

INTERNAL GRINDING MACHINE WITH FACE GRINDING ATTACHMENT



MICROTEK IFG 350 X 400

Microtek Grinding Machines Pvt. Ltd.
(Total Grinding Technology Solutions)

INTERNAL GRINDING MACHINE WITH FACE GRINDING ATTACHMENT MODEL MICROTEK IFG 350 x 400

Designed to meet today's and future requirements of Bore Grinding & Face Grinding from smaller diameters to bigger diameters. Bore & face grinding in single checking resulting in very close geometrical accuracies like Concentricity, Parallelism of Faces and Perpendicularity between Diameter and Faces.

TECHNICAL SPECIFICATIONS

MACHINE BED:

Machine Bed is rectangular box type structure with heavy ribbing providing high rigidity and stability.

INFEED SLIDE:

Infeed Slide moves on preloaded highly sensitive and permanent grease lubricated Swiss make Schneeburger Linear Guideways. This Guarantees high repetitive accuracy and stick slip free fine movement of the slide. Infeed through hardened and precision ground Cam.

WORK HEAD SLIDE:

Work Head Slide moves on dove-tail V- Guideways with ground Lead screw with backlash free nut. Job taper and angles can be set by tilting the Work Head with Lead screw mechanism given on the left side of the work head with Name plate.

INTERNAL GRINDING SPINDLE:

Internal Grinding Spindle is made of High precision angular contact bearings. Spindles are driven by belts. Speeds can be changed by changing pulley. VFD as optional for Speed change. High frequency spindles also offered as optional.

WORK HEAD:

The machine having rigid Work Head with MT-5 Internal Taper and A2-6 External Taper. Spindle is made of Special alloy steel. Spindle Bearings are permanently grease lubricated by Special Grease. Spindle driven by Induction motor with Variable Frequency Drive for speed control. Work Head can be swivelled at an angle of 45 deg.

TABLE:

Table moves on Precision hand scrapped V & Flat Guide ways with continuous lubrication for smoother, finer stick slip free movement. Table Guide ways are coated with Turcite lining.

FACE GRINDING ATTACHMENT:

Face Grinding Attachment is mounted on Work Head and grinds the external face of component square to the bore in the same set up.

DRESSING:

Hydraulic Dressing attachment is provided on the rear side of the machine. Face grinding spindle dresser is mounted on attachment itself.

Note: Available in Hydraulic & CNC Versions.

CAPACITY

Swing	mm	450
Max. Internal grinding diameter	mm	350
Max. grinding length	mm	400
Max. Job holding length	mm	500
Max. weight of Job	Kg	100

TABLE

Table Stroke	mm	650
Table Speed	M/Min.	0.05-4
Grinding stroke adjustable	mm	3-400
Dwell At Reversal	Sec.	0-10
Travel Per Revolution Of Hand Wheel	Mm	15

IN FEED

Slide movement (Manual)	mm	150
Minimum increment	mm	0.001
One turn on cross feed hand wheel on dia	mm	2
One turn on micro feed hand wheel on dia	mm	0.2
Minimum infeed rate for grinding wheel stroke	mm/	0.002

INTERNAL HEAD

Cross Slide travel Infeed thru CAM	mm	20
Spindle sizes and RPM's		
Ø100 x 400	rpm	6,000
Ø80 x 250	rpm	10,000
Ø80 x 250	rpm	18,000
Spindle motor power	HP	5

WORK HEAD

ASA outside Taper	No	A2-6
Spindle Taper	MT	5
Spindle Speed	rpm	20-200
Spindle motor power	Kw	1.2
Swivel Range	Deg	45

FACE GRINDING ATTACHMENT

Spindle diameter	mm	80
Spindle Length	mm	200
Spindle Speed	rpm	6000
Grinding wheel	mm	100 (cup wheel)

GENERAL

Operation Voltage	Volts	415+ _10% AC 3 phase
Floor Space LxBxH	mm	3000x2200 x 2000
Total Power Requirement	kw	7
Total Weight of the Machine	kg	3,800
Circularity on job	mm	0.002
Cylindricity	mm	0.004/100

Manufactured By:

M/S Microtek Grinding Machines Pvt. Ltd.

SB- 57, 2nd cross, 1st Stage, Peenya Industrial Estate, Peenya, Bangalore- 560 058

Ph: 28393371/72 E-mail: microtekltd@yahoo.com / microtekltd@gmail.com

Website: www.microtekmachines.com