# **Surface Grinding**

## Semi-automactic series- ESG-1A618/ESG2A618 &ESG-1A818/ESG-2A818

## **Specifications:**

1A: Longitudinal Hydraulic.2A: Longitudinal Hydraulic And Cross feed Motorized.

| MODEL                                       |                                  | ESG-1A~2A618                                  | ESG-1A~2A818                                  |
|---|----------------------------------|---|---|
| Table Size                                  |                                  | 152x460mm(6x18")                              | 203x460mm(8x18")                              |
| Max.grinding length                         | Longitudinal                     | 480mm(19")                                    | 480mm(19")                                    |
| Max.grinding width                          | Crosswise                        | 168mm(6 5/8")                                 | 228mm(9")                                     |
| Max. distance from table surface to spindle |                                  |   |   |
| centerline                                  |                                  | 460mm(18")                                    | 460mm(18")                                    |
| Stadard magnetic chuck size                 |                                  | 150x450mm(6x18")                              | 200x450mm(8x18")                              |
|   | Max. travel, hydraulic           | 480mm(19")                                    | 480mm(19")                                    |
|   | Max. travel, manual              | 510mm(20")                                    | 510mm(20")                                    |
| Longitudinal movement of table              | Max. travel,infinitely va riable | 60HZ,5-28m/min,50HZ,5-<br>23m/min             | 60HZ,5-25m/min,50HZ,5-<br>20m/min             |
|   | Auto transverse                  |   |   |
|   | increment                        | 1-10mm(0.04"-0.4")                            | 1-10mm(0.04"-0.4")                            |
|   | Max. auto transverse travel      | 180mm(7")                                     | 235mm(9 1/4")                                 |
|   | Max. manual transverse           | 10011111(7)                                   | 25511111(7-174-)                              |
|   | travel                           | 195mm(7 3/4")                                 | 250mm(9 3/4")                                 |
|   | Handwheel per                    | - (0.5%)                                      | - (0.2W)                                      |
| Cross transverse                            | revolution Handwheel per         | 5mm(0.2")                                     | 5mm(0.2")                                     |
| travel                                      | graduation                       | 0.02mm(0.0005")                               | 0.02mm(0.0005")                               |
|   | Automatic infeed                 | (11000)                                       | (0.00000)                                     |
|   | Step feed (jog)                  |   |   |
|   | Rapid travel, Approx             |   |   |
|   | Slow travel, Approx              |   |   |
| Sheelhead vertical in                       | Handwheel revolution             | 1mm(0.05")                                    | 1mm(0.05")                                    |
|   |                                  | ` /   | · /   |
| feed  | Handwheel graduation             | 0.005mm(0.0001")<br>60HZ,3450 R.P.M. / 50HZ,2 | 0.005mm(0.0001")<br>60HZ,3450 R.P.M. / 50HZ,2 |
| Grinding spidle driv                        | Speed                            | 850 R.P.M.                                    | 850 R.P.M.                                    |
|   | Power rating                     | 2.0HP   | 2.0HP   |
|   | Diameter                         | 203MM(8")                                     | 203MM(8")                                     |
| Standard grinding wheel                     | Width                            | 12.7mm (1/2"), MAX. 19mm (3/4")               | 12.7mm (1/2"), MAX. 19mm (3/4")               |
|   | Bore                             | 31.75mm(1 1/4")                               | 31.75mm(1 1/4")                               |
| Hydraulic motor                             | Power rating                     | 1HPx6P  | 1HPx6P  |
| Crossfeed motor                             | Power rating                     | 40Wx6P  | 40Wx6P  |
| Elevating motor                             | Power rating                     | 40Wx6P  | 40Wx6P  |

|                    |                       | 1810x1133x1660mm(71"x45 | 1810x1285x1680mm(71"x50 |
|--------------------|-----------------------|-------------------------|-------------------------|
| Floor space        | Total space required  | "x65")                  | 1/2"x66")               |
|                    | Net weight, Approx.   | 820KGS(1804LBS)         | 1170KGS(2574LBS)        |
| Weights            | Gross weight, Approx. | 970KGS(2134LBS)         | 1340KGS(2948LBS)        |
| Rated power,       |                       |                         |                         |
| Approx             |                       | 3.0HP                   | 3.0HP                   |
|                    |                       | 1940x1400x1930mm(77"x55 | 1890x1540x1930mm(75"x61 |
| Packing dimensions | LxWxH                 | "x76")                  | "x76")                  |

#### **GENERAL FEATURE:**

#### 1. High Precision Cartridge Wheel Spindle:

High precision cartridge type spindle is supported by two preloaded precision angular contact ball bearings & one NN type Roller bearing and driven by V3 class motor that allow high accurate grinding performance. (618/818 series are driven by 2.0HP motor.)

#### 2. High Anti-Wear Guide Ways:

The saddle rests on precision hand-scraped double V ways, and the table rests on precision hand-scraped V and flat ways which coated with "TURCITE-B". These guide ways are equipped with auto lubrication to resist wear of guide ways, plus lasting accuracy and damping.

### 3. High Rigid Casting Construction:

Machines are casted with high grade casting iron with heavy walls and reinforced ribs to provide excellent rigidity and damping.

#### 4. Enlarged Column And Base:

Enlarged column and base create high stability and rigidity. The height of column is increased up to 18" (460mm) from table surface to the center line of spindle.

#### 5. Auto Lube System:

Automatic lubrication system is applied as standard to ensure sufficient lubrication at lead-screws and guide-ways for more longevity.

#### 6. Longitudinal & Cross Drive:

For all models, except 618 & 818 handfeed, the longitudinal movement is driven by hydraulic system; for 2A, 3A, ASD series, the cross movement is driven by motor for more accurate increment feeding.



Spindle For 618, 818 Series



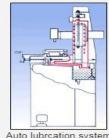




Adjusting I



Positioning system(for 614)



### Standard Accessories:

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

## Optional Accessories:

