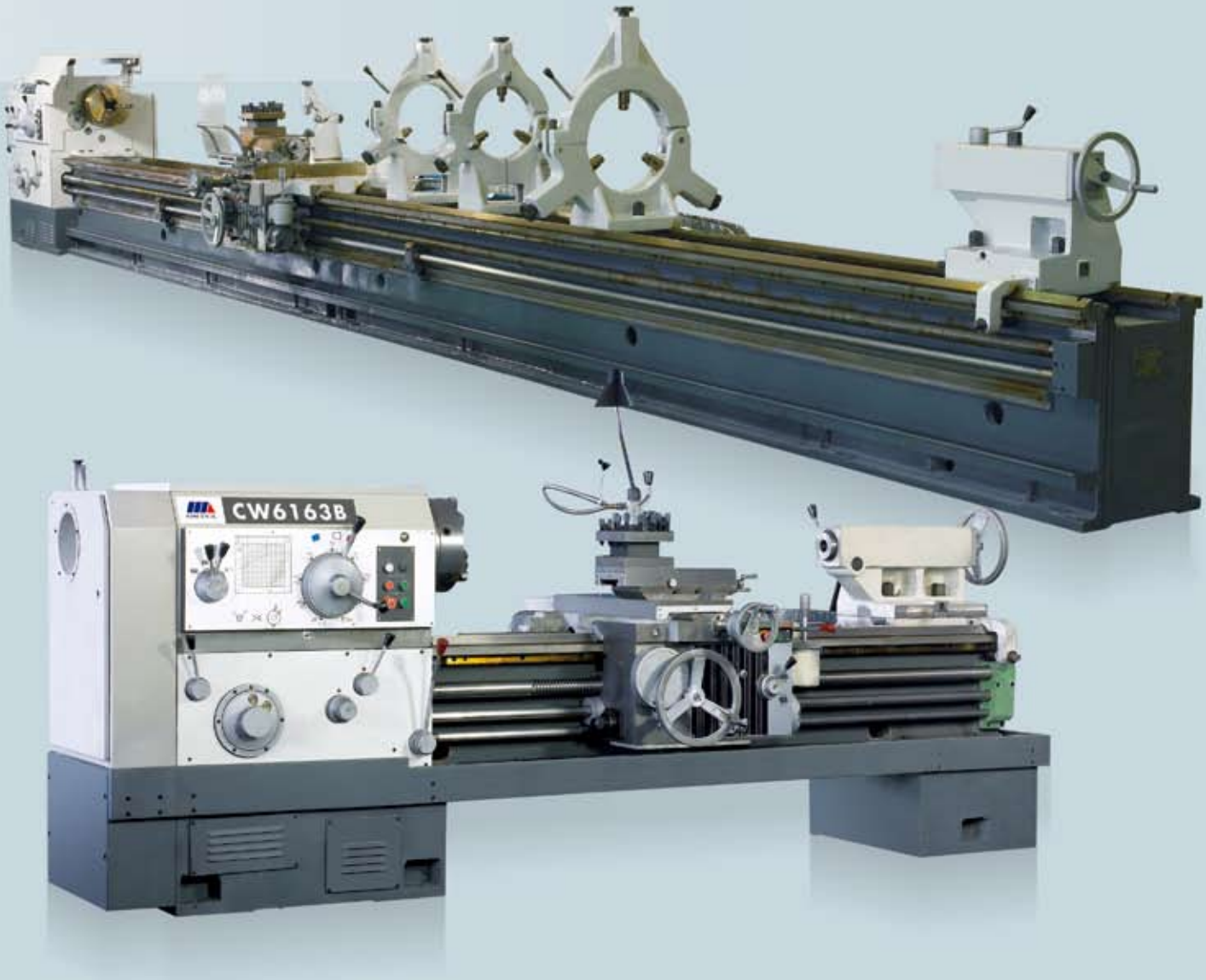
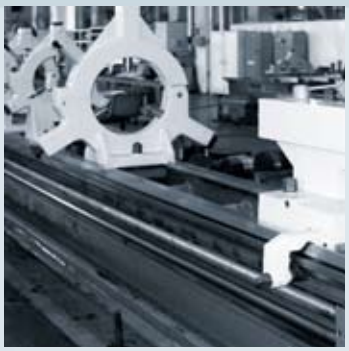
# CW series

www.wme.cn/Lathe/

***Vanguard CW series engine lathes are constructed of high quality alloy castings. Its large torque and high spindle speeds allow quicker cutting operations for faster turn around. The spindles are forged steel and are supported by precision NSK bearings which give it greater accuracy ensuring very precise turning capabilities. All bed ways are induction hardened and precision ground on CNC way grinding machines thus enhancing machine life. Its gear box is totally enclosed, and has an automatic forced lubrication system.***


CW6163B



# CW6163B


The side wall of the bed is double-ribbed and coupled with internal rib plates  Rigidity of machines increases by 33% compared to that of N-type ribs of single wall construction. The 4-way rapid traverse is located on the saddle and is operated by a single handle for operator efficency.

## *Standard Equipment*

3-jaw chuck
Follow rest
Steady rest
Center and Sleever
Flood coolant system
Machine work light

## *Optional Equipment*

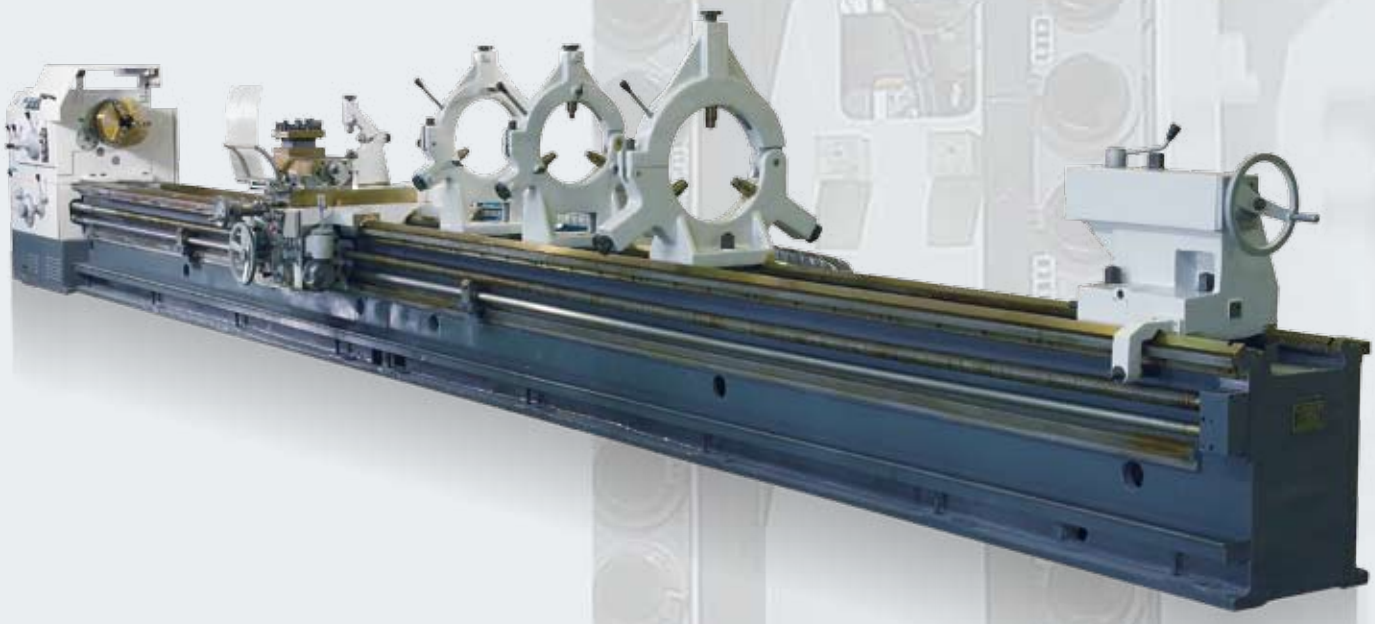
3 & 4 jaw chucks
Steady Rest (larger diameters)
Taper attachment
Thread cutting dial
Digital readout
Adjustable pads

# CW6180B

Both rigidity of construction and rigidity of transmission are high, so precision is stable and heavy cut can be carried out.

Owing to the saddle guideway which is inlaid with "TSF" wear-resisting material plate, the carriage moves lightly and nimbly. The service life of the guideway is extended. Lubricating system circulates from the external independent storage tank, thus cutting precision is increased.

The spindle bore is 104mm. The tailstock is equipped with a graduated disc and graduated line. The machine is characterized with elegant appearance and easy to be cleaned and maintained.



## *Standard Equipment*

3 jaw chuck
4 jaw chuck
Face plate
Follow rest
Steady rest
Center and Sleever
Flood coolant system
Machine work light

## *Optional Equipment*

Face plate
3 & 4 jaw chucks
Steady Rest (larger diameters)
Taper attachment
Thread cutting dial
Digital readout
Adjustable pads

# CW61125B


## Standard Equipment

- 4 jaw chuck
- Face plate
- Follow rest
- Steady rest
- Rolling steady rest
- Live center
- Center and Sleever
- Flood coolant system
- Machine work light

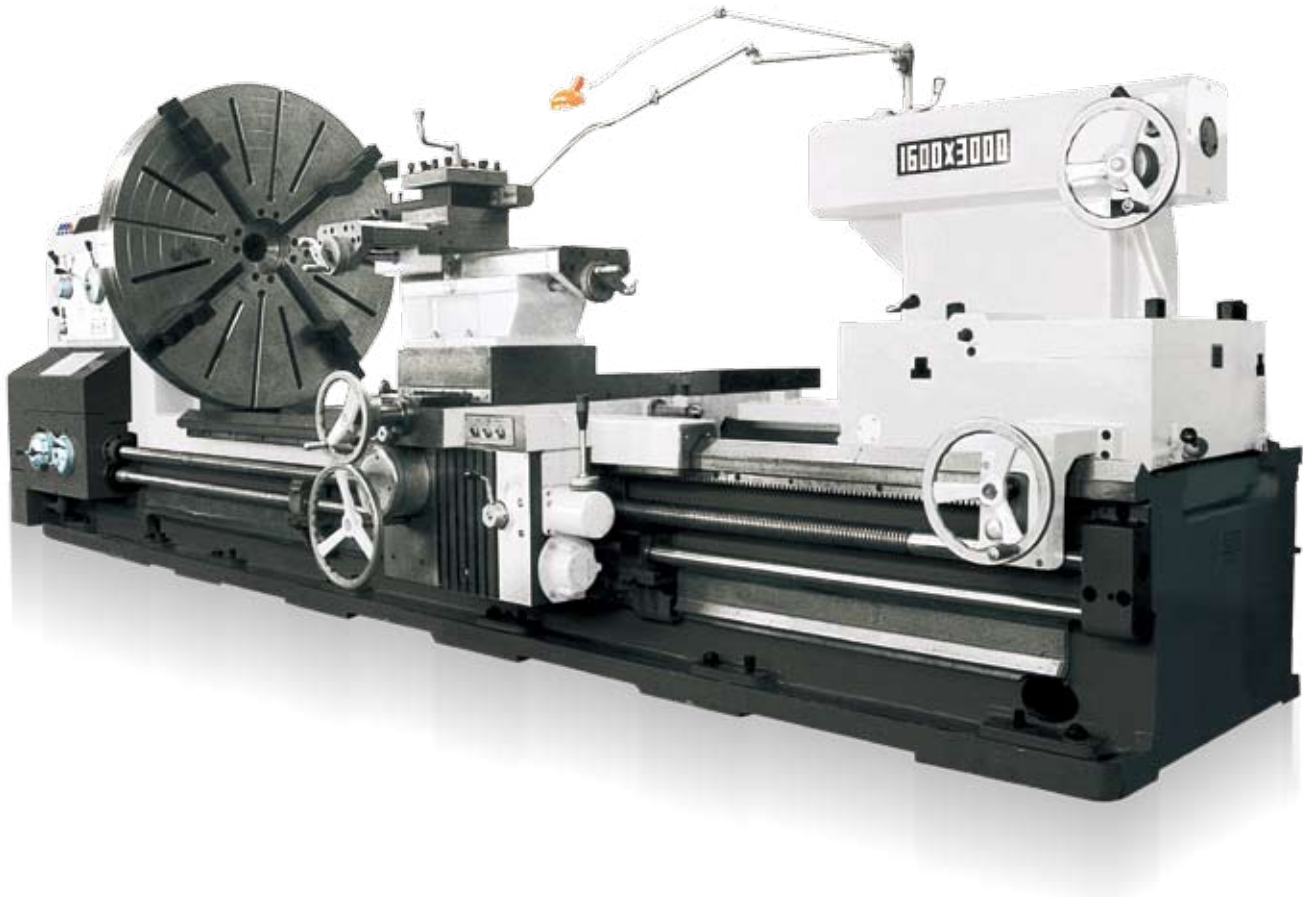
## Optional Equipment

- 3 & 4 jaw chucks
- Steady Rest (larger diameters)
- Roller support
- Digital readout
- Adjustable pads

Braking and rotating-direction change of spindle is controlled by hydraulic power with sensitive and reliable performances. By the manipulation of a push buttom, spindle speed change can be made to a higher or lower step without stopping the machine. Lubrication in the headstock is effected by forced pressure oil while spindle speed ranges are furnished for selection by user when placing order.

# CW61160B

The apron is provided with a safety device to protect the machine against overloading. The top slide may be operated by power for cutting short taper surface. The combination of longitudinal feed of the saddle and feed of the silde facilitates the cutting of a long taper surface on this machine.
all guidewas on the bed are casehardened to prolong their service life.
The centralized leverl can be easily and conveniently operated.




### *Standard Equipment*

4 jaw chuck
Follow rest
Rolling steady rest
Center and Sleever
Flood coolant system
Machine work light

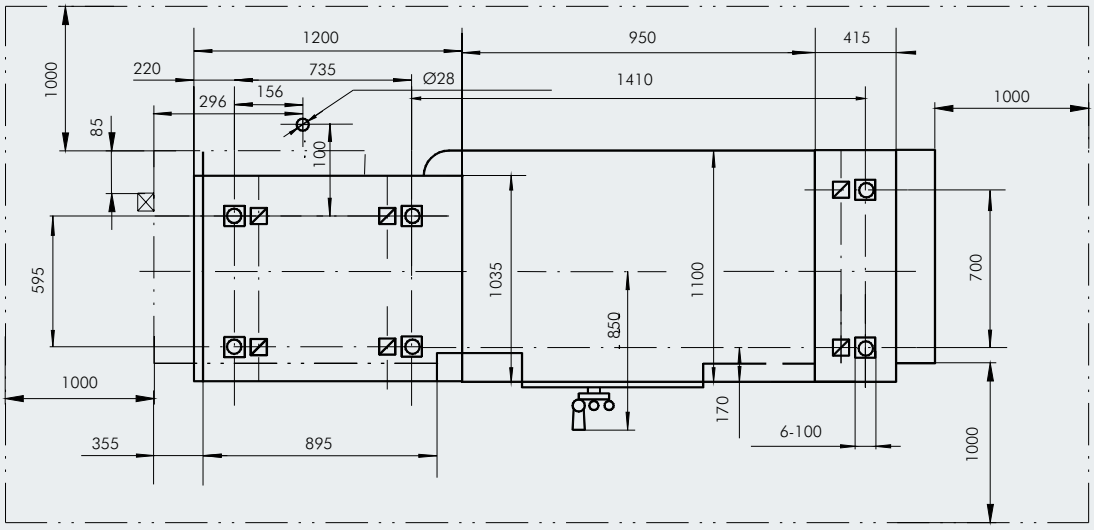
### *Optional Equipment*

Face plate
3 & 4 jaw chucks
Roller support
Adjustable pads

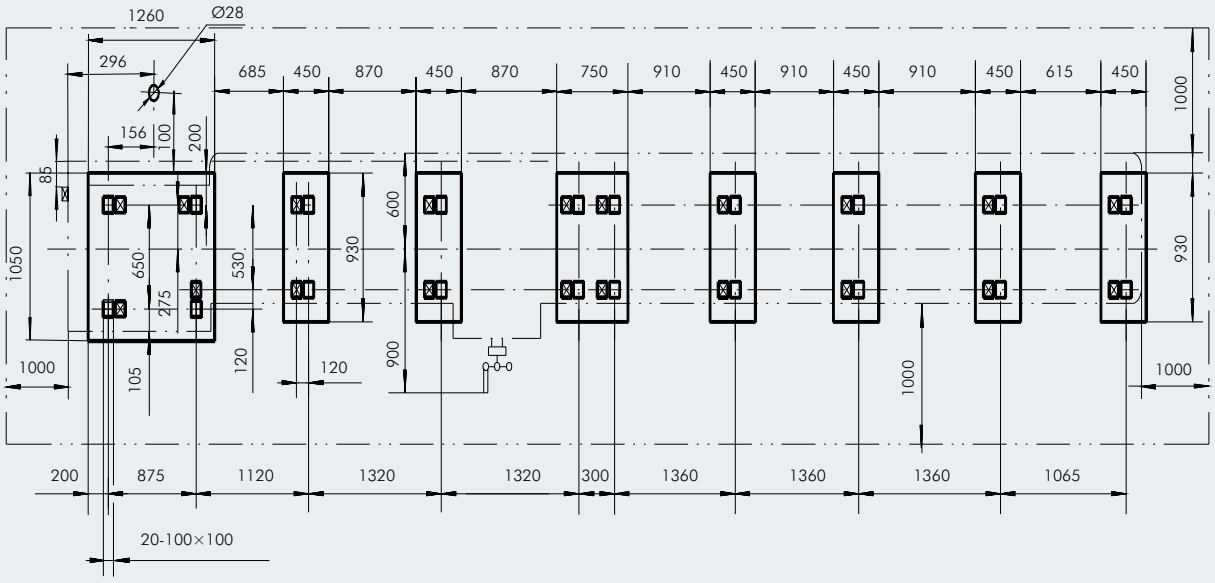
# Main Technical Specifications

## *Foundation Layout*

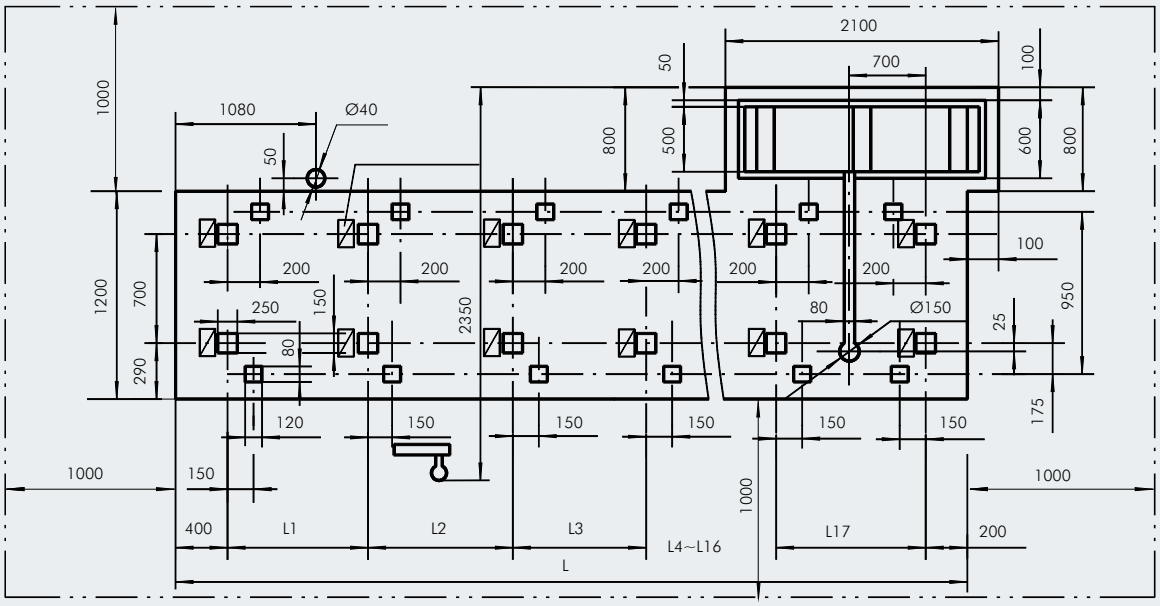
CW6163/6193 series



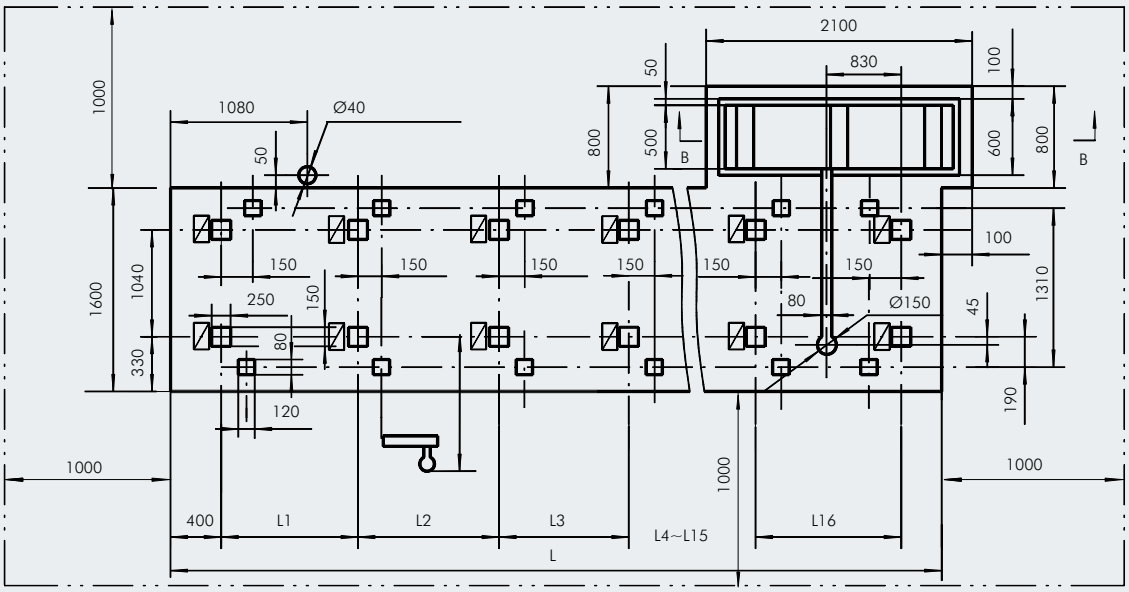

CW6280 series



CW61100 series




CW62200 series



# Main Technical Specifications

| Item | Units | CW6263B/C CW6163B/C | CW6280B/C CW6180B/C | CW6293B/C CW6193B/C |
|---|---|---|---|---|
| Max. swing diameter over bed | mm | 630 | 800 | 930 |
| max. swing diameter over carriage | mm | 350 | 480 | 650 |
| max. workpiece length | mm | 750, 1500, 2000, 3000-15000 | 1500, 3000, 4000, 3000-15000 | 1500, 2000, 3000-15000 |
| max.swing diameter and width in gap | mm | 800/300 | 1000/310 | 1100/300 |
| Spindle bore and nose | | Ø104mm; D11(B series) Ø130;D11(C series) | | |
| Taper in spindle nose and center | | Ø120mm (B series) Ø140mm (C series); Mores 5 | | |
| Steps of spindle speeds | | 18 kinds | 18 kinds | 18 kinds |
| range of spindle speeds | r/min | 7.5-1000(B series) 8.5-800 (C series) | 5.4-720 | 6-800(B series) 8.8-800(C series) |
| Steps of longitudinal feeds | | 64kinds | 64kinds | 64kinds |
| range of longitudinal feeds | mm/r | 0.05-24.3 | 0.06-24.3 | 0.05-24.3 |
| Longitudinal and cross feed rate | | 1/2 | 1/2 | 1/2 |
| Pitch of leadscrew | | 12mm | 12mm | 12mm |
| Number, range of Metric thread | mm | 50 kinds 1-240 | 50 kinds 1-240 | 50 kinds 1-240 |
| Number, range of whitworth thread | t.p.i | 26 kinds; 14-1 | 26 kinds; 14-1 | 26 kinds; 14-1 |
| Number, range of Module thread | mm | 53 kinds; 0.5-120 | 53 kinds; 0.5-120 | 53 kinds; 0.5-120 |
| Mumber, rage of diametral thread | DP | 24 kinds; 28-1 | 24 kinds; 28-1 | 24 kinds; 28-1 |
| Max. cross travel of lower slide | mm | 315 | 500 | 500 |
| Max. travel of top slide | mm | 200 | 200 | 200 |
| Max. travel of quill of tailstock | mm | 250 | 250 | 250 |
| Taper of quill of tailstock | | Morse No. 5 | Morse No. 5 | Morse No. 5 |
| Power of main motor | kW | 11 | 11 or 15 | 11 |
| Width of bed guideways | mm | 550 | 600 | 550 |
| Hardness of bed guideways | | RC52 | RC52 | RC52 |
| Max. weight of workpiece | kg | 2000 | 2000 | 2000 |
| Diameter of tails stock quill | | 100 | 100 | 100 |

| CW61110B/C | CW61125B | CW61160 | CW61200 |
|---|---|---|---|
| 1100 | 1250 | 1600 | 2000 |
| 800 | 610/865 | 1200 | 1580 |
| 1500, 3000, 4000, 3000-15000 | 1500, 3000, 5000-15000 | 3000, 5000, 6000-1500 | 3000, 5000, 6000-1500 |
| 1300/310 | | | |
| Ø104mm; D11 / Ø130: D11(C series) | Ø130 | Ø130 | Ø130 |
| Ø120; Mores No. 5 / Ø140 (C series) | Ø140 | Ø140 | Ø140 |
| 18 kinds | 21 kinds | 21 kinds | 21 kinds |
| 5.4-720 | 2-200(50Hz)/3.15-315(60Hz) | 2-200(50Hz)/3.15-315(60Hz) | 2-200(50Hz)/3.15-315(60Hz) |
| 64kinds | 56kinds | 56kinds | 56kinds |
| 0.05-24.3 | 0.1-12 | 0.1-12 | 0.1-12 |
| 1/2 | 1/2 | 1/2 | 1/2 |
| 12mm | 12 | 12 | 12 |
| 50 kinds 1-240 | 44 kinds; 1120 | 44 kinds; 1120 | 44 kinds; 1120 |
| 26 kinds; 14-1 | 31kinds; 24-1/4 | 31kinds; 24-1/4 | 31kinds; 24-1/4 |
| 53 kinds; 0.5-120 | 45 kinds; 0.5-60 | 45 kinds; 0.5-60 | 45 kinds; 0.5-60 |
| 24 kinds; 28-1 | 38 kinds; 1/2-56 | 38 kinds; 1/2-56 | 38 kinds; 1/2-56 |
| 500 | 520 | 960 | 1010 |
| 200 | 300 | 200 | 200 |
| 250 | 300 | 300 | 300 |
| Morse No. 5 | Morse No. 6 | 80 (metric) | 80 (metric) |
| 11 or 15 | 22 | 22 | 22 |
| 600 | 755 | 1100 | 1100 |
| RC52 | RC52 | RC52 | RC52 |
| 2000 | 6000 | 8000 | 8000 |
| 100 | 160 | 180 | 180 |