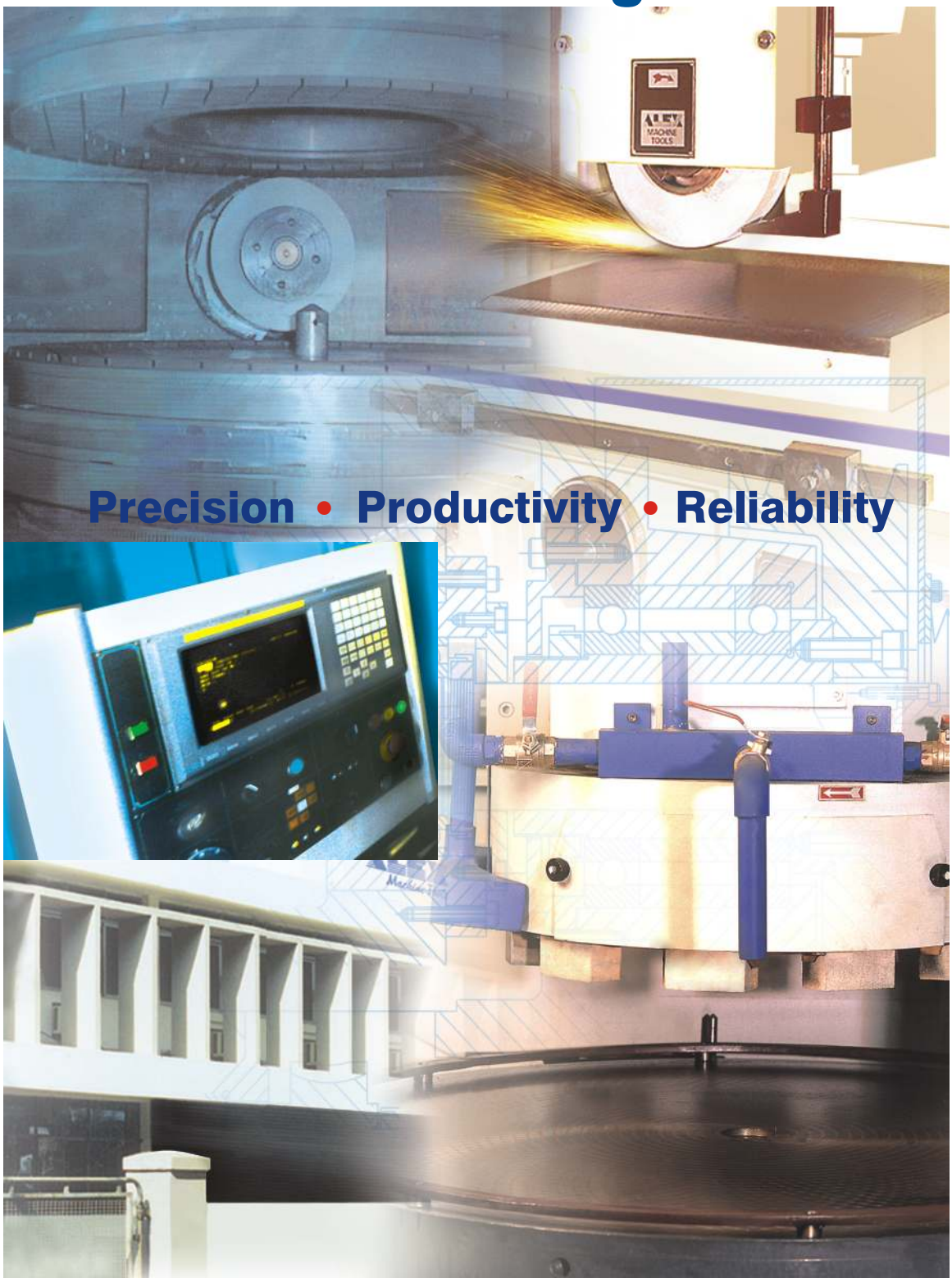
ALEX MACHINE TOOLS 50TH ANNIVERSARY 1964 2014

50 Years Of
Grinding Excellence

ALEX
Machine Tools Pvt. Ltd.

Full Line Of Grinding Solutions



Precision • Productivity • Reliability

www.alexmachinetools.com

Welcome to

ALEX MACHINE TOOLS

Customer Economics is our focus

WELCOME

Alex Machine Tools is the largest manufacturer of high precision surface grinding machines in India.

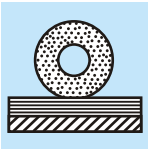
Satisfying the requirements of Customers and commitment to high-quality products are the principles which form the cornerstone of the ALEX Group. This policy has remained unchanged throughout the history of the organization and has been fundamental in establishing a reputation for being the leading Surface Grinder manufacturer in India. ALEX offers a comprehensive range of Surface Grinding machines from the Reciprocating hydraulically operated Surface Grinder to high power Rotary Surface Grinder to precision Double Disk Grinding to Special Purpose Grinding Solutions. This range includes a wide variety of sophistication including computer numerical controls, automatic in-process gauging and other material handling automation, depending on the customer's need and application.

Over the past 30 years ALEX has grown its manufacturing base to include three plants located in India. Alex Machine Tools, located at Gaiwadi Industrial Estate, Goregaon West, Mumbai, manufactures the Reciprocating, Rotary, Double Disk and Special Purpose Grinding Machines. Alex Grinders Pvt. Ltd., located at Shah Industrial Estate, Lonavala and Allied Industrial Products located at Kamshet, manufactures spare parts and components for Alex Machine Tools. ALEX has an in-house service division dedicated to installation and after sales service.

The Director, Mr. A. F. Lobo, together with an experienced team of Design, Quality and Marketing Engineers, has made ALEX a leading force in the field of grinding technology. Today, ALEX enjoys a clientele of blue chip companies in all major sectors of the Engineering Industry. Over 5000 ALEX grinders are in successful operation in India as well as abroad. Countries abroad include U.S., Germany, U.K., Canada, Saudi Arabia, U.A.E., Oman, Kenya, Nigeria, SriLanka, Nepal, Bangladesh, Singapore, Thailand, Indonesia, Malaysia, Australia and New Zealand. This has been the result of a continued development in design, quality, electronics and automation.

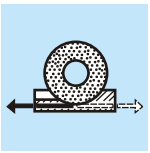
FULL LINE

Horizontal Surface Grinding - Reciprocating Table



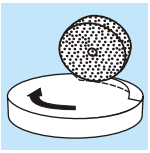
Model	Max. Surface Ground (mm)	(inch)	Std. Grinding Wheel Dia (mm)	(inch)	Spindle Motor hp	(KW)
NH 500	500 x 250	(20 x 10)	200	(8)	2	(1.5)
NH 750	750 x 300	(30 x 12)	250	(10)	5	(3.7)
NH 800	800 x 400	(32 x 16)	250	(10)	5	(3.7)
NH 1000	1000 x 250	(40 x 10)	250	(10)	5	(3.7)
BW 800	800 x 500	(32 x 20)	350	(14)	10	(7.5)
BW 1000	1000 x 500	(40 x 20)	350	(14)	10	(7.5)

Creep Feed Grinding - Reciprocating Table



Model	Table Longitudinal Travel (mm)	(inch)	Std. Grinding Wheel Dia (mm)	(inch)	Main Motor hp	(KW)
750 CF	500	(20)	300	(11.8)	5	(3.7)
BW 800 CF	600	(24)	350	(14)	15	(11.2)

Horizontal Surface Grinding - Rotary Table

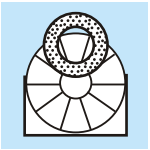


Model	Table Dia (mm)	(inch)	Std. Grinding Wheel Dia (mm)	(inch)	Spindle Motor hp	(KW)
RH 500	500	(20)	250	(10)	5	(3.7)
RH 650	650	(25)	250	(10)	5	(3.7)
RH 1000	1000	(40)	350	(14)	10	(7.5)

Vertical Surface Grinding - Rotary Table

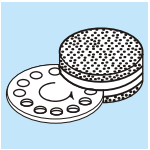
Model	Table Dia (mm)	(inch)	Std. Grinding Wheel Dia (mm)	(inch)	Spindle Motor hp	(KW)
R 20	500	(20)	350	(14)	7.5	(5.5)
R 30	750	(30)	450	(18)	25	(18)
R 40	1000	(40)	550	(22)	30	(22)
R 50	1250	(50)	700	(28)	60	(45)
R 60	1500	(60)	810	(32)	75	(55)

Through - Feed Surface Grinding - Rotary Table



Model	Table Dia (mm)	(inch)	Speed Range rpm	Std. Grinding Wheel Dia (mm)	(inch)	Main Motor hp	(KW)
R 30A (Single Spindle)	750	(30)	1-2	450	(18)	15	(11)
R 30A2 (Twin Spindle)	750	(30)	1-2	400 x 2	(16 x 2)	10 x 2	(7.5 x 2)

Duplex Surface Grinding - Vertical and Horizontal Spindle



Model	Max. Clearance Bet. Wheel (mm)	(inch)	Std. Grinding Wheel Dia (mm)	(inch)	Main Motor hp	(KW)
DDV 400	50	(2)	400	(16)	5 x 2	(3.7 x 2)
DDV 500	75	(3)	500	(20)	15 x 2	(11 x 2)
DDV 600	100	(4)	600	(24)	20 x 2	(15 x 2)
DDH 400	50	(2)	400	(16)	5 x 2	(3.7 x 2)
DDH 500	75	(3)	500	(20)	15 x 2	(11 x 2)
DDH 600	100	(4)	600	(24)	20 x 2	(15 x 2)
DDH 760	150	(6)	760	(30)	30 x 2	(22 x 2)

The range also includes adaptations on basic machines to suit special needs of end users including fully automatic cycle operations.

ALEX Machine Tools Pvt. Ltd.

RECIPROCATING

SURFACE & PROFILE GRINDER (NH/BW/CF)

DESCRIPTION

- In our NH family we have separated all movements in X, Y and Z direction. Our objective is to attain a precision of 90°± 0° in all 3 axes and to preserve this precision at all times. This provides superior stability even at extreme ends of working range.
- The spindle runs in super precision angular contact preloaded bearings with optimum concentricity and balance characteristics.
- The spindle head travels in the vertical column in handscrapped guideways with power elevation and manual infeed.
  The transverse carriage carrying the column traverses firmly on the base on handscrapped guideways via electromechanical drive. This provides intermittent cross infeed.
  The table carries out longitudinal traverse only, so that the entire grinding area is at all times fully supported by the slideways of the front base, even when the table is in its end position.
  The column carries out cross traverse only. This ensures the transverse guiding system is always uniformly supported by the rear base slideways regardless of column position. The spindle head only carries out vertical traverse, hence the grinding wheel is always at the same distance from vertical guideways regardless of working height, which in turn ensures absolute parallelism between grinding wheel and worktable.
- For large working area, high table loads and very high rates of material removal we offer our BW Series that distinguishes itself by its heavy duty construction. The spindle head as well as vertical cross traverse and table guideways are specially designed for heavy duty cycles.
- The Alex low pressure hydraulic unit is located inside the base which establishes a defined thermal state in the machine frame.
- Optional: All models are available with CNC controls for automatic grinding cycle including wheel dressing and compensation.
- All models can be customized for specific application to suit customer needs.
- For Creep feed applications we offer our CF Series. This series focus is on individual production solutions. All 3 axes X, Y and Z are powered by servomotors and drives through precision ball screws. Feed rates start from a few millimeters to a very wide range on the upper end.
  Spindle is of superior rigid construction to handle heavy full cut grinding load.
  Coolant system is of very robust design to ensure adequate dissipation of heat.
  Dressing system is designed to suit individual application. (Fully automatic cycle to include rapid approach creep feed grinding, auto dressing, compensation and return to home position.)

TECHNICAL SPECIFICATIONS

MODEL			NH-500	NH-750	NH-800	NH-1000	BW-800	BW-1000	BW-1200
Machining Range	Grinding length x width (Max.)	mm (inch)	500 x 250 (20 x 10)	750 x 300 (30 x 12)	800 x 400 (32 x 16)	1000 x 250 (40 x 10)	800 x 500 (32 x 20)	1000 x 500 (40 x 20)	1200 x 600 (48 x 24)
	Distance between table and spindle center (Max.)	mm (inch)	400 (16)	400 (16)	400 (16)	400 (16)	450 (18)	450 (18)	450 (18)
	Working Surface	mm (inch)	500 x 250 (20 x 10)	750 x 300 (30 x 12)	800 x 400 (32 x 16)	1000 x 250 (40 x 10)	800 x 500 (32 x 20)	1000 x 500 (40 x 20)	1200 x 600 (48 x 24)
	Weight carrying capacity of table (Max.)	Kg (Lb)	200 (440)	400 (880)	600 (1320)	500 (1100)	800 (1760)	1000 (2200)	1200 (2640)
Table	Max. longitudinal movement	mm (inch)	550 (22)	800 (32)	850 (34)	1050 (42)	850 (34)	1050 (42)	1250 (50)
	Max. cross movement	mm (inch)	280 (11)	330 (13)	430 (17)	285 (11)	550 (21.65)	550 (21.65)	665 (26)
	T - slots (number x width)	mm (inch)	1x14 (1x0.55)	1x14 (1x0.55)	1x14 (1x0.55)	1x14 (1x0.55)	1x14 (1x0.55)	1x14 (1x0.55)	3x14 (3x0.55)
Longitudinal Movement	Max. Table speed	m/min (ft/min)	20 (60)	20 (65)	20 (65)	20 (65)	20 (65)	20 (65)	20 (65)
Cross Movement	Auto cross feed at each Table reversal	mm/stroke (inch/stroke)	0.25-6 (0.01-0.24)	0.25-6 (0.01-0.24)	0.25-6 (0.01-0.24)	0.25-6 (0.01-0.24)	1-10 (0.04-0.40)	1-10 (0.04-0.40)	1-10 (0.04-0.40)
	Manual feed rate / turn	mm (inch)	1 (0.04)	1 (0.04)	1 (0.04)	1 (0.04)	1 (0.04)	1 (0.04)	1 (0.04)
	Least count of hand wheel	mm (inch)	0.01 (0.0004)	0.01 (0.0004)	0.01 (0.0004)	0.01 (0.0004)	0.01 (0.0004)	0.01 (0.0004)	0.01 (0.0004)
Vertical Movement	Manual feed rate per / turn	mm (inch)	0.2 (0.008)	0.2 (0.008)	0.2 (0.008)	0.2 (0.008)	0.2 (0.008)	0.2 (0.008)	0.2 (0.008)
	Least count of hand wheel	mm (inch)	0.002 (0.0001)	0.002 (0.0001)	0.002 (0.0001)	0.002 (0.0001)	0.002 (0.0001)	0.002 (0.0001)	0.002 (0.0001)
	Power elevation	mm/min (inch/min)	100 (4)	100 (4)	100 (4)	100 (4)	100 (4)	100 (4)	100 (4)
Grinding Wheel	Diameter x thickness x bore	mm (inch)	200x20x50.8 (8 x 0.75 x 2)	250x25x76.2 (10 x 1 x 3)	250x25x76.2 (10 x 1 x 3)	250x25x76.2 (10 x 1 x 3)	350x50x127 (14 x 2 x 5)	350x50x127 (14 x 2 x 5)	350x50x127 (14 x 2 x 5)
	Speed	rpm	2880	1440	1440	1440	1440	1440	1440
Motors	Grinding spindle	hp (KW)	2 (1.5)	5 (3.75)	5 (3.75)	5 (3.75)	10 (7.5)	10 (7.5)	10 (7.5)
	Vertical up down	hp (KW)	0.25 (0.18)	0.25 (0.18)	0.25 (0.18)	0.25 (0.18)	0.75 (0.56)	0.75 (0.56)	0.75 (0.56)
	Cross feed	hp (KW)	0.25 (0.18)	0.25 (0.18)	0.25 (0.18)	0.25 (0.18)	0.75 (0.56)	0.75 (0.56)	0.75 (0.56)
	Coolant pump	hp (KW)	0.12 (0.1)	0.12 (0.1)	0.12 (0.1)	0.12 (0.1)	0.12 (0.1)	0.12 (0.1)	0.12 (0.1)
Hydraulic System	Working Pressure	kg/cm^2 $Lb/inch^2$	10 (140)	10 (140)	10 (140)	10 (140)	10 (140)	10 (140)	10 (140)
	Power of Hydraulic Pump Motor	hp (KW)	1 (0.75)	2 (1.5)	2 (1.5)	2 (1.5)	3 (2.25)	3 (2.25)	3 (2.25)
	Tank Capacity	Liters	35	50	50	50	200	200	250
Machine Size	Length x Width x Height	mm	1250x1450 x1650	1450 x 2050 x 1650	1600 x 2150 x 1700	1450 x 2300 x 1650	1890 x 2250 x 1890	1890 x 900 x 1890	2190 x 3500 x 1890
		(inch)	(50x57x65)	(57x81x65)	(63x85x67)	(57x90x65)	(75x89x75)	(75x114x75)	(87x137x75)
Weight	Net Weight	Kg (Lb)	1200 (2640)	2800 (6160)	3000 (6600)	3200 (7040)	4000 (8800)	4700 (10340)	5000 (11000)
	Gross Weight	Kg (Lb)	1600 (3520)	3600 (7920)	3600 (7920)	3800 (8360)	4800 (10560)	5500 (12100)	6500 (14300)

STANDARD EQUIPMENT

Grinding wheels (2): grinding wheel flange unit, wheel balancing mandrel; table guard; set of wrenches; hydraulic system; electric motors; all internal wiring and control gear.

OPTIONAL EQUIPMENT

Plain vice; Swivel vice; Universal vice; Sine vice; Wheel balancing stand; Radius & Angular wheel truing attachment; Head Wheel dresser; Wet grinding attachment; Magnetic Separator and/or Paperband filter; Dust control unit; Demagnetizer - platen or aperture type; Non electric magnet; Electromagnetic chuck with or without built-in demagnetizer; dressing diamond; Machine lamp; Workpiece handling system; Spare grinding wheels; Re-circulating Ball Screws (free from back lash).

CNC CONTROLS AND PLC CONTROL OPTIONS AVAILABLE

All machine can be provided with

- CNC control for automatic grinding cycle including wheel dressing and compensation
- PLC control with Servo motor for Auto Down feed.

RECIPROCATING

RECIPROCATING SURFACE GRINDER WITH VERTICAL SPINDLE (NV)

DESCRIPTION

- Specially suited for quick flat grinding of workpieces.
- Cross traverse is manual for infeed and powered for positioning hydraulic drive for table.

TECHNICAL SPECIFICATIONS

MODEL		NV500	NV750
Max. Longitudinal Table Travel	mm (inch)	550 (22)	800 (32)
Max. Wheel Clearance above Table	mm (inch)	200 (8)	250 (10)
Working Surface over Magnet	mm (inch)	500 x 200 (20 x 8)	750 x 250 (30 x 10)
Max. Table Speed	m/min ft/min	15 (50)	15 (50)
Power Elevation	mm/min inch/min	100 (4)	100 (4)
Least Count of Vertical Feed Hand Wheel	mm (inch)	0.002 (0.0001)	0.002 (0.0001)
Size of Cup Wheel	mm (inch)	200 x 63 x 76.2 bore (8 x 2.5 x 3 bore)	250 x 63 x 76.2 bore (10 x 2.5 x 3 bore)
Power of Spindle Motor	hp (KW)	2 (1.5)	5 (3.7)
Power of Elevation Motor	hp (KW)	0.25 (0.18)	0.25 (0.18)
Power of Coolant Motor	hp (KW)	0.13 (0.09)	0.13 (0.09)
Cross Feed Motor	hp (KW)	0.25 (0.18)	0.25 (0.18)
Speed of Grinding Spindle	rpm	2880	1440
Working Pressure	kg/cm^2 (Lb/inch^2)	10 (140)	15 (210)
Power of Hydraulic Pump Motor	hp (KW)	1 (0.75)	2 (1.5)
Tank Capacity	liters	50	60
Machine Size	mm	1250 x 1450 x 1650	1450 x 2050 x 1650
Length x Width x Height	(inch)	(50 x 57 x 65)	(57 x 81 x 65)
Net Weight of Machine	Kg (Lb)	1200 (2640)	2800 (6160)
Gross Weight of Machine	Kg (Lb)	1600 (3520)	3600 (7920)

ROTARY SURFACE GRINDER WITH HORIZONTAL SPINDLE (RH)

DESCRIPTION

This series features our well proven program of surface grinders with rotary tables. These machines are particularly suitable for High Precision Surface grinding of thin parts of high accuracy & Circular parts where one piece is to be ground at a time flat or with a radial taper. Besides, in applications where batches of small parts are to be ground with a high degree of parallelism & high surface finish this type of machine is a better alternative to a reciprocating machine as production time will be much less. This is because the grinding wheel is in constant touch with the grinding pieces, the operating speed of the work pieces is higher and the work pieces move constantly in one direction only.

TECHNICAL SPECIFICATIONS

MODEL		RH-500	RH-650	RH-1000
CAPACITY				
Magnetic Chuck Diameter	mm (inch)	500 (20)	650 (25)	1000 (40)
Swing inside Waterguard	mm (inch)	600 (24)	750 (29)	1100 (44)
Vertical Range Upto	mm (inch)	200 (8)	250 (10)	300 (12)
SPEEDS AND FEEDS				
Table Speed (Infinitely Variable)	rpm	10-50	8-40	5-25
Automatic Cross Feed (Infinitely Variable)	mm/min (inch/min)	50-200 (2-8)	100-500 (4-20)	100-500 (4-20)
Each Revolution of Hand Wheel (Vertical Feed)	mm (inch)	0.200 (0.008)	0.200 (0.008)	0.200 (0.008)
Each Gradation of Hand Wheel (Vertical Feed)	mm (inch)	0.002 (0.0001)	0.002 (0.0001)	0.002 (0.0001)
Power Elevation	mm/min (inch/min)	100 (4)	100 (4)	100 (4)
GRINDING WHEEL				
Wheel size OD x H x ID	mm (inch)	250 x 25 x 76.2 (10 x 1 x 3)	250 x 25 x 76.2 (10 x 1.6 x 3)	350 x 50 x 127 (14 x 2 x 5)
Wheel Speed	rpm	1500	1500	1500
MOTORS				
Grinding Wheel	hp (KW)	5 (3.7)	5 (3.7)	10 (7.5)
Table Rotation	hp (KW)	1 (0.75)	3 (2.2)	5 (3.7)
Cross Feed	hp (KW)	0.5 (0.37)	1 (0.75)	1 (0.75)
Power Elevation	hp (KW)	0.25 (0.18)	0.25 (0.18)	0.75 (0.55)
Coolant Pump	hp (KW)	0.15 (0.12)	0.25 (0.18)	0.25 (0.18)
GENERAL				
Machine Size Length x Width x Height	mm (inch)	1400 x 1400 x 1650 (55 x 55 x 65)	1700 x 1400 x 1950 (67 x 55 x 77)	2700 x 1500 x 2000 (107 x 60 x 79)
Net Weight of Machine	Kg (Lb)	1900 (4180)	2500 (5500)	5500 (12100)
Gross Weight of Machine	Kg (Lb)	2600 (5720)	3200 (7040)	6300 (13860)

CNC CONTROLS AND PLC CONTROL OPTIONS AVAILABLE

All machine can be provided with

- CNC control for automatic grinding cycle including wheel dressing & compensation.
- PLC control with Servo motor for Auto Down feed.
- Auto component gauging options can also be provided.

STANDARD EQUIPMENT

Grinding wheels (2): grinding wheel flange unit, wheel balancing mandrel; table guard; set of wrenches; coolant system; electric motors; all internal wiring and control gear.

ROTARY

ROTARY

ROTARY SURFACE GRINDER WITH VERTICAL SPINDLE (RV)

DESCRIPTION

- This series is designed for flat grinding of one side of the job at a time for each table load.
- Rotary work table operates on large, circular ways-well lubricated by means of an oil sump. It carries an electro magnetic chuck with circular poles.
- Access to work table is unique, in that a greater proportion of the work table is opened for easier and safer work handling. Being a fixed centre table, the initial accuracies are maintained for the entire life of the machine.
- Wheel Spindle Head is of extremely rigid construction, with precision bearings duly preloaded. Segmented wheel is directly mounted at lower end.
- Column has oversize vertical vee and flat ways fully protected from grinding dust and coolant by sliding steel guards. Wheel feed can be applied by hand or power. Precision Screw gives positive down feed on the head for accurately controlling small increments of feed.
- CONTROLS as Optional:
  Automatic electronic gauging can be provided. It gives continuous measurement of work during grinding cycle and visual indications that the work is approaching size. When work reaches a preset dimension grinding stops, the machine sparks out and the Head retracts. Since the job is directly probed, wheel wear is directly compensated.

  CNC controls for Vertical axis with servo drives via precision ball screw is also available as optional equipment.

TECHNICAL SPECIFICATIONS

MODEL		R20	R30	R40	R50	R60
Magnet Table Diameter	mm (inch)	500 (20)	750 (30)	1000 (40)	1250 (50)	1500 (60)
Segmental Wheel Diameter	mm (inch)	350 (14)	450 (18)	550 (22)	700 (28)	810 (32)
Segments per set		8	8	10	12	14
Maximum Wheel Clearance	mm (inch)	150 (6)	250 (10)	250 (10)	350 (14)	500 (20)
Spindle Speed	rpm	1200	960	750	500	460
Table Speed	rpm	10 & 20	7.5 & 15	6 & 12	5 & 10	4 & 8
Automatic Feeds per min (infinitely variable)	mm (inch)	0.05 - 1.0 (0.002-0.04)	0.05 - 1.0 (0.002 - 0.04)	0.05 - 1.0 (0.002 - 0.04)	0.05 - 1.0 (0.002 - 0.4)	0.05 - 1.0 (0.002 - 0.4)
Spindle Motor	hp (KW)	7.5 (5.5)	25 (18.5)	30 (22)	60 (45)	75 (55)
Table Motor	hp (KW)	1/1.5 (0.75/1.1)	2/3 (1.5/2.2)	3/4 (2.2/3)	4/5 (3/3.7)	5/7.5 (3.7/5.5)
Machine Size Length x Width x Height	mm (inch)	1750 x 1200 x 1500 (69 x 47 x 59)	2000 x 1600 x 1900 (80 x 63 x 75)	2300 x 1700 x 1900 (90 x 67 x 75)	2900 x 2200 x 2400 (115 x 87 x 95)	3200 x 3200 x 2700 (126 x 126 x 106)
Net weight of machine	Kg (Lb)	2000 (4400)	5000 (11000)	6500 (14500)	9000 (20000)	13000 (29000)
Gross Weight of machine	Kg (Lb)	3000 (6500)	6000 (13000)	7500 (17000)	10500 (23000)	15000 (33000)

STANDARD EQUIPMENT

- Segmental Chuck with two sets of grinding segments
- Built-in Wheel Dressing Unit
- Table Guard
- Set of Wrenches
- All Electric Motors
- Internal Wiring and Control Gear
- Electro Magnetic Chuck
- Complete Coolant Equipment

OPTIONAL EQUIPMENT

- Vertical Position Indicator (DRO)
- Cylinder Wheel Holder
- Demagnetiser Platten Type or Aperture Type
- Dimmerstat (For variable magnet power)
- Built-in Table Demagnetiser (For easy removal of jobs)
- Electronic Sizing Unit
- CNC Control
- Auto lubrication system
- Coolant filteration systems

CNC CONTROLS OPTION AVAILABLE

All machine can be provided with

- CNC control for automatic grinding cycle including wheel dressing & compensation.
- Auto gauging size of components can also be provided.
- Auto component gauging options can also be provided.

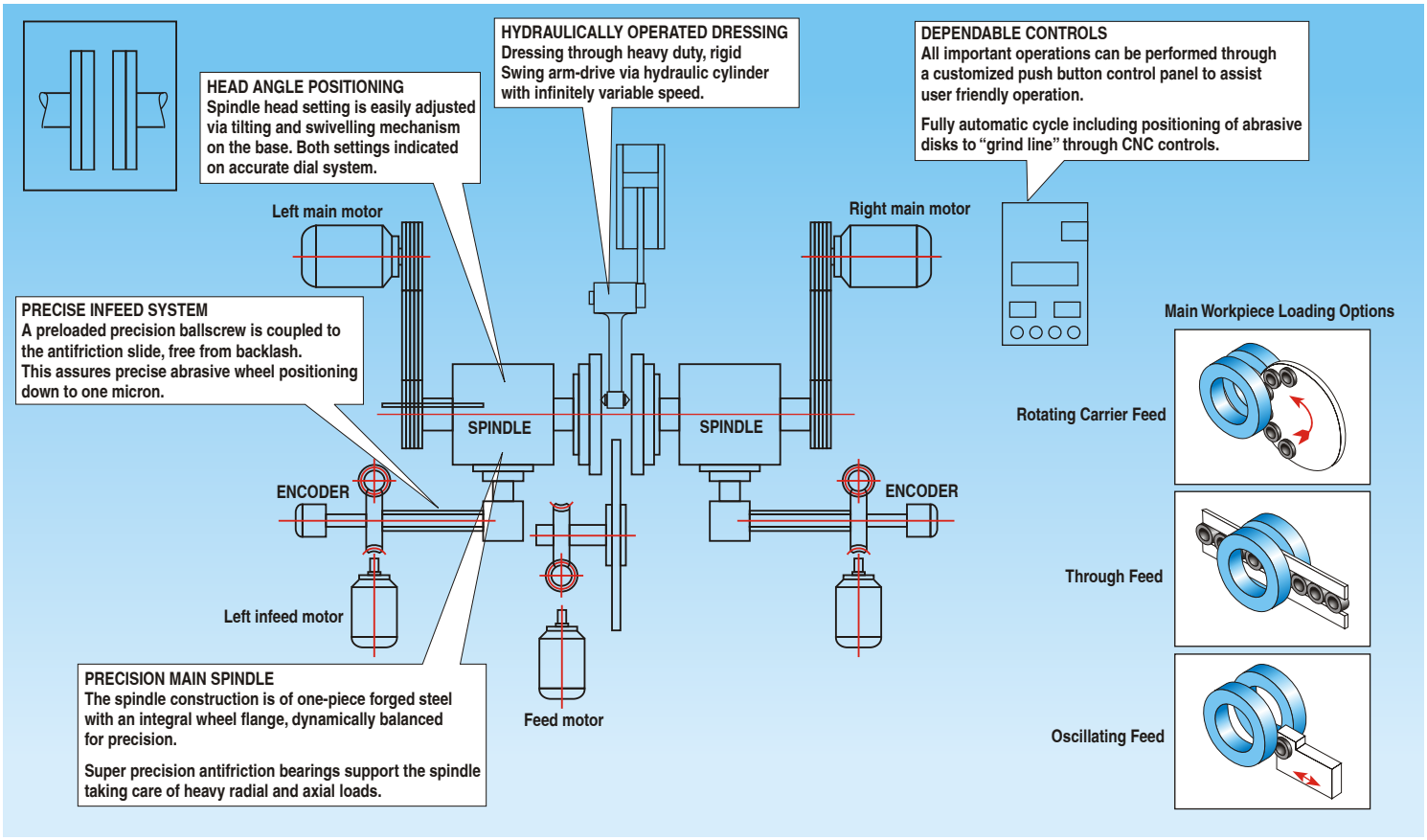
ALEX Machine Tools Pvt. Ltd.

DOUBLE DISK

DUPLEX GRINDER WITH HORIZONTAL SPINDLE (DDH)

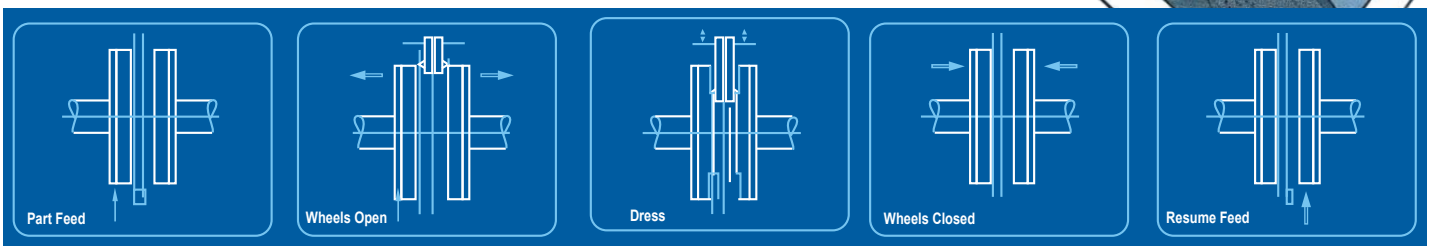
DESCRIPTION

- This series uses powerful double disk grinding technology to simultaneously grind opposite and parallel surfaces flat, at unbelievable rates of production.
- Optimum loading systems to suit customer need.
- Sturdy forged spindle supported by precision angular contact bearings provides accurate finishing even under heavy duty loads.
- Robust spindle drive design through a splined sleeve and precision belt transmission to eliminate spindle deflection during grinding.
- Accurate positioning of grinding wheels with zero backlash through a precision ball screw, anti friction slide and digital control.
- Vertical tilting and horizontal swivelling of the spindle is effected conveniently through screw mechanism.
- Ample coolant supply via rotary union through two spindles.
- Swing arm wheel dresser is hydraulically operated.
- All controls within easy reach of operator.
- Optional CNC controls for fully automatic grinding cycle including dressing and compensation.
- Optional Auto loading & unloading arrangement.
- Optional Auto gauging and compensation provision.



FULLY AUTOMATIC DRESSING CYCLE INCLUDING POSITIONING OF ABRASIVE DISKS TO GRIND LINE

The dresser is programmed to make a specific number of dressing passes and definate amount of infeed per pass. Abrasive disks automatically infeed a preset increment at completion of each dressing pass. Upon completion of the dressing cycle, both disks will automatically move to the original grind line, compensating for the dressed abrasives. Dressing is initiated by operator pressing "Dresser Start" button, or through the programmable control.



TECHNICAL SPECIFICATIONS

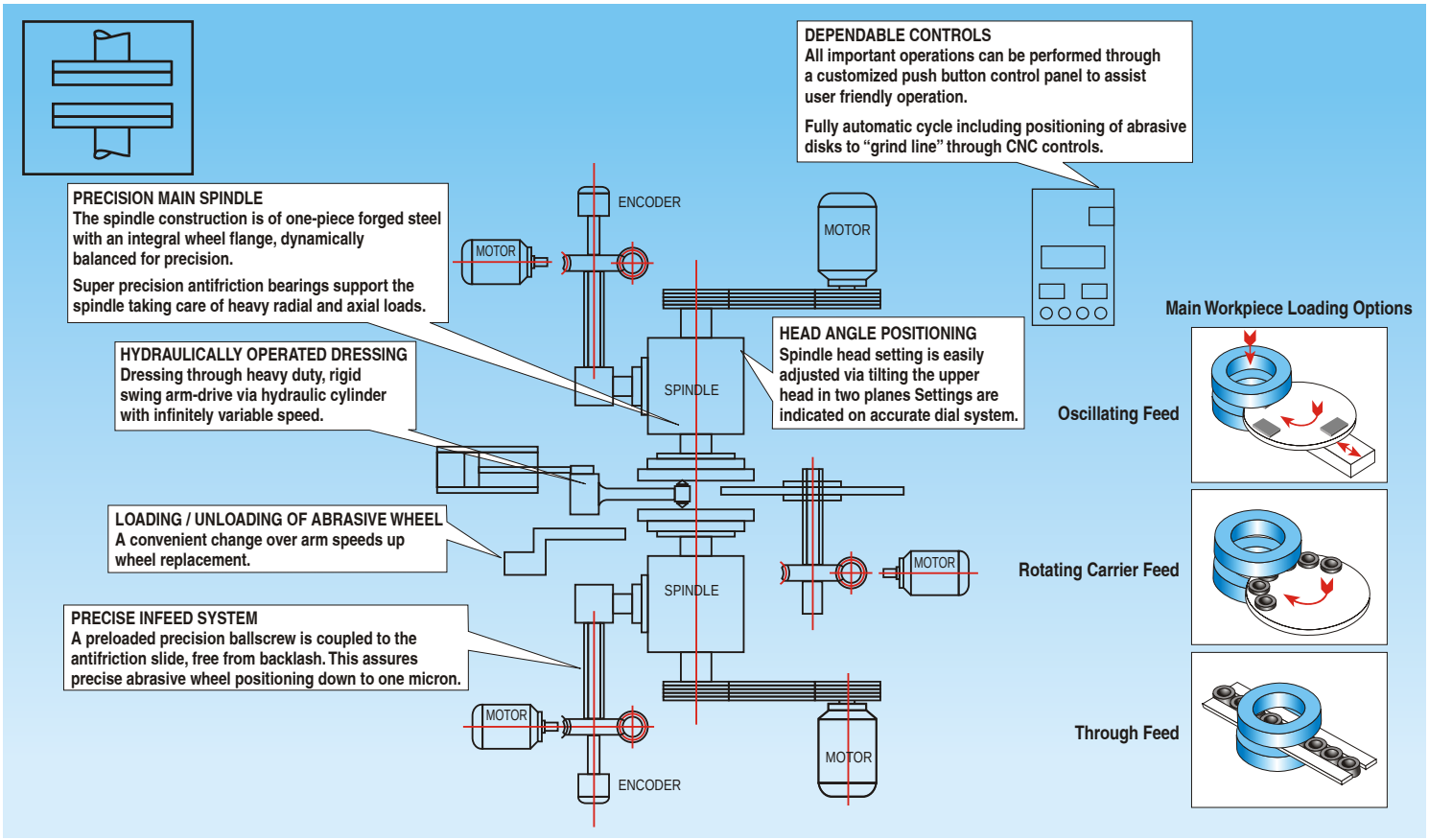
MODEL		DDH-400	DDH-500	DDH-600	DDH-760
Workpiece Diameter (max)	mm (inch)	70 (2.75)	90 (3.54)	120 (4.72)	150 (5.9)
Workpiece Thickness (max)	mm (inch)	20 (0.78)	25 (1)	50 (2)	80 (3.1)
Process Speed (Carrier)	rpm	1-5	1-5	1-5	1-5
Wheel Diameter	mm (inch)	400 (16)	500 (20)	600 (24)	760 (30)
Spindle Speed	rpm	1200	950	750	600
Spindle Motor (2 Units each)	hp (KW)	5 (3.7)	15 (11)	20 (15)	30 (22.3)
Machine Size Length x Width x Height	mm (inch)	1500 x 1900 x 1000 (59 x 75 x 40)	2000 x 2300 x 1550 (79 x 93 x 61)	2200 x 3000 x 1650 (87 x 119 x 65)	4000 x 2500 x 1800 (157 x 98 x 70)
Net Weight of Machine	Kg (Lb)	4,000 (8,800)	6,000 (13,200)	10,000 (22,000)	14,000 (30,800)
Gross Weight of Machine	Kg (Lb)	5,000 (11,000)	7,000 (15,400)	11,500 (25,300)	16,000 (35,000)

DOUBLE DISK

DUPLEX GRINDER WITH VERTICAL SPINDLE (DDV)

DESCRIPTION

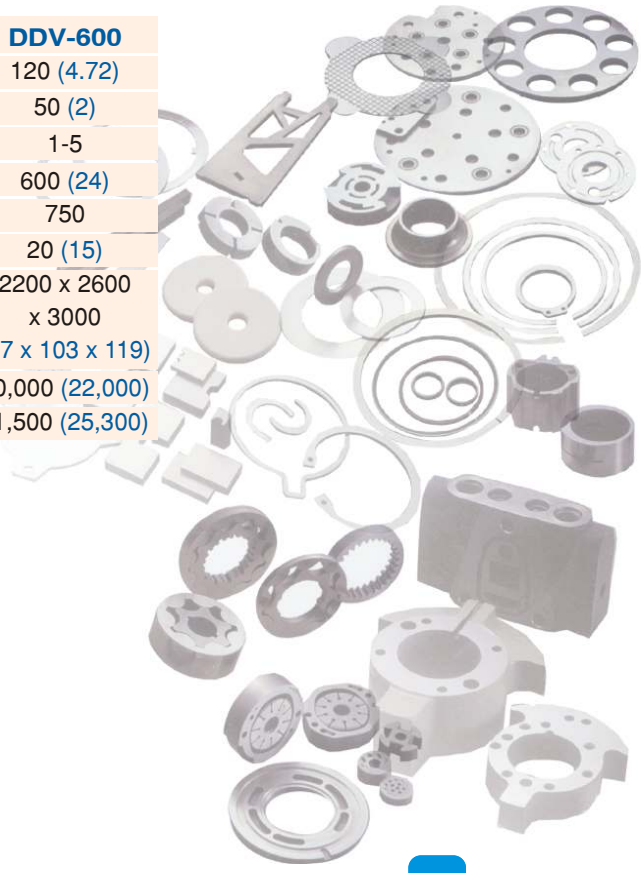
- This series is designed specifically for thin components or to suit automation in work feeding.
- Optimum loading systems to suit customer need.
- Sturdy forged spindle supported by precision angular contact bearings provides accurate finishing even under heavy duty loads.
- Robust spindle drive design is through a splined sleeve and precision belt transmission to eliminate spindle deflection during grinding.
- Accurate positioning of grinding wheels with zero backlash through a precision ball screw, anti friction slide and digital control.
- Optimum entry angle for maximum accuracy through effective tilting of upper head with lower head in 2 directions.
- Ample coolant supply via rotary union through two spindles.
- Swing arm wheel dresser is hydraulically operated.
- All controls are within easy reach of the operator.
- Optional CNC Controls for Fully Automatic Grinding Cycle including dressing and compensation.
- Optional Auto loading & unloading arrangement.
- Optional Auto gauging and compensation provision.



Fully Automatic Dressing Cycle including positioning of Abrasive Disks to Grind Line, can be incorporated

TECHNICAL SPECIFICATIONS

MODEL		DDV-400	DDV-500	DDV-600
Workpiece Diameter (max)	mm (inch)	70 (2.75)	90 (3.54)	120 (4.72)
Workpiece Thickness (max)	mm (inch)	20 (0.78)	25 (1)	50 (2)
Process Speed (Carrier)	rpm	1-5	1-5	1-5
Wheel Diameter	mm (inch)	400 (16)	500 (20)	600 (24)
Spindle Speed	rpm	1200	950	750
Spindle Motor (2 Units each)	hp (KW)	5 (3.7)	15 (11)	20 (15)
Machine Size Length x Width x Height	mm	1500 x 1000 x 1900	2000 x 2350 x 2450	2200 x 2600 x 3000
	(inch)	(59 x 40 x 75)	(79 x 93 x 97)	(87 x 103 x 119)
Net Weight of Machine	Kg (Lb)	4,000 (8,800)	6,000 (13,200)	10,000 (22,000)
Gross Weight of Machine	Kg (Lb)	5,000 (11,000)	7,000 (15,400)	11,500 (25,300)



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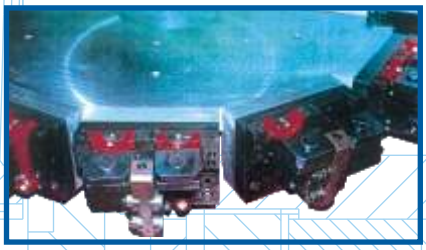
SPECIAL SOLUTIONS



SPECIAL SOLUTIONS

- We have the capacity and capability to arrange, design and specially build "turn-key" grinding systems to precisely meet your specific requirements.
- ALEX MACHINE TOOLS Pvt. Ltd. has built a wide range of special purpose machines specifically engineered with state-of-the-art technology in diverse sectors such as Automobiles, Auto Ancillaries, Defense, General Engineering, Ferrites, etc.
- Based on a thorough understanding of the customer's components, tolerance, surface finish and production requirements, we will recommend the optimum grinding solutions including the type of grinding method, handling systems and controls. Our full line offering and ability to customize our equipment gives us this competitive advantage.
- The high quality of our solutions is a result of over 30 years of grinding experience and our expertise in design and manufacturing innovation.

Our Road to the Future

- Continuous Development to keep pace with changing technology
- Capability to provide high technology grinding systems
- Optimum solutions through expert application engineering and a Full Line offering
- High quality from planning right through to delivery
- Reliable inputs satisfying global standards
- Testing to global standards of accuracy
- Competent and Responsive after sales service






Why not join the many renowned companies who have already utilized our machines and knowledge base to enhance their productivity and gain a positive advantage

ALEX
Machine Tools Pvt. Ltd.

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