



## SKU : 102781

The special construction of the Multi Grind makes it possible to combine the functions of cylindrical, flat and tool grinding in one machine. With external cylindrical grinding, the workpiece is either clamped on one side or supported between centers in the stable tailstock. An internal grinding device can also be attached to the headstock and light surface grinding work is also possible with this model. With the additional tool grinding function area, you can use the Multi Grind to machine the cutting edges of a large number of tools.

- Outer and inner cylindrical grinding
- Surface grinding
- Tool grinding
- Hydraulic table feed
- Wide range of accessories

## TECHNICAL SPECS

### WORKING AREA

Grinding diameter	7.9 in
Workpiece length (max.)	20 in
Outside grinding measure, maximum	Ø 0,2-2, x 15,8 in
Inside grinding measures, optimal	Ø 0,4-2 x 3 in
Tool grinding measure	8 in x 20 in
Work piece length surface grinding	8 in
Work piece width surface grinding	2 in
Workpiece weight (max.)	22 lbs
Table swivel range (max.)	+45° / -30°

### TRAVELS

Travel Z-axis	19 in
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### FEED

Feed per hand-wheel rotation X-axis, fine	0.0394 in
Feed per hand-wheel rotation X-axis, rough	0.1575 in
Feed per scale division X-axis, fine	0.0002 in
Feed per scale division, X-axis, rough	0.00079 in
Scale division of height adjustment	0.00039 in
Longitudinal feed speed (hydraulic)	0 fpm - 20 fpm
Manual, hydraulic assist	23 fpm

### HEADSTOCK

Working headstock swivel range	± 90°
Working spindle speed	110 rpm - 300 rpm
Working spindle taper	2 MT
Chuck diameter	4 in

### GRINDING HEADSTOCK

Grinding spindle speed	2500 rpm
Inside grinding spindle speed	13500 rpm
Grinding headstock swivel range	± 90
Grinding headstock - vertical / - transverse	8 in

### TAILSTOCK

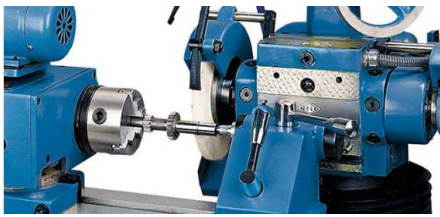
Height adjustment per handwheel rotation	0.08 in
Tailstock taper	2 MT
Tailstock quill stroke	1 in

### DRIVE CAPACITY

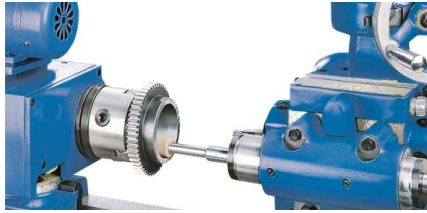
Machine drive capacity	3.4 Hp
Motor rating main drive	1.5 Hp

### MEASURES AND WEIGHTS

Grinding wheel dimensions	7.87 in x 0.79 in x 2.95 in
Grindstone dimensions, inside grinding (min.)	0.4 in x 0.4 in x 0.1 in
Grindstone dimensions, inside grinding (max.)	1 in x 0.8 in x 0.2 in
Overall dimensions (length x width x height)	60 in x 54 in x 56 in
Weight	2860 lbs



Outside cylindrical grinding for lengths up to 15.75 in.



High-speed inside cylindrical grinding



Rigid angle-adjustable workpiece mounts



Swiveling headstock and extensive accessories



Saw blade sharpening

## PRODUCT DETAILS

The functionality of the Multi-Grind ranges from external and internal cylindrical grinding to taper grinding. The Multi-Grind also allows easy tool grinding (sharpening of cutters, reamers and turning tools) and is suitable for light surface grinding jobs.

- Three-Point Bearing The custom three-point bearing of the grinding spindle ensures minimum temperature effects and consistent grinding quality.
- Feed Drives Hydraulic table feed (longitudinal) with automatic change of direction. An additional manually operated longitudinal feed with hydraulic support allows feed speeds up to 275"/min.
- Grinding Headstock Special grinding headstock design allows simultaneous setup of 2 different grinding wheels. The grinding headstock can be moved in transverse direction and also vertically; and it can be rotated around the vertical axis.
- Speeds The headstock operates at 3 different speeds (110, 200, 300 rpm) which are set through an easy to operate gear shift lever.
- Additional Features... - central lubrication system - sturdy construction - the KNUTH Multi-Grind body is made of solid cast-iron and weight 2860 lbs; minimizes vibration effects - electrical components are mounted easily accessible in a control cabinet

## STANDARD EQUIPMENT

Coolant system  
 Exhaust vacuum  
 Tool mount / indexing head MT 4  
 Internal grinding unit including 2 die grinders  
 3-jaw chuck (4" diam.)  
 Left tailstock  
 Right tailstock MT 2  
 Center point  
 Half center points  
 Balancing station  
 Spindle extension  
 Vise for surface grinding (3-D angle adjustment)  
 Spring stop  
 5 drivers  
 Various splash guards  
 Grinding wheel guard (2x)  
 Automatic central lubrication  
 Operator manual  
 Test certificate