2 machines in one!
Vertical/Horizonal

less investment, less floor space

All-new, heavy-duty horizontal spindle features all-geared positive drive, with high-inertia flywheel, 3 h.p. variable speed drive with direct lever control, and #40 MMT taper spindle equipped with drawbar.

Also available as a horizontal milling machine (Model 860 H)
Specifications

**TABLE**
Size overall (standard) ........................................ 10" x 43"
T-slots - number and size .................................. Three - 1/2"
Distance between T-slots ...................................... 2 1/8"
Dial graduations .................................................. 1001"

**RANGE**
Longitudinal (46" table) ...................................... 34"
Cross (standard) ................................................. 14"
Vertical knee ............................................................. 19 1/2"
Center of table to column face .......................... Max 19 1/2" - Min. 5 1/2"

**Vertical Spindle**
Quill ........................................................................ 5"
Head tilt, forward and backward ......................... 45° - 0 - 45°
Head tilt, side to side ........................................... 30° - 0 - 90°
(Tandem)
Turret rotation on column ................................... 360°
Spindle nose to top of table ............................... 21.5" max., 0" min.
Center of spindle to column face ....................... 28 3/8" max., 2 7/8" min.

**Horizontal Spindle**
Spindle housing rotation .................................. ± 30°
Centerline horizontal spindle to table top ........ 16 1/2" max., 0" min.

**SPINDLE**
Reverse ................................................................ Yes

**Vertical Spindle**
Spindle nose ........................................................... #9 B & S, R-8, #30 MNT
Quill feeds: (5) - per spindle revolution ................. .0015", .003", .005"

**Horizontal Spindle**
Spindle nose ........................................................... #40 milling machine taper with 3/8"-11 drawbar (4) 1/2"-13 tapped holes on a 2 1/8" dia. B.C.
with (2) 1/2" drive keys for face mills
Spindle speeds, variable speed drive ...................... Variable speed 42 to 425 rpm back gear, 412 to 4200 rpm direct drive.

Standard equipment supplied with machine:
- Spindle drive motor
- 3 h.p. horizontal, with variable speed drive
- 3 h.p. vertical, with variable speed drive
- Power feed to vertical quill
- Electrical controls, including reversing switches and all wiring
- One type "B" arbor support for (1.375 OD bearing)
- One-shot lubrication
- Hand-scraped hard chromed ways
- Way covers

Note: Machine can be ordered complete with vertical head, or as a horizontal mill to which the vertical head can be added later.

Optional equipment at extra cost:
- #30 QC nut on vertical
- #40 Spindle on vertical w/OC nut
- 200 K3 and 300 K3 on vertical
- Magnetic control (NFPA-79)
- Overarm brace
- Swivel or plain base vises
- Rotary table and indexing attachment
- Slitter attachment
- Type B arbor
- Longitudinal, cross or knee power feed
- Chip pan flood coolant
- Digital read-out system

Specifications subject to change without notice

MANUFACTURED BY:
Wells-Index Division
A & D Machinery Company
701 West Clay Avenue
Muskegon, Michigan 49440-1064
Phone (231) 759-0950 • Fax (231) 728-7456
Specifications

**TABLE**
- Size overall (standard) ........................................... 16" x 45"
- T-slots – number and size ........................................ Three – ¼"'
- Distance between T-slots ....................................... 2¼"'
- Dial graduations .................................................... 001"'

**RANGE**
- Longitudinal (46" table) ........................................... 34"'
- Cross (standard) ..................................................... 14"'
- Vertical knee ......................................................... 19½"'
- Center of table to column face .......................... Max 19½"" Min 5½"'

**Vertical Spindle**
- Quill ................................................................ ........... 5"'
- Head slide, forward and backward ....................... 45° – 0 – 45°
- Head rotation, side to side ................................... 30° – 0 – 90°
- (and greater) ..................................................... 360°
- Spindle nose to top of table .......................... 21.5" max., 0" min.
- Center of spindle to column face .................. 28¼" max., 2¼" min.

**Horizontal Spindle**
- Spindle housing rotation ...................................... ±30°
- Centerline horizontal spindle to table top .......... 16½" max., 0" min.

**SPINDLE**
- Reverse ........................................................................ Yes

**Vertical Spindle**
- Spindle nose ............................................................. #9 B & S, R-8, #30 MNT
- Quill feeds: (3) – per spindle revolution .............. .0015", .003", .006"

**Horizontal Spindle**
- Spindle nose ............................................................. #40 milling machine taper with ½\"-11 drawbar (4) ½\"-13 tapped holes on a 2½\" dia. B.C.
- Spindle speeds, variable speed drive ................. Variable speed
- 42 to 425 rpm back gear, 412 to 4200 rpm direct drive.

**DRIVES**
- Motor spindle ............................................................... 3 h.p.

**Vertical Spindle**
- Type ........................................................................ Variable speed (standard)

**Horizontal Spindle**
- Type ........................................................................ Variable speed

**OPTIONAL POWER FEEDS**
- Longitudinal, Cross and Knee ......................... Variable from ¾-35 IPM
- Rapid Traverse Long. and Cross ....................... 35-40 IPM
- Rapid Traverse Knee .............................................. 15 IPM

**ARBOR LENGTH ACCOMMODATED**
- Vertical Spindle ......................................................... 18" max.

**OVERARM**
- Horizontal Spindle ................................................... 7½"'
- Underside to centerline horizontal spindle .......... 7½"'
- End of spindle to bushing in arbor support .......... 20½"'

**FLOOR SPACE**
- Front to back .............................................................. 78"'
- Right to left ................................................................ 107"'

**HEIGHT OVERALL**
- With vertical head ................................................... 90"'
- Less vertical head ...................................................... 66"'

**SHIPPING WEIGHT (approximate)**
- With vertical head ................................................... 3,000 lbs.
- Less vertical head ...................................................... 3,300 lbs.

Standard equipment supplied with machine:
- Spindle drive motor
- 3 h.p. horizontal, with variable speed drive
- 3 h.p. vertical, with variable speed drive
- Power feed to vertical quill
- Electrical controls, including reversing switches
- and all wiring
- One type 8" arbor support for (1.375 OD bearing)
- One-shot lubrication
- Hand-scraped hard chromed ways
- Way covers

Note: Machine can be ordered complete with vertical head, or as a horizontal mill to which the vertical head can be added later.

Optional equipment at extra cost:
- #30 QC nut on vertical
- #40 Spindle on vertical w/ QC nut
- 200 K8 and 300 K8 on vertical
- Magnetic control (NFPA-79)
- Overarm brace
- Swivel or plain base vises
- Rotary table and indexing attachment
- Slatter attachment
- Type 8 arbor
- Longitudinal, cross or knee power feed
- Chip pan/flood coolant
- Digital read-out system

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