



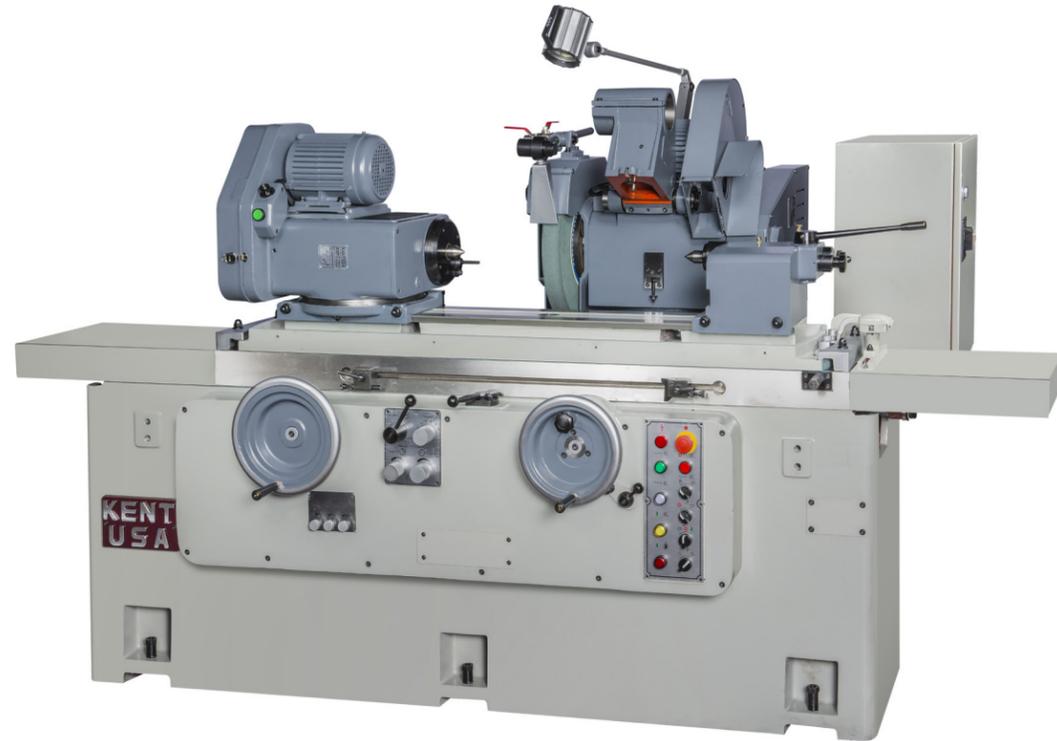
Cylindrical Grinder

KUG Series



www.kentusa.com

Cylindrical / Universal Grinding Machine



KUG-27 SERIES

Grinding Diameter: 10"
Grinding Length: 23"-78"

KUG-35 SERIES

Grinding Diameter: 13"
Grinding Length: 23"-78"

Internal Attachment

(Universal Cylindrical Standard Accessory)

Feeding Rate

Manual Grinding Feeding
Z-Axis Hydraulic Movement
Z-Axis Manual Movement

NC Cylindrical Grinding Machine



KUG-27NC1 SERIES

Grinding Diameter: 10"
Grinding Length: 23"-78"

KUG-35NC1 SERIES

Grinding Diameter: 13"
Grinding Length: 23"-78"

NC Controller

Comes equipped with conversational touch screen interface for enhanced productivity.

Feeding Mode

X-Axis Servo Motor
Z-Axis Hydraulic Movement
Automatic Grinding

CNC Cylindrical Grinding Machine

User Friendly Controller

KUG-27 CNC SERIES

Grinding Diameter: 10"
Grinding Length: 23"-78"

Feeding Rate

- X Axis Servo Motor
- Z Axis Servo Motor
- Automatic Grinding Cycle
- Automatic Dressing Compensation
- Dressing Feeding
- Automatic Coordinate Setting

KUG-35 CNC SERIES

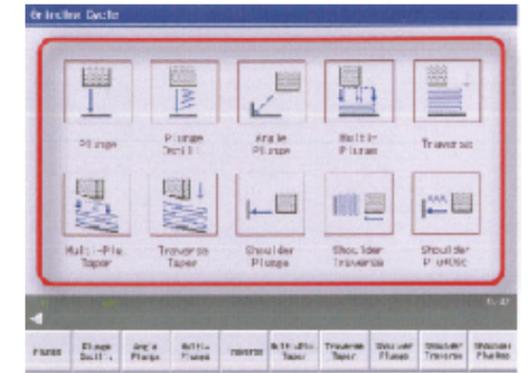
Grinding Diameter: 13"
Grinding Length: 23"-78"

Suitable for Mass Production or Short Runs.

Variety Grinding Cycles

Designed to be practical and meet user needs with ease of operation.

- | | |
|-------------------------|----------------------------------|
| Plunge w/o Oscillation | Multi-Plunge Taper Grinding |
| Plunge with Oscillation | Traverse taper Grinding |
| Angle Plunge Grinding | Shoulder Plunge w/o Oscillation |
| Multi-Plunge Grinding | Shoulder Traverse Grinding |
| Traverse Grinding | Shoulder Plunge with Oscillation |



Form Type fill in for Editing Processes.

Form Type is designed for easy and fast editing for different grinding cycles.

The regular program with NC Editing allows the user to edit any processing mode.

Easy expansion for special grinding cycle for any processing needs.

Control Options



Fanuc



Siemens



Mitsubishi



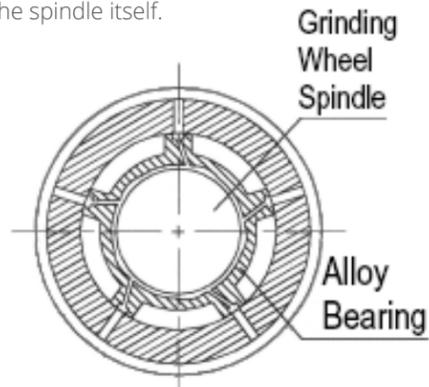
Wheel Head

Vibration Absorbing Design

The forced lubrication system of the grinding wheel spindle features a vibration absorbing function. The oil film pressure created by the hydrodynamic bearing automatically absorb the vibration according to the current working condition.

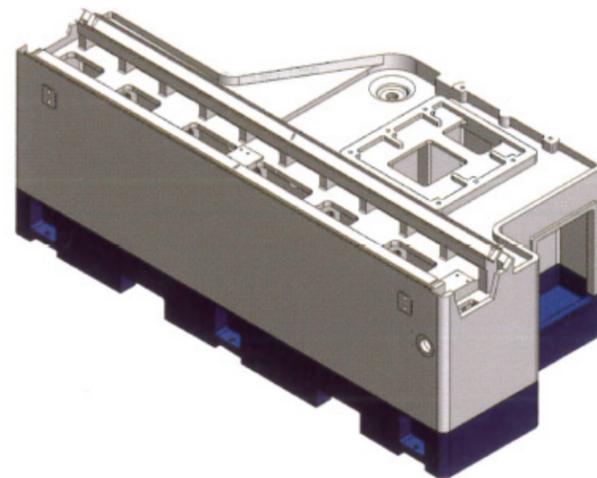
Precise Rigid Spindle

The grinding wheel spindle is supported by two special hydrodynamic bearings on the end with a five-point support. The five-point supported bearings provide maximum rigidity and stability while running the spindle. In the case of insufficient lubrication to the spindle occurs, the spindle stops automatically to avoid wearing out the hydrodynamic bearing and the spindle itself.



One-Piece Fabricated Base

The One-Piece base is manufactured from Meehanite cast iron. The Box Type Base construction provides superior stability and rigidity during operations.

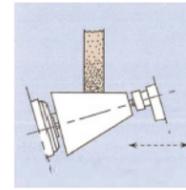


Hydraulic Tailstock (CNC)

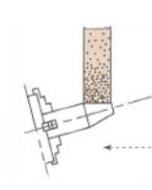
For convenient work piece loading and unloading the sleeve movement is hydraulically operated. Work piece clamping and unloading force can be adjusted by turning a knob. For maximum wear resistance and rigidity, the sleeve is machined from hardened alloy.



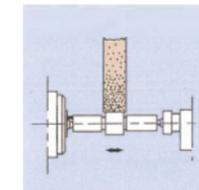
Universal/NC Cylindrical Grinding Example



Taper Grinding between two Center

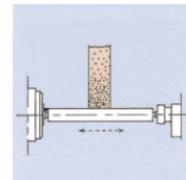


Straight Plunge Grinding

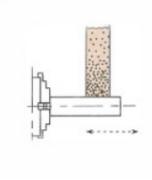


Hold on Taper Grinding

Universal/NC/CNC Cylindrical Grinding Example

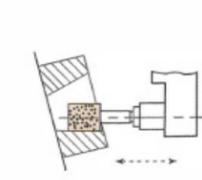


Hold on Horizontal Grinding

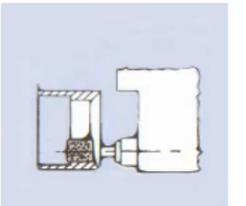


Horizontal Grinding between two Centers

Universal Cylindrical Grinding Example



Internal Taper Grinding

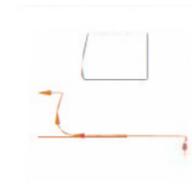


Taper Grinding

CNC Cylindrical Wheel Dressing Cycles

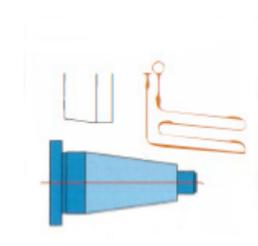


Straight Grinding Wheel

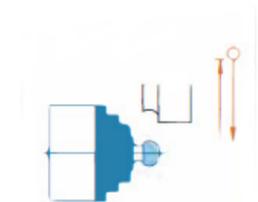


Forming Wheel with Curve

CNC Cylindrical Grinding Example



Tapered Traverse Grinding



Curve & Endface Plunge Grinding

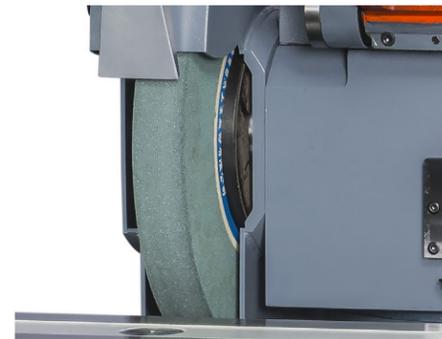
Kent USA Cylindrical Grinders combine various grinding functions into one machine, making it effective for precision grinding while providing operation convenience.

Standard Accessories

Tools and Tool Box
Grinding Wheel and Wheel Flange
Wheel Dresser
2-Point Center Rest (1m, 1.5m , 2m)
Water Pump and Tank
Fully Enclosed Splash Guard
Oil Mist Collector (CNC only)
Touch Probe Gauge (CNC only)
X-Axis Linear Scale (CNC only)

Standard Accessories

Tools and Tool Box
Grinding Wheel and Wheel Flange
Wheel Dresser
2-Point Center Rest (1m, 1.5m , 2m)
Water Pump and Tank
Fully Enclosed Splash Guard
Oil Mist Collector (CNC only)
Touch Probe Gauge (CNC only)
X-Axis Linear Scale (CNC only)



Optional Accessories

Magnetic Separator
Balancing Arbor
Wheel Balancing Base
3-Jaw Chuck
3-Point Center Rest (Large)
3-Point Center Rest (Small)
High Speed Spindle
Center Ring and Jaw Plate
Paper Filter
Internal Attachment

CNC Optional Accessories

Thickness Measuring Gauge Marposs/BS
Z-Axis Linear Scale
Auto In-Process Gauge Marposs
Auto In-Process Gauge BS
Automatic Grinding Wheel Balancing System Marposs/BS
Wheel Crash Control Device Marpass/BS

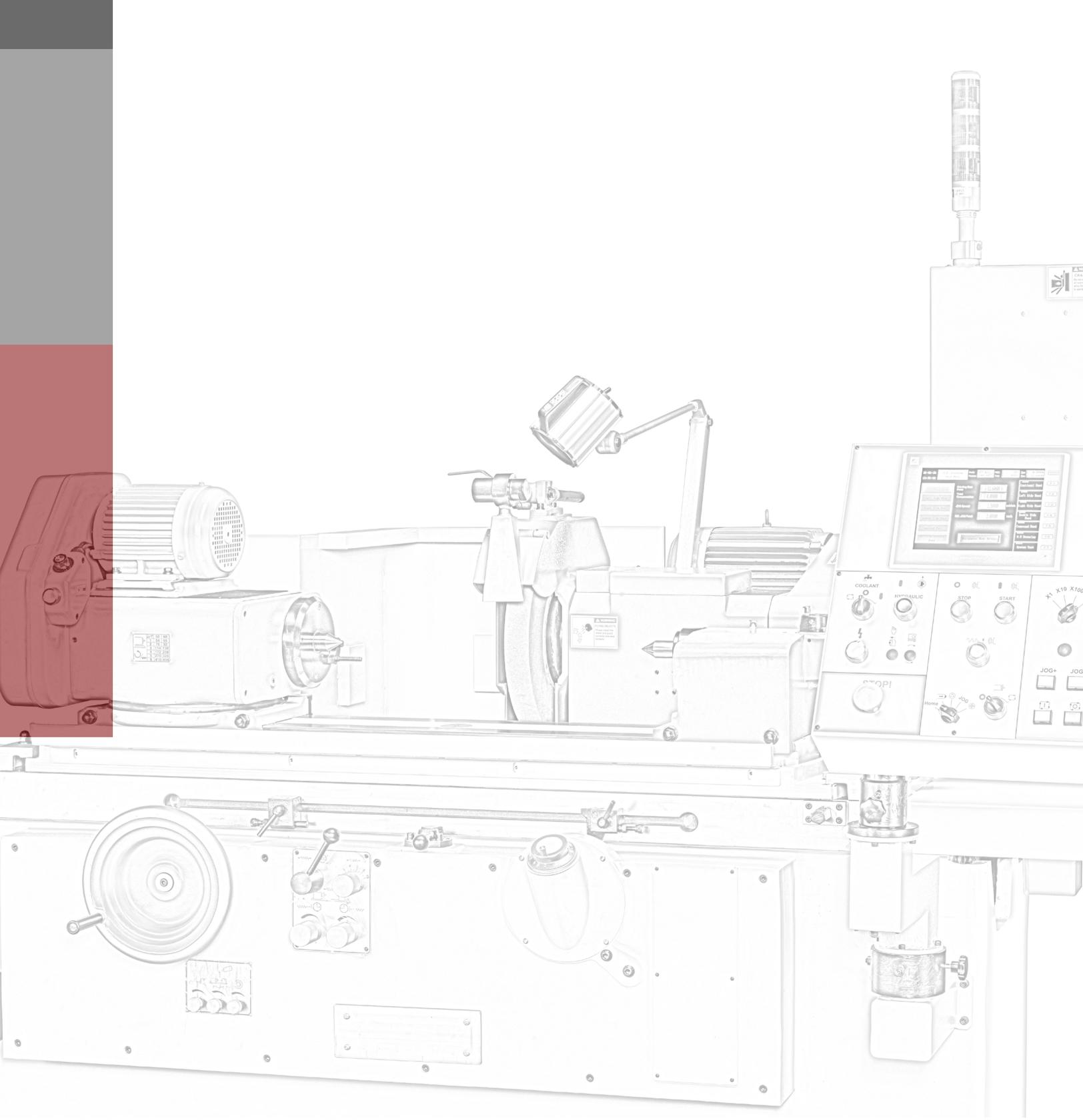
Conventional H/NC Specifications

Model		KUG-2760 H/NCI	KUG-27100 H/NCI	KUG-27150 H/NCI	KUG-27200 H/NCI	KUG-3560 H/NCI	KUG-35100 H/NCI	KUG-35150 H/NCI	KUG-35200 H/NCI
Capacity	Max Work Swing	11"				14"			
	Max. Grinding Length	24"	40"	60"	79"	24"	40"	60"	79"
	Max Grinding Dia.	10"				13"			
	Max. Job Weight in Center	154 lbs	287 lbs			154 lbs	287 lbs		
Work Head	Speed Range (rpm 60HZ)	11-500 (Variable Speed)							
	Speed Range (rpm 50HZ)	9-420 (Variable Speed)							
	Swivel Angle	120° (CCW : 90°; CW : 30°)							
	Center	MT4							
	Spindle Rotation	Setting, Normal and Reverse Rotation							
Work Table	Horizontal Travel Speed (inch/min)	2"-157"	2"-118"			2"-157"	2"-118"		
	Handwheel/Revolution	.80"							
	Swivel Angle CCW/CW	11°/6°	9°/5°	7°/4°	5°/3°	11°/6°	9°/5°	7°/4°	5°/3°
	Min Travel	.32"							
Wheel Head	Grinding Wheel Size	16" x 1"-2" x 6"				18" x 2" x 6"			
	Max Peripheral (inch/Min)	78"							
	Grinding Wheel Speed (2-step RPM 60HZ)	1499:1600 (Standard)							
	Grinding Wheel Speed (2-step RPM 50 HZ)	1508: 1603 (Standard)							
	Total Front and Rear Travel	Grinding Wheel 7"				Grinding Wheel 8"			
	Speedy Feed Travel	H Type 1.5" / NCI Type Adjustment Setting							
	WheelHead Total Feed Travel	Grinding Wheel 5"				Grinding Wheel 6"			
	HeadWheel Feed/Revolution	.04"							
Tail Stock	Center Travel	1.18"							
	Center	MT4							
Motor	Grinding Wheel Motor	5 hp, 4p (Opt. 7.5 hp)							
	Workhead Motor	1/2 hp, 6p							
	Hydraulic Motor	2 hp, 4p							
	Compulsory Lubrication Motor	1 hp, 4p							
	Coolant Motor	1/4 hp, 2p							
	Magnetic Separator Motor	1/25 hp, 2p							
	Internal Grinding Motor	2 hp, 2p							
	X Servo Motor (NC)	2 hp							
Hydraulic System	Hydraulic tank	15 gal							
	Compulsory Lubrication Motor	8 gal							
	Coolant Tank	26 gal							
General	Machine N.W. (Approx. lbs)	6283 lbs	8311 lbs	10141 lbs	11243 lbs	6503 lbs	8531 lbs	10361 lbs	11464 lbs
	Machine G.W. (Approx. lbs)	7165 lbs	9260 lbs	11572 lbs	13227 lbs	7385 lbs	9480 lbs	11794 lbs	13448 lbs
	Packing Size (L x W x H)	110"-242" x 88" x 82"							

CNC Specifications

Model		KUG-2760 CNC	KUG-27100 CNC	KUG-27150 CNC	KUG-27200 CNC	KUG-3560 CNC	KUG-35100 CNC	KUG-35150 CNC	KUG-35200 CNC
Capacity	Max Work swing	11"				14"			
	Max. Grinding Length	24"	40"	60"	79"	24"	40"	60"	79"
	Max Grinding Dia.	10"				13"			
	Max. Job Weight in Center	154 lbs	287 lbs			154 lbs	287 lbs		
	Range of Touch Probe	20"	35"	55"	74"	20"	35"	55"	74"
Work Head	Speed Range (rpm 60 hz)	11-500 (Variable Speed)							
	Speed Range (rpm 50 hz)	9-420 (Variable Speed)							
	Swivel Angle	120° (CCW : 90°; CW : 30°)							
	Center	MT4							
	Spindle Rotation	Setting, Normal and Reverse Rotation							
Work Table	Swivel Angle CCW/CW	11°/6°	9°/5°	7°/4°	5°/3°	11°/6°	9°/5°	7°/4°	5°/3°
	Max. Feed Rate	.32"							
	Min Setting Unit	0.00004"							
Wheel Head	Grinding Wheel Size	16" x 1"-2" x 6"				18" x 2" x 6"			
	Max Peripheral (inch/Min)	78"							
	Grinding Wheel Speed (2-step rpm 60 hz)	1499:1600 (Standard)							
	Grinding Wheel Speed (2-step rpm 50 hz)	1508: 1603 (Standard)							
	Max Feed Rate	.23" /min							
	Max Stroke	Grinding Wheel 7"							
	Max Setting Unit	0.00004"							
Tail Stock	Center Stroke	1.18"							
	Center	MT4							
Motor	Grinding Wheel Motor	5 hp, 4p (Opt. 7.5 hp)							
	Workhead Motor	2 hp							
	Hydraulic Motor	1 hp, 4p							
	Compulsory Lubrication Motor	1 hp, 4p							
	Coolant Motor	1/4 hp, 2p							
	Magnetic Separator Motor	1/25 hp, 2p							
	X Servo Motor	1.6 hp							
Hydraulic System	Z Servo Motor	2 hp	2 hp	3 hp	3 hp	2 hp	2hp	3 hp	3 hp
	Hydraulic tank	15 gal							
	Compulsory Lubrication Motor	8 gal							
General Specifications	Coolant Tank	26 gal							
	Machine N.W. (Approx. lbs)	6283 lbs	8311 lbs	10141 lbs	11243 lbs	6503 lbs	8531 lbs	10361 lbs	11464 lbs
	Machine G.W. (Approx. lbs)	7165 lbs	9260 lbs	11572 lbs	13227 lbs	7385 lbs	9480 lbs	11794 lbs	13448 lbs
Packing Size (L x W x H)		157"-275" x 90" x 90"							

The above specifications are for reference only, we reserve the right to alter them without further notice.



Kent Industrial USA, INC

1231 Edinger Avenue

Tustin, CA 92780 USA

Phone: +1.714.258.8526

E-mail: info@kentusa.com

www.kentusa.com