and vertical milling attachments, slotting attachment, thread milling attachment, rack milling attachment, rack indexing attachment, rack vise, rotary tables, hinged arbor support, and arbors and collets. (See pages 12 and 13).

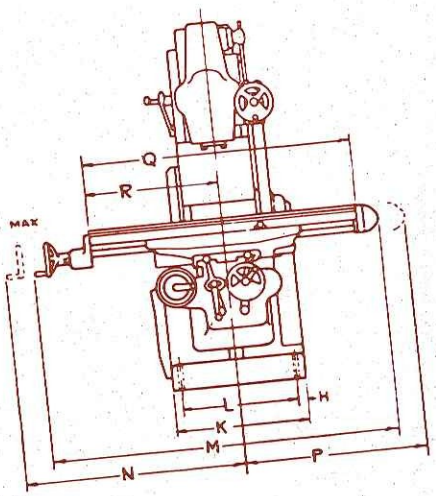
The manufacturer reserves the right to improve, change or modify the construction of these milling machines or attachments or any part thereof as he may see fit, without incurring any obligation to make like changes on K&T MILWAUKEE Milling Machines or attachments previously sold.

PLAN DIMENSION DATA

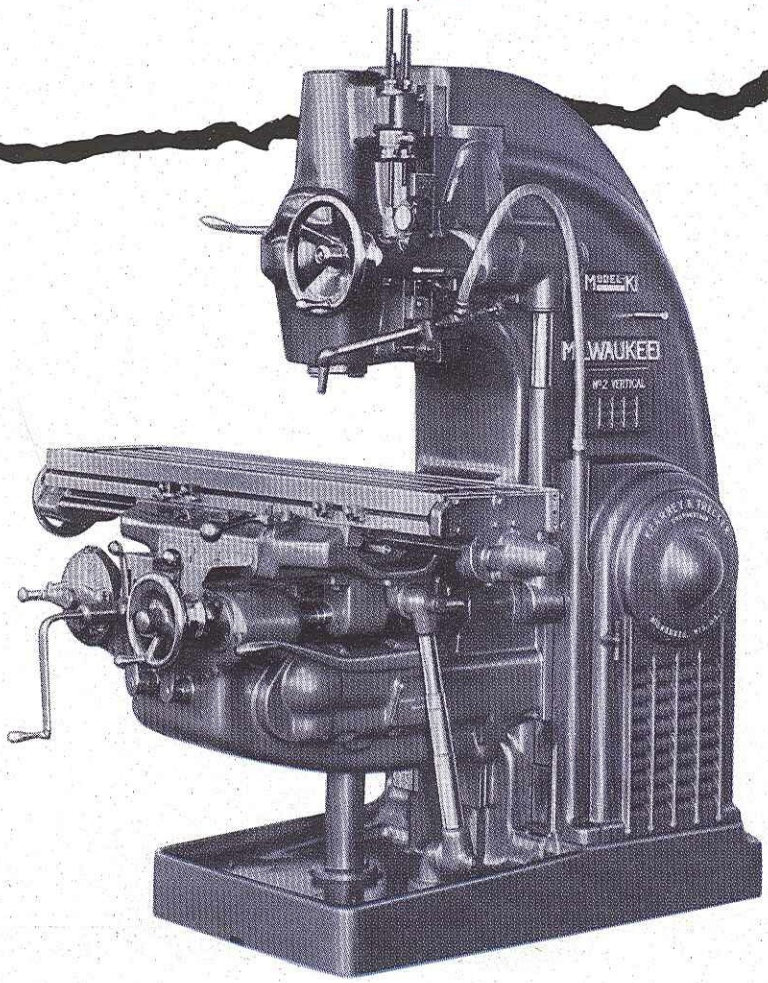
	A	B	C	D	E	F Min	F Max	G	H	K	L	M	N	P	Q	R	S	T Max	T Min
2K Vertical (inches)	43L 45R	49	2	69¼	14	0	19 1/16	13/16	2	28	24F 24½R	71⅛	50⅝	49⅛	56	41	75⅞	50	44
3K Vertical (inches)	48½L 51R	55	2	75¾	18	0	21	13/16	2	32	28F 28⅞R	83¼	60⅞	56⅞	64	48	81¾	52¾	45¾
2K Vertical (mm)	1092L 1143R	1245	51	1759	356	0	484	21	51	711	610F 623R	1806	1286	1248	1422	1041	1927	1270	1117
3K Vertical (mm)	1232L 1295R	1397	51	1924	457	0	533	21	51	813	711F 733R	2115	1546	1445	1626	1219	2076	1340	1162



PLAN DIMENSIONS



VERTICAL TYPE



- Solid Rear Wall Column
- Center Bearing Spindle
- Easy-to-Read Dials
- Cross-Mounted Motor
- Automatic Lubrication System
- Safety Interlocks on all Control Levers
- "Live" Rapid Traverse
- Four-Position Micrometer Stop
- Correct Working Height
- 24 Speed Changes
- 32 Feed Changes

GENERAL SPECIFICATIONS

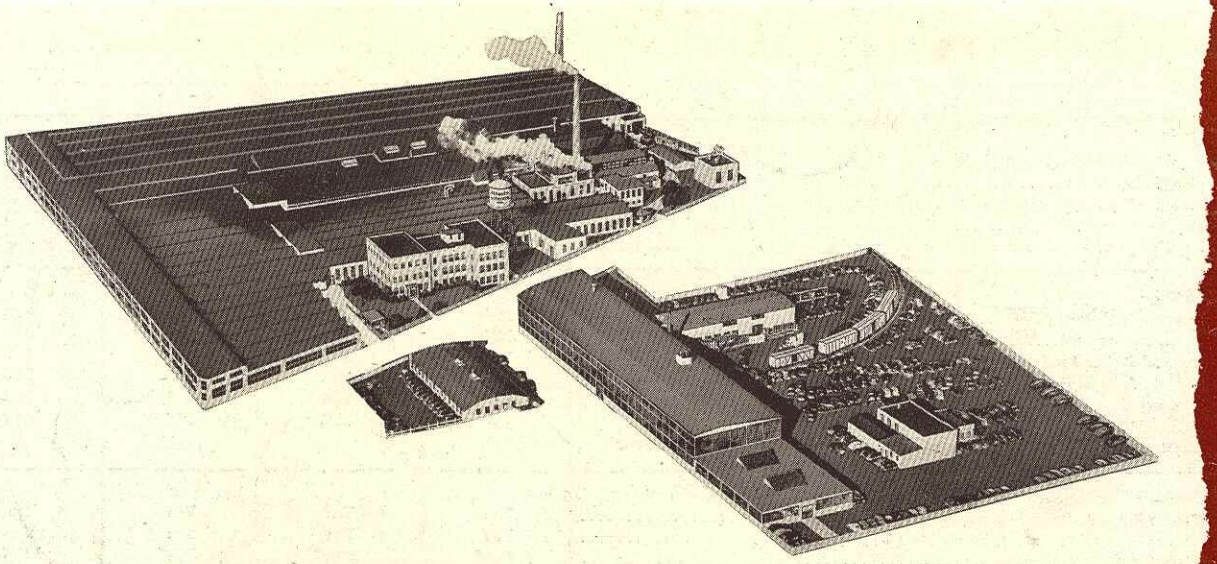
	No. 2K VERTICAL		No. 3K VERTICAL	
	Inches	Millimeters	Inches	Millimeters
TABLE—				
Working Surface	56″x12″	1422x305	64″x15½″	1625x394
Size Over-all	56″x12″	1422x305	64″x15½″	1625x394
T-Slots—Number and Width	Three—11/16″	Three 17.5	Three—11/16″	Three 17.5
—Center Distance	2¾″	70	2¾	70
Back Edge of Table to Center of First T-Slot	3¼″	82.5	5″	127
RANGE—				
Longitudinal Power Feed	28″	711	34″	864
Cross Power Feed	12″	305	14″	356
Vertical Power Feed	14″	356	16″	406
Sliding Vertical Head Power Feed	6″	152	7″	178
Distance Spindle Nose to Top of Table—Maximum	19 1/16″	484	21″	533
Throat Distance, Center-line of Spindle to Column	14″	356	18″	457
Duplicate Rear Power and Hand Controls available if desired, at additional cost.				
SPINDLE—Chrome Nickel Steel, Heat Treated, Hardened and Ground—				
Center Bearing (increases stiffness 8 to 1)	Yes	Yes	Yes	Yes
No. 50 National Standard, Taper Hole 3½″ per Foot	Yes	Yes	Yes	Yes
Diameter of Nose	5 1/16″	128.6	5 1/16″	128.6
Size of Hole Through for 1″ Diameter Draw-In Rod	1 1/16″	27	1 1/16″	27
SPEEDS—100 to 1 Ratio—One Complete Series (single lever)—				
Number	24	24	24	24
Range—In Geometrical Progression	15 to 1500 rpm	15 to 1500 rpm	15 to 1500 rpm	15 to 1500 rpm
Reverse	Yes	Yes	Yes	Yes
FEEDS—240 to 1 Ratio—One Complete Series (single lever)—				
Number—In Geometrical Progression	32	32	32	32
Range—Longitudinal and Cross (rate per minute)	¼″ to 60″	6 to 1440	¼″ to 60″	6 to 1440
—Vertical (rate per minute)	⅛″ to 30″	3 to 720	⅛″ to 30″	3 to 720
Rear Feed Controls—Hand and Power	Extra	Extra	Extra	Extra
POWER FEED TO SLIDING HEAD—				
Number of Feeds	32	32	32	32
Range of Feeds—In Geometrical Progression	⅛″ to 30″	3 to 720	⅛″ to 30″	3 to 720
RAPID TRAVERSE—With Spindle Stopped or Running—				
Longitudinal—Rate per Minute (front and rear control)	150″	3600	150″	3600
Cross—Rate per Minute (front and rear control)	150″	3600	150″	3600
Vertical—Rate per Minute	75″	1800	75″	1800
Vertical Head	75″	1800	75″	1800
DRIVE—Silent Multiple V-belt from Motor—				
Pulley Speed	600 rpm	600 rpm	600 rpm	600 rpm
Motor Speed	1800 rpm	1800 rpm	1800 rpm	1800 rpm
Horsepower Recommended	7½	7½	10	10
CODE WORD—(For Belt Driven Machines, Add the Word "BELT") (*) Indicates Metric Lead Screws and Dials are required.	**KIDIJ**	**KIFIL***	**KIDZA**	**KIFUX***
SHIPPING DATA—				
Net Weight	6700 lb	3042 kg	8800 lb	3995 kg
Shipping Weight (Domestic)	7200 lb		9400 lb	
Shipping Weight (Foreign)	7700 lb	3496 kg	10,135 lb	4601 kg
Size of Case (Foreign)	42″x82″x83″	1067x2083x2108	48″x85″x89″	1219x2210x2261
Cubic Measurements (Foreign)	165 cu ft	4.67 cu meters	210 cu ft	5.94 cu meters

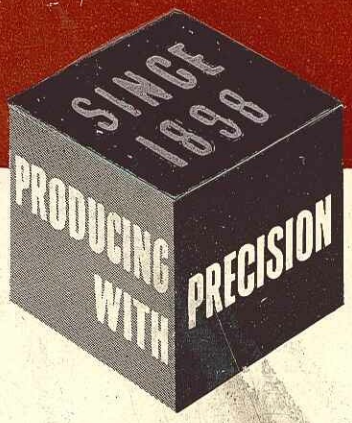
STANDARD EQUIPMENT INCLUDES: Spindle reverse; oil filter; cutter coolant system; power rapid traverse in both directions for longitudinal, cross and vertical movements of table; hand feed, power feed and power rapid traverse in both directions for vertical movement of sliding vertical spindle head; arbor draw-in rod; built-in push button station for starter; and necessary wrenches.

NOTE: No. 2K and No. 3K Vertical Machines can be furnished with a single or a four-position micrometer stop and dial indicator for sliding vertical spindle head as desired at a differential in price.

EXTRA EQUIPMENT (Available at additional cost): Plain and swivel vises, rotary tables, arbors and collets.

The manufacturer reserves the right to improve, change or modify the construction of these milling machines or attachments or any part thereof as he may see fit, without incurring any obligation to make like changes on K&T MILWAUKEE Milling Machines or attachments previously sold.





Before the turn of the century, two men with but a single thought entered the machine tool field — to build machines "at a profit if we can, at a loss if we must — but always good machines." This singleness of purpose is found confirmed and reflected in the quality and precision of all Milwaukee Machine Tools that have been designed and developed through the years. Ours is a reassuring story of initiative and invention, guided solely by a steadfast insistence on sound engineering principles and superior standards of workmanship. It is this policy of building only what is precisely manufactured that is your guarantee of a profitable return on Milwaukee Machine Tools.

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