

## **Surface Grinding**

### **Semi-automactic series- ESG-3A1640**

#### **Specifications:**

3A: Longitudinal Hydraulic, Crossfeed Motorized And Rapid Up/Down Motorized.

MODEL		ESG-3A1640
Table Size		406x1020mm(16x40")
Max.grinding length	Longitudinal	1020mm(40")
Max.grinding width	Crosswise	410mm(16")
Max. distance from table surface to spindle centerline		Standard column:630mm(24 3/4"); Optional high column:720mm(28 5/16")
Stadard magnetic chuck size		400x800mm(15 11/16x31 1/2")
Longitudinal movement of table	Max. travel, hydraulic	1060mm(41 11/16")
	Max. travel, manual	1100mm(43 1/4")
	Max. travel,infininitely variable	60HZ,5-25m/min,50HZ,5-20m/min
Cross transverse travel	Auto transverse increment	1~25mm(0.04"-1")
	Max. auto transverse travel	430mm(17")
	Max. manual transverse travel	460mm(18")
	Handwheel per revolution	5mm(0.2")
	Handwheel per graduation	0.02mm(0.001")
Sheelhead vertical infeed	Automatic infeed	0.001-0.04mm(0.00005-0.002")
	Step feed (jog)	0.001mm(0.00005")
	Rapid travel, Approx	150mm/min
	Slow travel, Approx	6mm/min
	Handwheel revolution	1mm(0.05")
	Handwheel graduation	0.005mm(0.0005")
Grinding spidle drive	Speed	60HZ,1750 R.P.M.; / 50HZ,1450 R.P.M.
	Power rating	Standard:5HP; Optional:7 1/2HP,10HP
Standard grinding wheel	Diameter	355mm(14")
	Width	50mm(2")
	Bore	127mm(5")
Hydraulic motor	Power rating	3.0HPx6P
Crossfeed motor	Power rating	80Wx6P
Elevating motor	Power rating	1/4HPx6P
Floor space	Total space required	4020x2200x2050xmm(158x87x81")
Weights	Net weight, Approx.	4000KGS(8800LBS)
	Gross weight, Approx.	4500KGS(9900LBS)
Rated power, Approx		8 1/2HP(Spindle motor:5HP)
		11HP(Spindle motor:7.5HP),
Packing dimensions	L x W x H	3250x2290x2200mm(128x90x88")

**GENERAL FEATURE:****1.Column:**

Enlarged, honeycomb-ribbed column especially suitable for heavy duty grinding.

**2.Construction:**

Construction of table, saddle and base is casted with high grade iron, strongly ribbed.

**3.Spindle:**

Enlarged spindle set is supported by four preloaded precision angular contact Ball bearings for heavy duty.

**4.Slideways:**

Vertical, cross (double vee) and longitudinal (one vee & one flat) slideways are coated with Turcite-B, provides stable movement and durable accuracy.

**5Automatic Continuous Lubrication System:**

All slideways and screws are fully oiled by automatic continuous lubrication system to eliminate wears on slideways & screws.

**6.Cross Feed:**

Ball screw for cross travel, powered by AC motor.

**7.Hydraulic Table:**

Table speed ranges 5-25m/min. With rack and pinion table drive for hand operation.

**8.Proximity Switch:**

Provide built-in-type (hidden) proximity switch, features safe and easy operation.

**9.Table Speed Control:**

Presetable hydraulic table speed control allows operator to pre-set speed rate, enable to get same speed rate when engaging hydraulic table every time.

**10.Hand Wheels:**

Zero-setting slip-ring with vernier on vertical handwheel, and vernier on crossfeed handwheel.



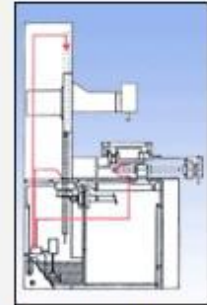
Enlarged Spindle Set For  
1228, 1232, 1236, And 16  
Series



Ball screw For Crossfeed  
Movement



Presetttable Table Speed  
Control For 1228, 1232, 1236,  
And 16 Series



Auto Lubrication System

### Standard Accessories:

- Wheel Extrac Screw & Nut
- Tool Box With Tools
- Balancing
- Auto Lubrication System
- Levelling Screw With Blocks
- Diamond Dresser
- Wheel Flange
- Touch-up Paint
- Grinding Wheel
- Crossfed Ballscrew

### Optional Accessories :



Electro Magnetic Chuck



Inclinable Permanent  
Magnetic Chuck



Swivel Wheel Guard



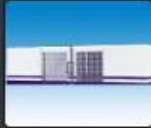
Frequency Changer



Coolant System With  
Manual Paper Feeding  
Device



Auto Paper Feeding  
Device With Magnetic  
Separator



Full Guarded Splash  
Guard (10/12/16 Series)



Electro Parallel Dressing  
Attachment



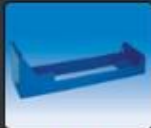
Screw Type Parallel  
Dressing Attachment



Concave Convex Forming  
Dresser



Work Lamp



Splash Guard



Wheel Flange



Manual Parallel Dresser



Chuck Control With  
Demagnetizer



Precision Vice



Punch Former



Balancing Stand (Double  
Line)



Roller Type Balancing  
Stand



Micro Crossfeed For  
10/12/16 Series



Ratchet Type Electro  
Parallel Dresser (10/12/16  
Series)



Digital Readout



Permanent Magnetic  
Chuck



Micro Down Feed For  
10/12/16 Series