



## M820 - Manual

Standard features:

- \* **3 – axis manual operation**
  - \* **High rigidity H-frame column with spindle center to table for extra clearance under the wheel.**
  - \* **Enhanced ribbed full cast iron base provides the best anti-vibration foundation with greater stability and rigidity**
  - \* **Enlarged spindle housing for heavier grinding**
  - \* **V3 grade spindle motor for powerful output to achieve precision work standards and better grinding capability**
  - \* **Cartridge spindle w/4 preloaded class 7 (P4) bearing and run out of taper nose better than 0.00060 T.I.R.provides quiet,vibration free operation for better workpiece accuracy.**
  - \* **M820: roller steel balls on linear table ways for easy and smooth longitudinal movements and double V shape saddle ways for rigidity.**
  - \* **Mid-level downfeed handwheel placement for convenient and easy positioning for Z-axis**
  - \* **Manual lubrication system provides lubrication to all necessary mechanism saddle&column ways,bearings and lead screws for better machine performance and less maintenance.**
  - \* **Convenient control panel including all buttons and switches.**
  - \* **Digital readout system – two axis (Z& Y axis) digital readout**
- The min.digital readout amount:0.001-0.005mm**

Standard Appendix:

- (1) tool box (2) balancing stand and bar (3) handwheel nut (4)flange wrench  
(5) screwdriver (6)Balancing screw (7)open-end wrench (8)inner hexagon spanner  
(9) wheel dresser holder (10) machine stand pad (11) wheel flange  
(12) diamond wheel dresser (diamond pen) (13) permanent chuck

Optional accessories:

- (1) tiltable permanent chuck or electro magnetic chuck (2) demagnetizer (3) angle dresser  
(4) radius dresser (5) precision vice (6) 2- axis digital readout system  
(7) working light (8)wheel flange

Technical Parameters

|                                    |       |             |
|------------------------------------|-------|-------------|
| <b>Main specifications</b>         | Units | M820        |
| Max.workpiece to be Ground( LxWxH) | mm    | 500x200x320 |
| Max. Grinding Length               | mm    | 530         |

|   |      |                                 |      |
|---|------|---------------------------------|------|
| Max. Grinding Width                           | mm   | 220                             |      |
| Distance From Table Surface To Spindle Center | mm   | 490                             |      |
| Slide way                                     |      | V-type rail with Steel-ball     |      |
| V-type rail with Steel-ball                   | Kg   | 100                             |      |
| Table Size (LxW)                              | mm   | 480x200                         |      |
| Number of T -Slot                             | mmxn | 12x1                            |      |
| Cross Feed On Handwheel                       | mm   | 0.02/Graduation 2.5/revolution  |      |
| Vertical Feed On Handwheel                    | mm   | 0.01/Graduation 1.25/revolution |      |
| Wheel Size (dia.xwidthxbore )                 | mm   | 200x16x31.75                    |      |
| Spindle Speeds                                | 50Hz | rpm                             | 2850 |
| Spindle Motor                                 | Kw   | 1.1                             |      |
| Coolant Pump                                  | Kw   | 0.4                             |      |
| Minimum of Numerical Display                  | mm   | 0.001                           |      |
| Machine Size (LxWxH)                          | mm   | 1680x1140x1800                  |      |
| Packing Size (LxWxH)                          | mm   | 1140x1630x1960                  |      |
| GrossNet                                      | T    | 0.85 0.75                       |      |



## Manual surface grinder



M618A ( MD618 )



M820



M250

**Feature:**

X,Y,Z: 3-axis manual operation

**Standard appendix:**

- (1)tool box (2) balancing stand & bar (3) handwheel nut
- (4)flange wrench (5)screwdriver (6)balancing screw
- (7)open-end wrench (8)inner hexagon spanner
- (9)wheel dresser holder (10)machine stand pad
- (11) wheel flange (12)diamond wheel dresser
- (13) permanent chuck

**Optional accessories:**

- (1) Tilttable permanent chuck
- (2)Demagnetizer
- (3) Angle dresser (4)radius dresser
- (5) precision vice (6) 2-axis DRO
- (7) working light (8)wheel flange
- (9) electric power attached(x.y-axis)
- (MD618,MD820)
- (10)electro magnetic chuck

| Technical parameters                          | Unit | M618A             | M820              | M250              |
|---|------|-------------------|-------------------|-------------------|
| Max.workpiece to be ground(LxWxH)             | mm   | 500x190x250       | 530x220x320       | 560x260x280       |
| Max. grinding length                          | mm   | 500               | 530               | 560               |
| Max. grinding width                           | mm   | 190               | 220               | 260               |
| Distance from table surface to spindle center | mm   | 335               | 450               | 430               |
| Max.load of worktable                         | mm   | 200               | 200               | 200               |
| Table size(LxW)                               | mm   | 460x180           | 480x200           | 540x250           |
| Cross feed on handwheel                       | mm   | 0.02/Gra 2.5/Rev  | 0.02/Gra 2.5/Rev  | 0.02/Gra 2.5/Rev  |
| Vertical feed on handwheel                    |      | 0.01/Gra 1.25/Rev | 0.01/Gra 1.25/Rev | 0.01/Gra 1.25/Rev |
| Wheel size(diaxwidthxbore)                    | mm   | 180x13x31.75      | 200x20x31.75      | 200x20x31.75      |
| Spindle speeds                                | rpm  | 2850              | 2850              | 2850              |
| Spindle motor                                 | kw   | 1.1               | 1.1               | 1.1               |
| Coolant pump                                  | kw   | 0.4               | 0.4               | 0.4               |
| Machine size (LxWxH)                          | mm   | 1550x1150x1590    | 1680x1140x1760    | 1680x1220x1720    |
| Packing size (LxWxH)                          | mm   | 1000x1140x1760    | 1140x1250x1960    | 1200x1400x1960    |
| Gross, Net weight                             | l    | 0.75 0.65         | 0.8 0.7           | 0.90 0.85         |

## Auto-hydraulic surface grinder



Feature:

MY3060,MY3075: Hydraulic transmission on longitudinal, manual & auto feed on transverse, rapid movement & manual feed on vertical;  
MY820, MY250: Hydraulic transmission on longitudinal, manual feed on transverse and vertical, auto feed attached on Y-axis is optional.

Standard appendix:

(1) tool box (2) balancing stand & bar (3) handwheel nut  
(4) flange wrench (5) screwdriver (6) balancing screw  
(7) open-end wrench (8) inner hexagon spanner  
(9) wheel dresser holder (10) machine stand pad  
(11) wheel flange (12) diamond wheel dresser  
(13) permanent chuck

Optional accessories:

(1) tiltable permanent chuck  
(2) demagnetizer  
(3) angle dresser (4) radius dresser  
(5) precision vice (6) 2-axis DRO  
(7) working light (8) wheel flange  
(9) Auto power attached (y-axis) (10) electric magnetic chuck

| Technical parameters                          | Unit  | MY820             | MY250             | MY3060           | MY3075           |
|---|-------|-------------------|-------------------|------------------|------------------|
| Max. workpiece to be ground (LxWxH)           | mm    | 520x220x320       | 560x260x280       | 630X320X390      | 780x310x390      |
| Max. grinding Length                          | mm    | 530               | 560               | 630              | 780              |
| Max. grinding Width                           | mm    | 220               | 260               | 320              | 310              |
| Distance from table surface To spindle center | mm    | 450               | 430               | 550              | 550              |
| Max. load of worktable                        | Kg    | 200               | 200               | 200              | 200              |
| Table Size(LxW)                               | mm    | 480x200           | 540x250           | 600x300          | 750x300          |
| Speed of Working Table                        | m/min | 3-23              | 3-23              | 3-23             | 3-23             |
| Cross Feed On Handwheel                       | mm    | 0.02/Gra 2.5/Rev  | 0.02/Gra 2.5/Rev  | 0.02/Gra 2.5/Rev | 0.02/Gra 2.5/Rev |
| Vertical Feed On Handwheel                    | mm    | 0.01/Gra 1.25/Rev | 0.01/Gra 1.25/Rev | 0.01/Gra 2/Rev   | 0.01/Gra 2/Rev   |
| Wheel Size(diaxwidthxbore)                    | mm    | 200x20x31.75      | 200x20x31.75      | 250x25.4x76.2    | 250x25.4x76.2    |
| Spindle Speeds                                | mm    | 2850              | 2850              | 1450             | 1450             |
| Spindle Motor                                 | rpm   | 1.1               | 1.5               | 2.2              | 2.2              |
| Hydraulic station motor                       | kw    | 1.5               | 1.5               | 2.25             | 2.25             |
| Coolant Pump                                  | kw    | 0.4               | 0.4               | 0.4              | 0.4              |
| Machine Size (LxWxH)                          | mm    | 1680x1140x1760    | 1680x1220x1800    | 1900x1530x1950   | 1900x1530x1950   |
| Packing Size (LxWxH)                          | mm    | 1630x1140x1960    | 1630x1400x1940    | 1970x1660x2030   | 1970x1660x2030   |
| Gross, Net weight                             | T     | 0.85 0.75         | 0.90 0.85         | 1.33 1.2         | 1.43 1.3         |

**Maual Surface grinder - M618A,M820,M250**

| Main specifications                           |      | Units | M618A                              | M820                               | M250                               |
|---|------|-------|------------------------------------|------------------------------------|------------------------------------|
| Max.workpiece to be Ground( LxWxH)            |      | mm    | 400x180x250                        | 500x200x320                        | 550x250x280                        |
| Max. Grinding Length                          |      | mm    | 430                                | 530                                | 580                                |
| Max. Grinding Width                           |      | mm    | 190                                | 220                                | 260                                |
| Distance From Table Surface To Spindle Center |      | mm    | 335                                | 490                                | 450                                |
| Slide way                                     |      |       | V-type rail with Steel-ball        | V-type rail with Steel-ball        | V-type rail with Steel-ball        |
| V-type rail with Steel-ball                   |      | Kg    | 100                                | 100                                | 100                                |
| Table Size (LxW)                              |      | mm    | 400x180                            | 480x200                            | 550x250                            |
| Number of T -Slot                             |      | mmxn  | 12x1                               | 12x1                               | 12x1                               |
| Cross Feed On Handwheel                       |      | mm    | 0.02/Graduation<br>2.5/revolution  | 0.02/Graduation<br>2.5/revolution  | 0.02/Graduation<br>2.5/revolution  |
| Vertical Feed On Handwheel                    |      | mm    | 0.01/Graduation<br>1.25/revolution | 0.01/Graduation<br>1.25/revolution | 0.01/Graduation<br>1.25/revolution |
| Wheel Size (dia.xwidthxbore )                 |      | mm    | 180x13x31.75                       | 200x16x31.75                       | 200x16x31.75                       |
| Spindle Speeds                                | 50Hz | rpm   | 2850                               | 2850                               | 2850                               |
| Spindle Motor                                 |      | Kw    | 1.1                                | 1.1                                | 1.5                                |
| Coolant Pump                                  |      | Kw    | 0.4                                | 0.4                                | 0.4                                |
| Minimum of Numerical Display                  |      | mm    | 0.001                              | 0.001                              | 0.001                              |
| Machine Size (LxWxH)                          |      | mm    | 1550x1060x1590                     | 1680x1140x1800                     | 1800x1400x1800                     |
| Packing Size (LxWxH)                          |      | mm    | 1060x1170x1870                     | 1140x1630x1960                     | 1200x1340x1960                     |
| GrossNet                                      |      | T     | O.80 0.70                          | O.85 0.75                          | O.85 0.90                          |