

willis

AHB

TOOLING & MACHINERY, INC.

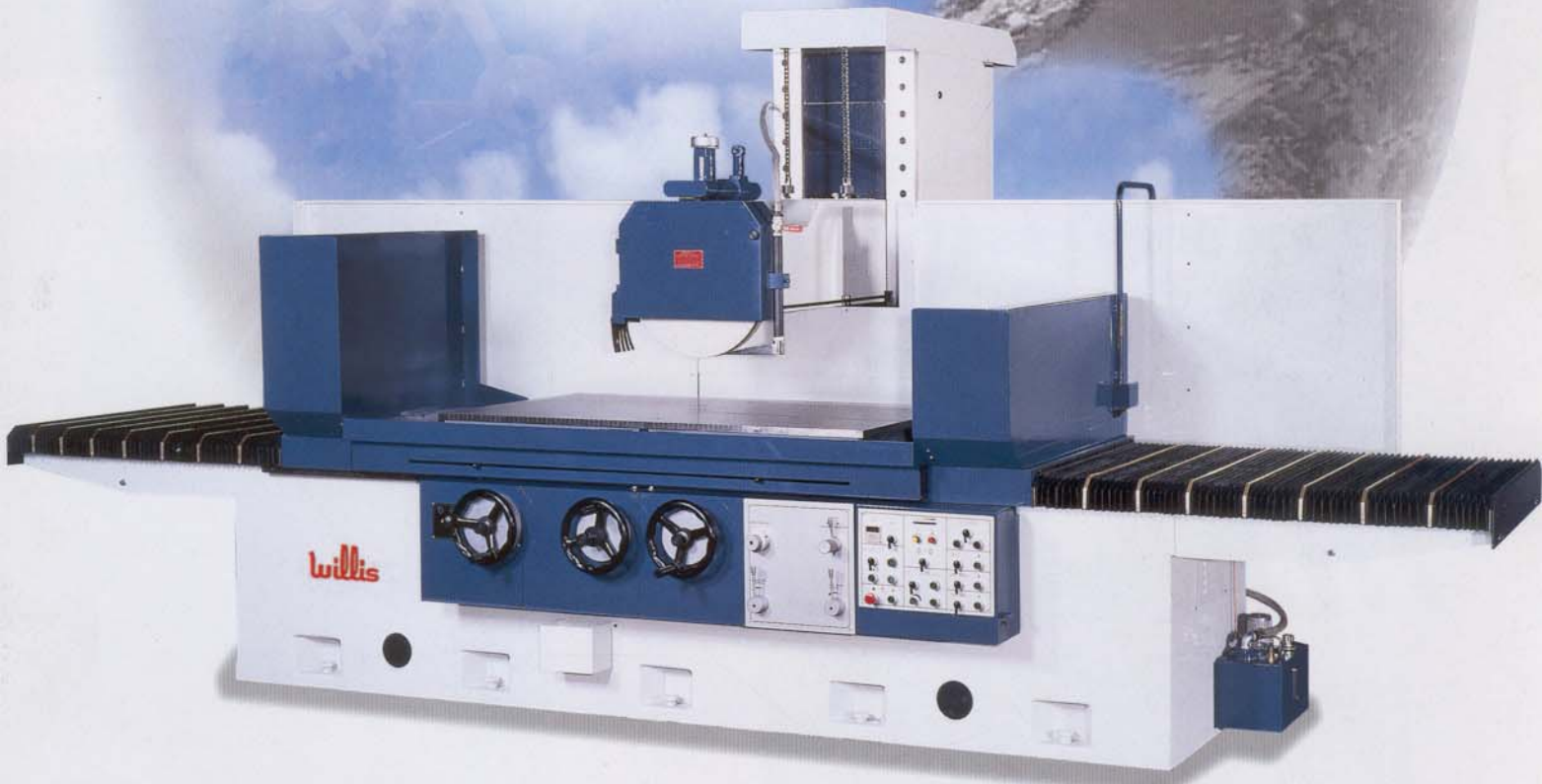
COMPLETE METALWORKING SOLUTIONS

(800) 991-4225

www.ahbinc.com

ISO Certified

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Precision Surface Grinder

WILLIS 616S



6"x16" table working area,
8"x17" maximum travels, 2HP
spindle motor(3HP option)ball
bearing Table movement on
hardened slide ways, cable
drive, fine feed mechanism on
downfeed.

616S has downfeed handwheel
on the lower right corner of
machine base.Ideal for the mold
and die business.

Down feed is equipped with a
micro-feed mechanism
providing0.00004" increments
(616S only)

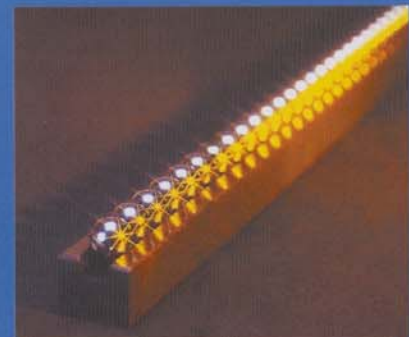


WILLIS 618



6"x18"table working area,
6.3"x18.7" maximum travels,
2HP spindle motor, ball bearing
table movement on hardened
slide ways, cable drive.

Table movement on the 618 and
the 616S is on precision steel
ball roller ways, hardness HRC-
63. Cable drive for the table.



WILLIS 818-2A

8"x18"table working area, 10.2"x21" maximum travels, 2HP spindle motor(3HP option), V and flat turcite ways for table feed,hydraulic table feed, electronic control crossfeed, automatic lubrication.

WILLIS 818-3A

same as above except includes automatic incremental down feed.

Optional package on the 818 grinder includes an 8 x18 permanent magnetic chuck, combination dust suction and coolant system, and a parallel dresser.



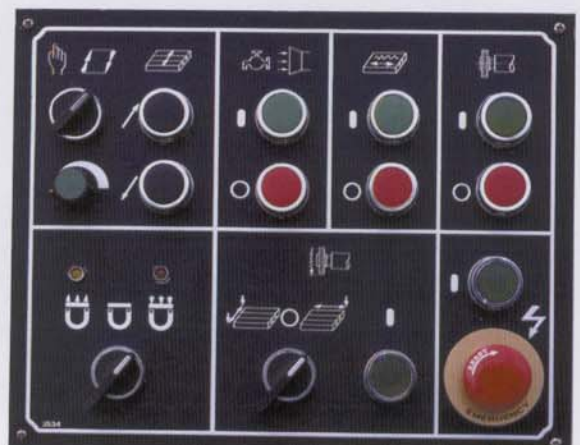
Standard Accessories on all Willis Surface Grinders

1. Halogen light
2. Wheel balancing base
3. Grinding wheel
4. Wheel flange
5. Diamond dresser
6. Wheel balancing arbor
7. Levelling pad
8. Tools
9. Toolbox



Operator friendly, well located, control panel for the 818 and 1020, 3 axis automatic machines.

Low volt controls(24v) on all Willis Grinders.



WILLIS 1020-3A



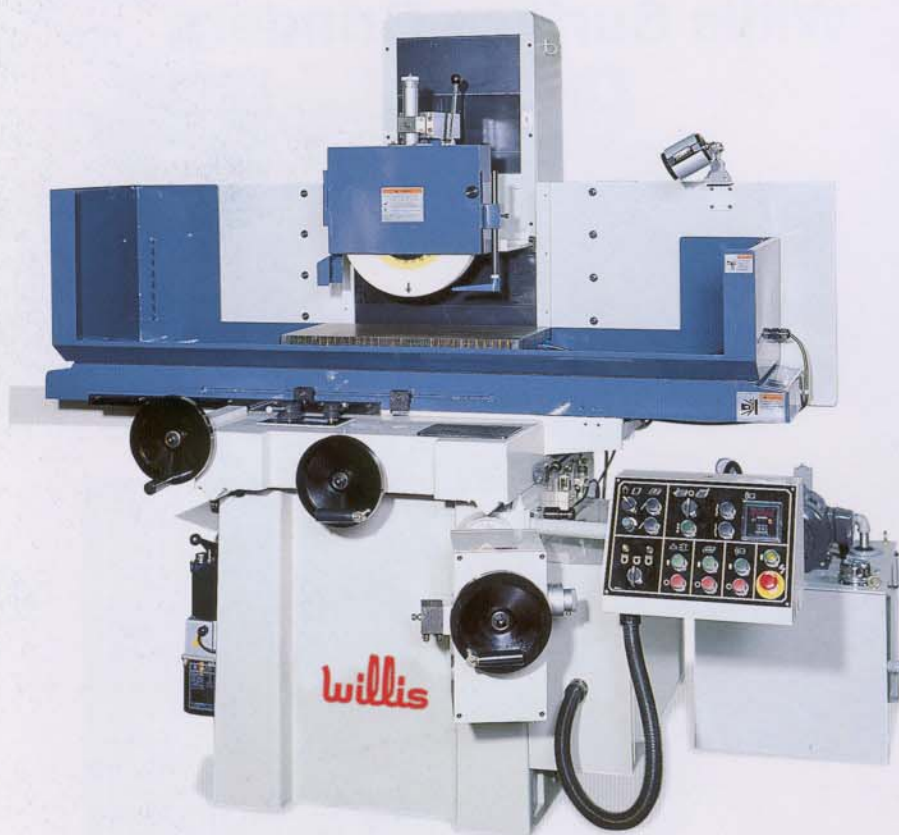
10"x20" table working area, 10.8"x21.0" maximum travels, 3HP spindle motor, V and flat turcite ways for table feed, hydraulic table feed, electronic control crossfeed, automatic incremental downfeed, automatic lubrication, rear splash-guard, 10x20 permanent chuck, dust suction and coolant system, parallel dresser.

full length rear splashguard is standard on all 1020-3A models and larger.

1 V way and 1 flat way with handscraped Meehanite cast iron mating with turcite for heavy duty stick-slip free operation.



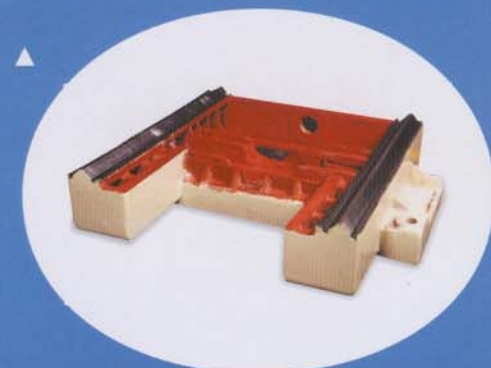
WILLIS 1224-3A



12" x 24" table working area, 13.4" x 28" maximum travels, 5HP spindle motor, V and flat turcite ways for table feed, hydraulic table feed, electronic control crossfeed, automatic incremental downfeed, automatic lubrication, rear splashguard, 12 x 24 electromagnetic chuck and control, paper filter coolant system, parallel dresser.

From the 618 up to and including the 1632-3A, all of our grinders have wide double "v" slideways coated with turcite B.

Automatic lubrication system on all the automatic grinders. One shot lube on the manual grinders.



WILLIS 1632-3A



16" x 32" table working area, 17.7" x 36.6" maximum travels, 7.5HP spindle motor, V and flat turcite ways for table feed, hydraulic table feed, electronic control crossfeed, automatic incremental downfeed, automatic lubrication, rear splashguard, 16x32 electromagnetic chuck and control, paper filter coolant system, parallel dresser.

Each of our spindles are fitted with 4 super high precision angular contact ball bearings providing spindle taper runout of less than 0.0001". These bearing are greased and sealed for providing lubrication for life.



WILLIS 2040-3A



20" x 40" table working area, 22.5" x 45" maximum travels, 10HP spindle motor, V and flat turcite ways for table feed, traveling column for crossfeed, hydraulic table feed, electronic control crossfeed, automatic incremental downfeed, automatic lubrication, rear splashguard, 20 x 40 electromagnetic chuck and control, paper filter coolant system, parallel dresser.

WILLIS 3280-3A

OTHER WILLIS GRINDERS AVAILABLE, BUT NOT SHOWN INCLUDE A 16x40, 20x60, 24x60, 24x80, 32x64, 32x100, 32x120, AND EVEN BRIDGE TYPE SURFACE GRINDERS. PLEASE CALL FOR DETAILS.



32x"80" table working area, 34.2" x 88.6" maximum travels, 15HP spindle motor, V and flat turcite ways for table feed, traveling column for crossfeed, hydraulic table feed, hydraulic incremental crossfeed, automatic incremental downfeed, automatic lubrication rear splashguard, PLC control crossfeed traverse, (2) 32x40 electromagnetic chucks and control, magnetic separator paper filter coolant system, hydraulic dresser.

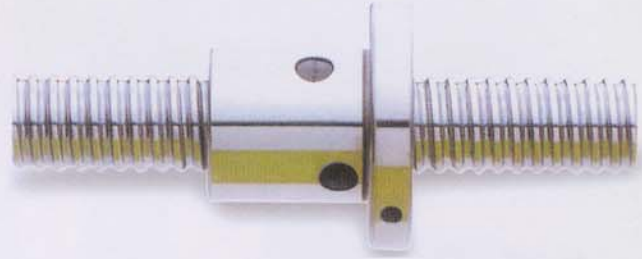


MSA1 CONTROL PANEL

Manual down feed can be micro-adjusted at graduation 0.0001" or 0.001" by a manual pulse generator.

PRECISION BALL SCREW

For vertical and cross feed, precision ball screw ensures accuracy in positioning and repeatability.



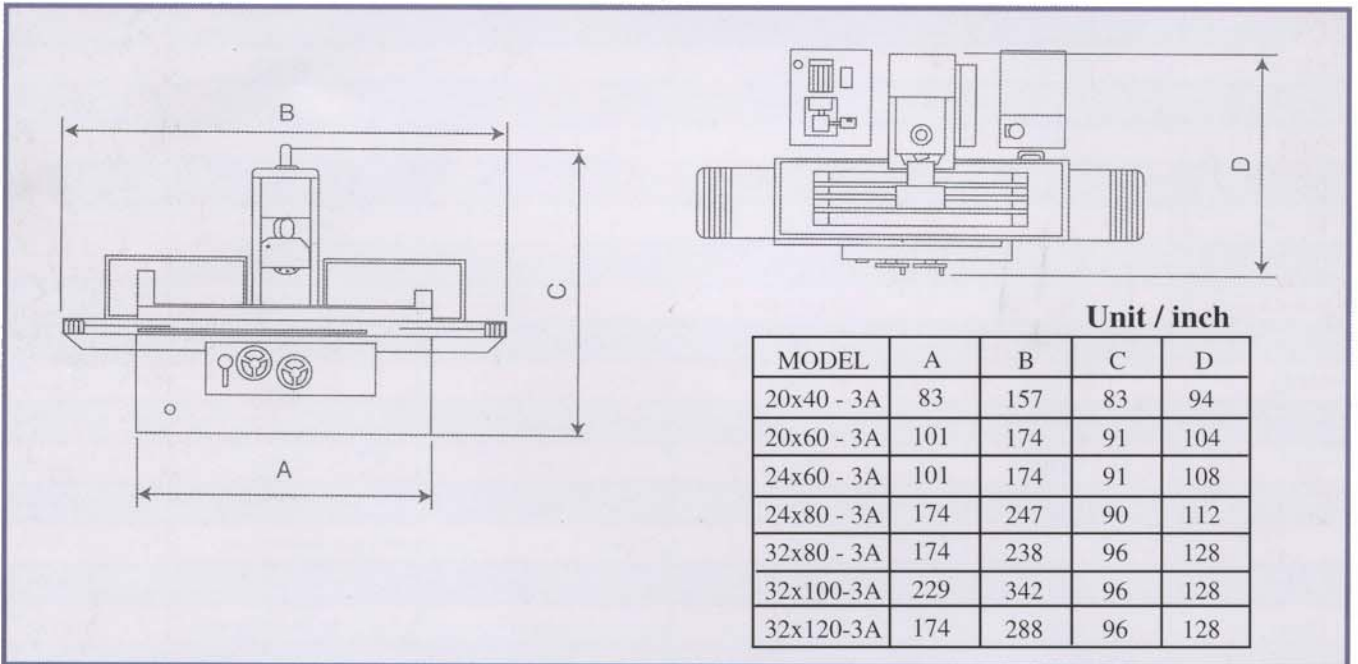
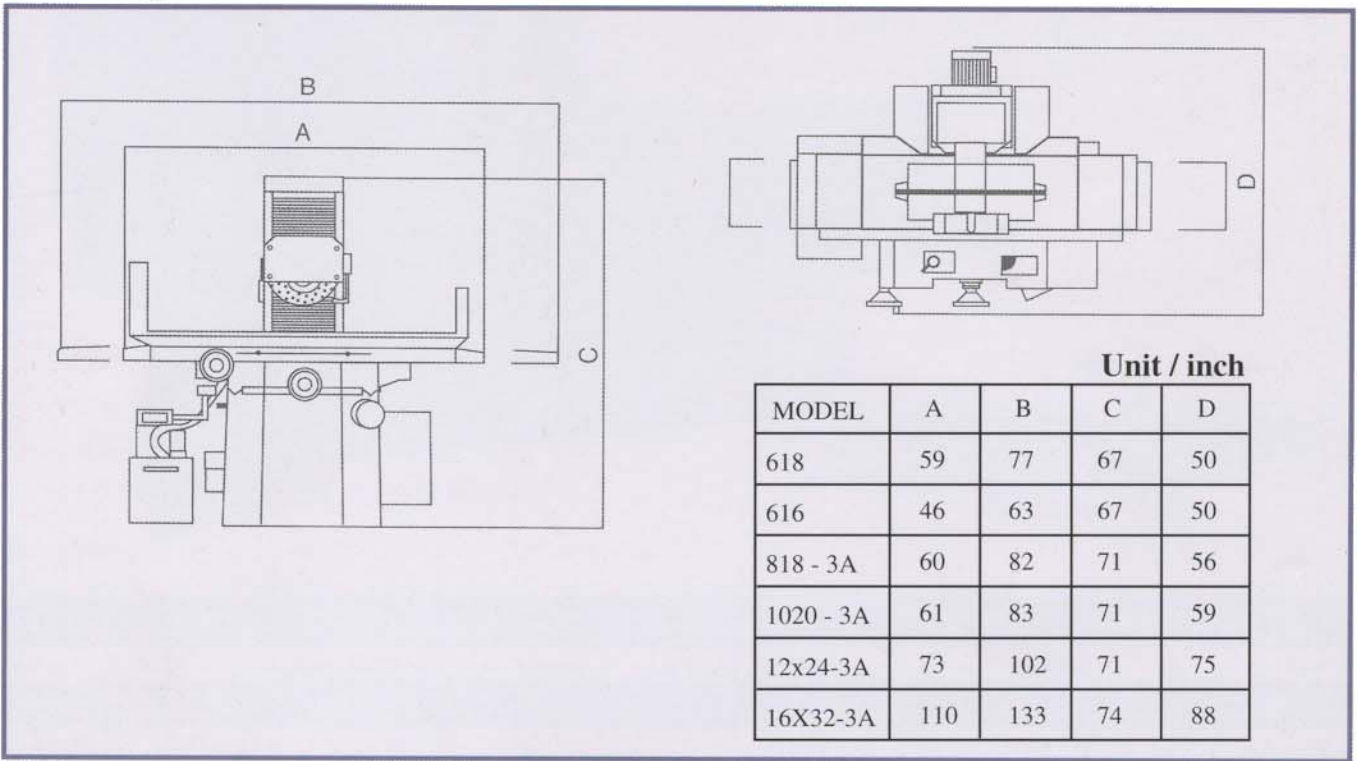
Specification		Unit	618	616S	
Capacity	Overall table working area	inch	6x18	6x16	
	Longitudinal table travel	inch	18 3/4	17	
	Cross feed table travel	inch	6 1/3	8	
	Distance spindle center to table	inch	15 3/4	18	
	Table load including magnetic chuck	lbs	220	220	
Table & cross feed	T-slot	inchxN	9/16x1	9/16x1	
	Longitudinal table speed	feet/min			
	Cross feed on hand wheel	1 gra.	inch	0.0005	0.001
		1 rev.	inch	0.2	0.2
	Auto cross feed per stroke	inch			
	Power cross feed	50 hz	inch/min		
60 hz		inch/min			
Grinding wheel	Wheel dimension (O.D.XT.XI.D.)	inch	7x1/2x1 1/4	7x1/2x1 1/4	
	Spindle speed	50 hz	RPM	2850	2850
		60 hz	RPM	3480	3480
Vertical movement	Vertical hand wheel	1 gra.	inch	0.0002	0.0002
		1 rev.	inch	0.05	0.1
	Auto down feed increment	inch			
	Power head elevation	50 hz	inch/min		
Power head elevation	60 hz	inch/min			
Motor	Spindle motor	HPxP	2x2	2x2	
	Elevation motor	WxP			
	Hydraulic pump motor	HPxP			
	Dust collection motor	HPxP	1/2x2	1/2x2	
	Coolant motor	HP	1/8	1/8	
Dimension and weight	Cross feed motor	WxP			
	Machine height	inch	66	68	
	Base space	inch	63x50	77x50	
	Net weight	lbs	1584	1380	
	Gross weight	lbs	1870	1650	

WILLIS 515-MSI



818-3A	1020-3A	1224-3A	1632-3A	2040-3A	3280-3A
8x18	10x20	12X24	16X32	20x40	32x80
21	21	27 15/16	36 5/8	45	88 1/2
10 1/4	10 7/8	13 3/8	17 5/8	22 1/2	34
19 3/8	19 1/4	20 1/2	23 5/8	23 5/8	35 1/2
220	550	924	1540	2200	5060
9/16x1	9/16x1	9/16x1	9/16x3	5/8 x 3	6/8x3
17-82	17-82	17-82	17-82	23-82	32-92
0.001	0.001	0.001	0.001	0.001	0.0004
0.2	0.2	0.2	0.2	0.2	0.08
0.004-0.2	0.004-0.2	0.02-0.4	0.02-0.4	0.02-0.4	0.08-0.8
32 1/4	32 1/4	39 3/8	39 3/8	49 1/4	78 1/2
38 9/16	38 9/16	47 1/4	47 1/4	51	
7x1/2x1 1/4	7x1x1 1/4	14x1 1/2x5	14x1 1/2x5	14x1 1/2x5	20x2x5
2850	2850	1450	1450	1450	950
3480	3480	1740	1740	1740	1150
0.0004	0.0005	0.00005	0.00005	0.0001	0.0001
0.01	0.01	0.025	0.025	0.02	0.02
0.0001-0.001	0.0001-0.001	0.00025-0.00125	0.00025-0.00125	0.0002-0.0016	0.0002-0.0016
		9	9	9	9
		11	11	11	11
2x2	3x2	5x4	7.5x4	10x4	15x4
		80x6	80x6	190x4	375x4
1x6	1x4	2x6	3x6	3x6	10x6
1/2x2	1/2x2	1/2x2	1/2x2	1/2x2	1/2x2
1/8	1/8	1/8	1/8	1/8	1/8
40x6	40x2	40x6	80x6	190x2	HYDRAULIC
75	75	75	75	90	100
82x56	83x59	103x75	133x88	157x94	238X128
2860	3080	3850	6160	11000	27500
3410	3520	4290	6600	13200	31900

Principal Dimensions



MACHINERY AND TOOLS CO.

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