

GRINDING MAGHINE









BENIGN ENTERPRISE CO., LTD.

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STRIVING FOR SERVICE AND SATISFACTION

COMPANY PROFILE

COMPANY NAME : BENIGN ENTERPRISE CO., LTD.

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: BEMATO REGISTERED TRADEMARK **COMPANY ESTABLISHED** : 1976

TEL

CAPITAL : US\$2,000,000.00

EMPLOYEE : 25 (Includes 4 QC inspectors)

GENERAL MANAGER : MR. DAVID WU

MAIN ACTIVITY : 1. EXPORT MACHINE TOOLS, MACHINE TOOLS

ACCESSORIES, INDUSTRIAL SUPPLIES, PNEUMATIC TOOLS AND OEM COMPONENTS

2. PURCHASING AGENT FOR FOREIGN COMPANIES

3. SHIPMENTS CONSOLIDATION

MAIN EXPORT MARKETS : 1. EUROPE

2. NORTH AMERICA

3. MIDDLE & SOUTH AMERICA

4. AUSTRALIA & N.Z.

5. ASIA

6. SOUTH AFRICA

MAIN EXPORT PRODUCTS

: A) MACHINE TOOLS

1. LATHES (CNC & CONVENTIONAL)

2. MILLING MACHINES (CNC & CONVENTIONAL)

3. MACHINING CENTERS (VERTICAL & HORIZONTAL)

4. GRINDING MACHINES (SURFACE, CYLINDRICAL, INTERNAL, CENTERLESS, TOOL & CUTTER)

5. SAWING MACHINES (HORIZONTAL, VERTICAL,

& CIRCULAR)

6. DRILLING MACHINES (BENCH, FLOOR, RADIAL,

NC, VERTICAL & HORIZONTAL)

7. WOODWORKING MACHINES (DIY & INDUSTRIAL)

8. WIRE CUT & EDM (DIE SINKER, MICRO DRILL)

9. SHEET METAL MACHINES (SHEAR, PRESS BRAKE,

FOLDING, BENDING, ROLLING)

10. SPECIAL MACHINES, OEM COMPONENTS (STAMPING, PLASTIC INJECTION, ALUMINUM

EXTRUSION, CASTINGS, ETC.)

B) MACHINE TOOLS ACCESSORIES & **INDUSTRIAL TOOLS & SUPPLIES**

C) PNEUMATIC TOOLS



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TOOL GRINDER

• DIAMOND GRINDER

GRINDING MACHINE

• DIAMOND & PCBN TOOL GRINDER

• HOB SHARPENING MACHINE

• PRECISION SPINDLE GRINDING MACHINE

• PRECISION ROD CUT-OFF & END SURFACE

• HOLDER MAINTENANCE & POLISH MACHINE

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*Machine shown with optional accessories

FEATURES:

- Major cast parts are made of stress relieved and annealed Meehanite castings to ensure stability.
- Table drive slides on steel ball slide rails, super quick motion.
- Precision constructed wheel head produces extremely smooth finish. Spiral bevel gear produces very smooth vertical motion.
- This model is handy and flexible. Very low spindle motor vibration

SPECIFICATION:

MODEL	BMT 612B		
Table Size	152 x 305 mm		
Max. Grinding Surface (W x L)	170 x 320 mm		
Max. Distance from Spindle Center to Table	280 mm		
Cross Feed on Hand Wheel	0.02 mm/gra.		
Vertical Feed on Hand Wheel	0.01 mm/gra.		
T-slot	12.7 x 19.5 x 398 mm		
Wheel Dimension	180 x 13 x 31.75 mm		
Wheel Speed	60Hz: 3600 rpm; 50Hz: 2800 rpn		
Spindle Motor	3/4 HP		
N.W. / G.W.	205 kgs / 260 kgs		
Floor Space (L x W x H)	430 x 440 mm		
Packing Dimension (L x W x H)	1040 x 730 x 950 mm		

^{*}Specifications are subject to change without prior notice.

STANDARD ACCESSORIES:

- 1. Grinding wheel
- 2. Wheel flange
- 3. Wheel guard
- 4. Tools & tool box

OPTIONAL ACCESSORIES:

- 1. Electromagnetic chuck
- 2. Permanent chuck
- 3. Inclinable permanent magnetic chuck
- 4. Dust collector
- 5. Coolant system w/ splash guard 6. Coolant & dust unit
- 7. Coolant system w/ paper filter
- 8. Coolant system w/ magnetic dust separator
- 9. Diamond dresser
- 10. Balancing stand
- 11. Demagnetizer
- 12. Automatic demagnetizing controller
- 13. Inverter
- 14. Digital read out
- 15. Radius forming attachment
- 16. Precision vise
- 17. Punch former
- 18. Angle dressing device
- 19. Vertical MPG control
- 20. Cross/vertical micro feed

▼ BMT 614 / BMT 618T (Turcite Way)



FEATURES:

- *Machine shown with optional accessories
- Major cast parts are made of stress relieved and annealed Meehanite castings to ensure stability, rigidity, high accuracy, and extended working life.
- Lead screws: Heat treated and ground, smooth operation and extended working life.
- Precision steel balls produce extremely smooth operation and long working life of slide ways for BMT 618B & BMT 818B.
- Double V slideways are precision hand scraped and coated with Turcite B for smooth movement and extra stability.
- The precision grinding spindle is coupled directly with a V-3 motor which ensures a high spindle run out accuracy of 0.002mm. The precision cartridge spindle is greased and requires very little maintenance, and incorporates 4 preloaded class 7 (P4) super precision angular contact ball bearings for heavy grinding.
- Standard auto-lube system provides ample lubrication on all slideways, lead screws and nuts. Lubricating oil is filtered and recycled for smooth movement and minimal wear and tear.

STANDARD ACCESSORIES:

- 1. Grinding wheel
- 2. Wheel flange
- 3. Wheel extractor
- 4. Work lamp
- 5. Wheel balancing arbor
- 6. Auto lubrication system 7. Levelling screws with blocks &
- eye bolts
- 8. Tools & tool box

OPTIONAL ACCESSORIES:

- 1. Permanent/electromagnetic chuck
- 2. Parallel dresser
- 3. Inclinable permanent magnetic chuck
- 4. Dust collector
- 5. Coolant system w/ splash guard
- 6. Coolant & dust unit
- 7. Coolant system w/ paper filter
- 8. Coolant system w/ magnetic dust separator
- 9. Diamond dresser
- 10. Balancing stand
- 11. Demagnetizer
- 12. Automatic demagnetizing controller
- 13. Inverter
- 14. Digital read out
- 15. Precision vise
- 16. Punch former
- 17. Angle dresser
- 18. Radius dresser
- 19. Vertical MPG control 20. Cross/vertical micro feed

MODEL	BMT 614	BMT 618T / BMT 618B	BMT 818B		
Table Size	150 x 352 mm	150 x 460 mm	200 x 450 mm		
Max. Table Travel	170 x 380 mm 176 x 480 mm		220 x 485 mm		
Max. Grinding Surface (W x L)	150 x 350 mm	200 x 450 mm			
Max. Distance from Spindle Center to Table	420 mm / 460 mm (Opt.)				
Cross Feed on Hand Wheel	5 mm/rev, 0.02 mm/gra.				
Micro Cross Feed on Hand Wheel	0.002 mm/gra. (Opt.)				
Vertical Feed on Hand Wheel	1 mm/rev, 0.005 mm/gra.				
Vertical Feed by MPG	(x1) 0.001 mm; (x5) 0.005 mm; (x10) 0.01 mm (Opt.)				
Wheel Dimension	180 x 13 x 31.75 mm				
Wheel Speed	60H	lz: 3600 rpm; 50Hz: 3000 i	rpm		
Spindle Motor	1.5	HP	2 HP		
Coolant Pump		1/8 HP			
N.W. / G.W.	670 kgs	780 kgs / 870 kgs	800 kgs / 890 kgs		
Machine Dimension (L x W x H)	1000 x 1155 x 1800 mm	1210 x 1180	0 x 1800 mm		
Packing Dimension (L x W x H)	1300 x 1050 x 2100 mm	1450 x 1100 x 2100 mm	1670 x 1150 x 2100 mr		

^{*}Specifications are subject to change without prior notice.

W BMT 618A / BMT 820A (Hydraulic Table)



BMT 618A

150 x 457 mm

180 x 485 mm

150 x 450 mm

1.5 HP

25W

850 kgs / 950 kgs

- Table uses proximity switch for stepless, side to side speed changes and increased convenience.
- Imported motor on Z axis (cross) drive ensures accuracy.
- Table can switch to manual grinding.
- For safety, manual grinding and hydraulic control cannot be simultaneously operated.
- Full length of slide ways protected from lubricant.
- Longitudinal/cross slide ways employ full support design, are precision hand scraped to offer high accuracy and stability on both axes.
- Worktable longitudinal and cross feed parallelism. Gauge is fixed in spindle and placed in light contact with worktable. Standard cross feed results below 0.002mm.
- · Before machine leaves the factory, it is checked for perpendicularity using a cylindrical angle square.

BMT 820A

200 x 500 mm

230 x 530 mm

200 x 500 mm

2 HP

40W

920 kgs / 1020 kgs

410 mm / 460 mm (Opt.)

3~25 M/min

60Hz: 1100 mm/min; 50Hz: 900 mm/min

5 mm/rev.; 0.02mm/gra.

0.002 mm/gra. (Opt.)

0.15~7.5 mm

220 mm/min (Opt.)

1 mm/rev.; 0.005 mm/gra.

(x1) 0.001 mm; (x5) 0.005 mm; (x10) 0.01 mm (Opt.)

180 x 13 x 31.75 mm

60Hz: 3600 rpm; 50Hz: 3000 rpm

25W (Opt.)

1 HP / 6P

1/8 HP

1510 x 1560 x 1900 mm

• The new hydraulic box with cooling fan, effectively reduce the impact generated by temperature rise.

STANDARD ACCESSORIES FOR BMT 618A / 820A / BMT 618AD / 820AD:

- 1. Grinding wheel
- 2. Wheel flange
- 3. Wheel extractor
- 4. Work lamp
- 5. Wheel balancing arbor
- 6. Auto lubrication system
- 7. Levelling screws with blocks & eve bolts
- 8. Tools & tool box

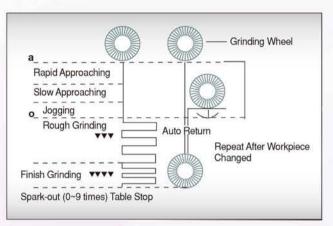
OPTIONAL ACCESSORIES FOR BMT 618A / 820A / BMT 618AD / 820AD:

- 1. Permanent/electromagnetic chuck
- 2. Parallel dresser
- 3. Inclinable permanent magnetic chuck
- 4. Dust collector
- 5. Coolant system w/ splash guard 6. Coolant & dust unit
- 7. Coolant system w/ paper filter
- 8. Coolant system w/ magnetic dust separator
- 9. Diamond dresser
- 10. Balancing stand
- 11. Demagnetizer
- 12. Automatic demagnetizing controller
- 13. Inverter
- 14. Digital read out
- 15. Precision vise
- 16. Punch former 17. Angle dresser
- 18. Radius dresser
- 19. Vertical MPG control
- 20. Cross/vertical micro feed

▼ BMT 618AD / BMT 820AD (Auto Feed, PLC Controller)



- Easy operation needs no calculation.
- Rough and fine feed two phase processing ensures high precision.
- Vertical axis is constantly displayed for easy monitoring, can arbitrarily set zero position.
- Zero set and zero return are available for easy handling, just press the return key to return to original starting point.
- Even if the vertical head is moved or modified from the current position, original feed setting won't be affected.
- Automatic transverse and deep plunge cycles available.
- Two plunge mode feed selections: Left side feed & dual side feed



SPECIFICATION:

*Machine shown with optional accessories

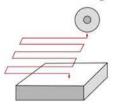
MODEL	BMT 618AD	BMT 820AD		
Table Size	150 x 457 mm	200 x 500 mm		
Max. Table Travel	180 x 485 mm	230 x 530 mm		
Max. Grinding Surface (W x L)	150 x 450 mm	200 x 500 mm		
Max. Distance from Spindle Center to Table	410 mm / 46	50 mm (Opt.)		
Longitudinal Table Speed	3~25 I	M/min		
Cross Rapid Feed	60Hz: 1100 mm/min	; 50Hz: 900 mm/min		
Cross Feed on Hand Wheel	5 mm/rev.; (0.02mm/gra.		
Cross Micro Feed	0.002 mm,	/gra. (Opt.)		
Intermittent Cross Feed	0.15~7	7.5 mm		
Vertical Rapid Feed	220 mm/min (Opt.)			
Vertical Feed on Hand Wheel	1 mm/rev.; 0.005 mm/gra.			
Vertical Micro Feed by MPG	(x1) 0.001 mm; (x5) 0.005 mm; (x10) 0.01 mm (0			
Auto Downfeed Rate (Coarse/Fine)	0.001~0.099 mm			
Auto Downfeed Total Stock Removal	0.001~999.999 mm			
Auto Downfeed Fine Feed Stock Removal	0.003	1 mm		
Auto Downfeed Spark Out	0~9 p	asses		
Wheel Dimension	180 x 13 x	31.75 mm		
Wheel Speed	60Hz: 3600 rpm;	50Hz: 3000 rpm		
Spindle Motor	1.5 HP	2 HP		
Cross Feed Motor	25W	40W		
Vertical Feed Motor	21.6	kg-cm		
Hydraulic Pump	1 HP	/ 6P		
Coolant Pump	1/8	HP		
N.W. / G.W.	850 kgs / 950 kgs	920 kgs / 1020 kgs		
Machine Dimension (L x W x H)	1510 x 1560	x 1900 mm		
Packing Dimension (L x W x H)	1750 x 1150 x 2100 mm	1750 x 1250 x 2100 mm		

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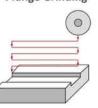


Operation Panel

Surface Grinding



Plunge Grinding



SPECIFICATION:

Max. Table Travel

Max. Distance from

Cross Rapid Feed

Cross Micro Feed

Vertical Rapid Feed

Wheel Dimension

Cross Feed Motor

Hydraulic Pump

Coolant Pump

N.W. / G.W.

Vertical Feed Motor

Wheel Speed

Spindle Motor

Spindle Center to Table

Longitudinal Table Speed

Cross Feed on Hand Wheel

Vertical Feed on Hand Wheel

Vertical Micro Feed by MPG

Machine Dimension (L x W x H)

Packing Dimension (L x W x H)

Intermittent Cross Feed

Max. Grinding Surface (W x L)

MODEL

Table Size

^{*}Specifications are subject to change without prior notice.

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- . Optimized structure The major parts of our grinders are manufactured from high quality cast iron combined with an outstanding structural design. Major parts are stress relieved to ensure maximum rigidity, stability and machining accuracy.
- Turcite-B on slideways X & Z axes slideways are coated with Turcite-B for stable movement and long term accuracy.
- Precision spindle design The spindle runs in a class P4 high precision angular contact bearing, assuring run-out accuracy in 2 μm. The cartridge-type spindle is completely sealed and lubricated for long working lifetime, providing high accuracy grinding and a long service life.
- · Auto down feed control (Option) All models are available to equip with an auto down feed control (AD5) for greatly increasing operational convenience.
- Customer can choose optional AD5 auto down feed system to become 3 axes fully automated, making operation more convenient.



STANDARD ACCESSORIES:

- 1. Grinding wheel
- 2. Wheel flange
- 3. Flange extractor
- 4. Wheel balancing arbor
- 5. Wheel balancing base
- 6. Diamond wheel dresser
- 7. Levelling screw and plates
- 8. Working lamp
- 9. Tools & tool box

OPTIONAL ACCESSORIES:

- 1. Electro/Permanent magnetic chuck
- 2. Automatic demagnetizer for electromagnetic chuck
- 3. Micro feed for cross/vertical feed
- 4. Power rapid up/down system
- 5. NC auto down feed (AD5) 6. Parallel dresser
- 7. NC auto parallel dressing & compensating system
- 8. Coolant system
- 9. Dust suction system (1/2HP)
- 10. Dust suction w/ coolant system
- 11. Magnetic separator w/ coolant system

- 12. Auto paper strip filter w/ coolant system
- 13. Auto paper strip filter & magentic separator w/ coolant system
- 14. Automatic crossing stroke adjustment by control panel
- 15. Back water splash shield for BMT 2550H/AH
- 16. Enclosed splash shield for BMT 2550H/AH
- 17. Spindle motor inverter
- 18. Tool makers vise
- 19. Auto balancing device
- 20. Digital readout unit 21. Crisscross grinding function

OPTIONAL ACCESSORIES:



1. Electro/Permanent magnetic chuck



6. Parallel dresser (manual)



2. Automatic demagnetizer for electromagnetic chuck



7. NC auto parallel dressing & compensating system



3. Micro feed for



11. Magnetic separator w/ coolant system



4. Power rapid up/down system



12. Auto paper strip filter w/ coolant system





13. Auto paper strip filter & magentic separator w/ coolant system

MODEL	BMT 1545H / BMT 1545AH	BMT 2045H / BMT 2045AH	BMT 2550H / BMT 2550AH		
Grinding Surface of Table	150 x 450 mm	200 x 450 mm	250 x 500 mm		
Max. Grinding Surface	150 x 450 mm	200 x 450 mm	250 x 500 mm		
Max. Distance from Spindle Center to Table	450	450 mm			
Total Max. Safety Table Load	144 kgs	250 kgs			
Table Speed	5~25 M/min				
Table Guideway		V & Flat Way			
Auto. Cross Feed Increment		Manual for H 0.1~12 mm for AH			
Rapid Power Cross Feed	Manual for H Manual for H 60Hz: 1100 mm/min 60Hz: 1100 mm/min for AH 50Hz: 900 mm/min for AH 50Hz: 900 mm/min for AH				
Cross Feed on Hand Wheel	5 mm/rev. ; 0.02 mm/gra.				
Rapid Power Head Elevation	60Hz: 550 mm/min; 50Hz: 450 mm/min (Power Rapid Up/Down System) (Opt.) 350 mm/min (NC Auto Down Feed System) (Opt.)				
Vertical Feed on Hand Wheel	2 mm/rev. ; 0.01 mm/gra.				
Auto Down Feed	0.001~0.999	mm/time (2 mm/rev.; 0.005 mm,	/gra.) (Opt.)		
Wheel Speed		60Hz: 3500 rpm; 50Hz: 2900 rpm			
Wheel Dimension		180 x 13 x 31.75 mm			
Spindle Motor		2 HP			
Hydraulic Pump		1 HP			
Auto Cross Feed Motor	25W f	or AH	1/5 HP		
Rapid Head Elevation Motor		1/5 HP (Opt.)			
Coolant Pump		1/8 HP (Opt.)			
N.W. / G.W.	900 kgs / 1100 kgs	950 kgs / 1150 kgs	1350 kgs / 1550 kgs		
Floor Space (L x W x H)	2100 x 1200 x 1700 mm	2100 x 1300 x 1700 mm	2250 x 1400 x 1800 mm		
Packing Dimension (Lx Wx H)	2120 x 1460 x 1950 mm	2120 x 1460 x 1950 mm	2120 x 1460 x 2000 mm		

^{*}Specifications are subject to change without prior notice.

3. Flange extractor

4. Wheel balancing arbor

STANDARD ACCESSORIES:

5. Wheel balancing base

6. Diamond wheel dresser

7. Levelling screw and plates

8. Working lamp

9. Tools & tool box

OPTIONAL ACCESSORIES:

1. Electro/Permanent magnetic chuck 2. Automatic demagnetizer for

3. Micro feed for cross/vertical feed

4. Power rapid up/down system

5. NC auto down feed (AD5)

electromagnetic chuck

6. Parallel dresser

7. NC auto parallel dressing & compensating system

8. Coolant system

9. Dust suction system (1/2HP)

10. Dust suction w/ coolant system 11. Magnetic separator w/ coolant system

12. Auto paper strip filter w/ coolant system

13. Auto paper strip filter & magentic separator w/ coolant system

14. Automatic crossing stroke adjustment by control panel

15. Back water splash shield

16. Enclosed splash shield

17. Spindle motor inverter

18. Tool makers vise

19. Auto balancing device

20. Digital readout unit

21. Crisscross grinding function

OPTIONAL ACCESSORIES:



1. Electro/Permanent magnetic chuck



2. Automatic demagnetizer for electromagnetic chuck

7. NC auto parallel dressing &

compensating system



w/ coolant system



4. Power rapid up/down system



CYLINDRICAL GRINDER

INTERNAL GRINDER

CENTERLESS GRINDER

5. NC auto down feed (AD5)



3. Micro feed for

11. Magnetic separator



12. Auto paper strip filter w/ coolant system



& magentic separator w/ coolant system

SPECIFICATION:

6. Parallel dresser

(manual type)

MODEL	BMT CS3060AH BMT DS3060AH	BMT CL3060AH BMT DL3060AH	BMT 4080AH		
Grinding Surface of Table	300 x 6	400 x 800 mm			
Max. Grinding Surface	300 x 6	400 x 800 mm			
Max. Distance from Spindle Center to Table	500 mm / 60	550 mm / 650 mm (Opt.)			
Total Max. Safety Table Load	300	400 mm			
Table Speed		5~25 M/min			
Table Guideway		V & Flat Way			
Auto. Cross Feed Increment		0.5~20 mm			
Rapid Power Cross Feed	60Hz: 1100 mm/min; 50Hz: 900 mm/min				
Cross Feed on Hand Wheel	5 mm/rev. ; 0.02 mm/gra.				
Rapid Power Head Elevation	60Hz: 550 mm/min; 50Hz: 450 mm/min (Power Rapid Up/Down System) (350 mm/min (NC Auto Down Feed System) (Opt.)				
Vertical Feed on Hand Wheel	2 mm/rev. ; 0.01 mm/gra.				
Auto Down Feed	0.001~0.999 mm/time (2 mm/rev.; 0.005 mm/gra.) (Opt.)				
Wheel Speed	60Hz: 3500 rpm 50Hz: 2900 rpm	60Hz: 1750 rpm, 50Hz: 1450 rpm			
Wheel Dimension	180 x 13 x 31.75 mm	355 x 38 x 127 mm	405 x 50 x 127 mm		
Spindle Motor	2 HP	ţ	5 HP		
Hydraulic Pump	1 H	·IP	2 HP		
Auto Cross Feed Motor		1/5 HP			
Rapid Head Elevation Motor		1/5 HP (Opt.)			
Coolant Pump		1/8 HP (Opt.)			
N.W. / G.W.	1700 kgs /	1950 kgs	3250 kgs / 3500kgs		
Floor Space (L x W x H)	2650 x 1550	x 1800 mm	3450 x 2050 x 1900 mm		
Packing Dimension (L x W x H)	2280 x 1790	x 2100 mm	2760 x 2280 x 2250 mm		

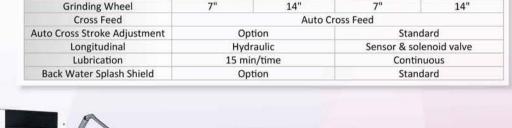
^{*}Specifications are subject to change without prior notice.

BMT CS3060AH BMT CL3060AH BMT DS3060AH BMT DL3060AH Model Grinding Wheel Cross Feed **Auto Cross Feed** Standard Auto Cross Stroke Adjustment Option

BEMATO

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Machine shown with optional accessories





SURFACE GRINDER SADDLE TYPE

▼ BMT CS3060AH / BMT DS3060AH

BMT CL3060AH / BMT DL3060AH

. Optimized structure - The major parts of our grinders are manufactured from high quality cast iron combined with an outstanding structural design. Major parts are stress relieved to ensure maximum rigidity, stability and machining accuracy.

• Turcite-B on slideways - The X & Z axes slideways are coated with Turcite-B for stable movement and long term accuracy.

• Precision spindle design - The spindle runs in a class P4 high precision angular contact bearing, assuring run-out accuracy in 2 μm. The cartridge-type spindle is completely sealed and lubricated for long working lifetime, providing high accuracy grinding and a long service life.

· Auto down feed control (option) - All models are available to equip with an auto down feed control (AD5) for greatly increasing operational convenience.

Customer can choose optional AD5 auto down feed system to become 3 axes fully automated thereby making operation more convenient.

SURFACE GRINDER COLUMN TYPE

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BMT 50100AHR / BMT 50150AHR / BMT 50200AHR BMT 60100AHR / BMT 60150AHR / BMT 60200AHR BMT 70100AHR / BMT 70150AHR / BMT 70200AHR (Longitudinal by hydraulic, Auto cross feed, Vertical axis by servo motor)

FEATURES:

1. Vertical travel driven by AC servo motor





- Optimized structure The major parts of our grinders are manufactured from high quality cast iron combined with an outstanding structural design. Major parts are stress relieved to ensure maximum rigidity, stability and machining accuracy.
- Turcite-B on slideways The X & Z axes slideways are coated with Turcite-B for stable movement and long term accuracy.
- Precision spindle design The spindle runs in a class P4 high precision angular contact bearing, assuring run-out accuracy in 2 μm. The cartridge-type spindle is completely sealed and lubricated for long working lifetime, providing high accuracy grinding and a long service life.
- · Auto down feed control (Option) All models are available to equip with an auto down feed control (AD5) for greatly increasing operational convenience.
- Customer can choose optional AD5 auto down feed system to become 3 axes fully automated thereby making operation more convenient.
- Double wall construction The structural parts, such as the column and table, etc., feature double wall construction, assuring maximum rigidity and stability especially when performing heavy grinding.



STANDARD ACCESSORIES:

- 1. Grinding wheel
- 2. Wheel flange
- 3. Flange extractor
- 4. Wheel balancing arbor
- 5. Wheel balancing base
- 6. Diamond wheel dresser 7. Levelling screw and plates
- 8. Tools & tool box

OPTIONAL ACCESSORIES:

- 1. Electro/Permanent magnetic chuck
- 2. Automatic demagnetizer for electromagnetic chuck
- 3. Power rapid up/down system
- 4. NC auto down feed (AD5)
- 5. Parallel dresser
- 6. NC auto parallel dressing & compensating system
- 7. Coolant system
- 8. Dust suction system (1/2HP)
- 9. Dust suction w/ coolant system
- 10. Magnetic separator w/ coolant system 20. Crisscross grinding function

- 11. Auto paper strip filter w/ coolant system
- 12. Auto paper strip filter & magentic separator w/ coolant system
- 13. Automatic crossing stroke adjustment by control panel
- 14. Back water splash shield
- 15. Enclosed splash shield
- 16. Spindle motor inverter
- 17. Tool makers vise
- 18. Auto balancing device
- 19. Digital readout unit

OPTIONAL ACCESSORIES:



1. Electro/Permanent magnetic chuck



6. NC auto parallel dressing & compensating system



2. Automatic demagnetizer for electromagnetic chuck



8. Dust suction w/ coolant system





11. Magnetic separator w/ coolant system



4. NC auto down feed (AD5)



5. Parallel dresser



12. Auto paper strip filter w/ coolant system



13. Auto paper strip filter & magentic separator w/ coolant system

SPECIFICATION:

MODEL	BMT 50100AHR / 50150AHR / 50200AHR			BMT 60100A	HR / 60150AHF	R / 60200AHR	BMT 70100A	HR / 70150AHI	R / 70200AHR		
Grinding Surface of Table	500 x 1000 / 1500 / 2000 mm			600 x 1000 / 1500 / 2000 mm			600 x 1000 / 1500 / 2000 mm		700 x 1000 / 1500 / 2000 mm		000 mm
Max. Grinding Surface	500 x 10	000 / 1500 / 2	000 mm	600 x 10	000 / 1500 / 2	000 mm	700 x 1000 / 1500 / 2000 mm				
Max. Distance from Spindle Center to Table		600 mm (Std.) / 800 mm (Opt.) / 1000 mm (Opt.) 20' GP Container (Std.) / 40' HQ Container (Opt.) / 20' Flat Rack Container (Opt.)									
Total Max. Safety Table Load	800 kgs	1200 kgs	1500 kgs	1000 kgs	1400 kgs	1700 kgs	1000 kgs	1400 kgs	1700 kgs		
Table Speed					5~25 M/min						
Table Guideway					V & Flat Way						
Auto. Cross Feed Increment		0.5∼20 mm									
Rapid Power Cross Feed	60Hz: 1100 mm/min; 50Hz: 900 mm/min										
Cross Feed on Hand Wheel	5 mm/rev. ; 0.02 mm/gra.										
Rapid Power Head Elevation	300 mm/min										
Vertical Feed on Handwheel	(x 1) 0.1 mm; (x 5) 0.5 mm; (x 10) 1 mm										
Auto Down Feed	0.001~0.999 mm/time (Opt.)										
Wheel Speed	60Hz: 1750 rpm, 50Hz: 1450 rpm										
Wheel Dimension				40	5 x 50 x 127 n	nm					
Spindle Motor				10	HP / 15 HP (O	pt.)					
Hydraulic Pump	3 HP	5	HP	3 HP	5	HP	3 HP	5 HP			
Auto Cross Feed Motor					1/5 HP						
Rapid Head Elevation Motor				1KV	V AC Servo M	otor					
Coolant Pump					1/4 HP (Opt.)						
N.W. / G.W.	6000 kgs / 6800 kgs	7200 kgs / 8100 kgs	8400 kgs / 9400 kgs	6300 kgs / 7100 kgs	7500 kgs / 8400 kgs	8700 kgs / 9700 kgs	6600 kgs / 7400 kgs	7800 kgs / 8700 kgs	9000 kgs / 10000 kgs		
Floor Space (L x W x H)	A STATE OF THE STA	4800 x 2300 x 2040 mm	6000 x 2300 x 2040 mm	DATE OF THE OWNER, OWNE	4800 x 2450 x 2040 mm	Market and an artist and a second	4600 x 2550		6000 x 2550 x 2040 mm		
Packing Dimension (L x W x H)		3910 x 2300 x 2280 mm	4770 x 2300 x 2280 mm		3910 x 2300 x 2280 mm	4770 x 2300 x 2280 mm		The Control of the Co			

^{*}Specifications are subject to change without prior notice.

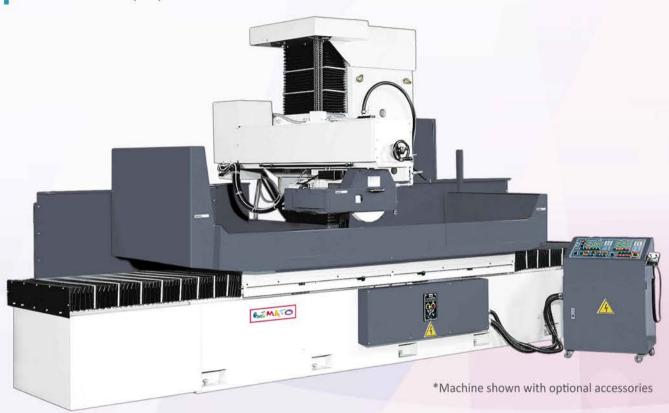
CENTERLESS GRINDER

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▼ BMT 80150AHD / BMT 80200AHD / BMT 80300AHD / BMT 80400AHD (Longitudinal by hydraulic, Auto cross feed, Auto down feed)

FEATURES:

- 1. Ball screw for vertical
- 2. Linear guide way for vertical
- 3. Manual pulse generator for vertical & AC servo motor
- 4. Longitudinal hydraulic
- 5. Stepless variable proportional valve hydraulic system
- 6. Continuous compulsory lubrication system
- 7. Cross feed by solid state relay
- 8. NC auto down feed (AD5)



- The box type column is ruggedly constructed and combined scientifically with rib reinforcement for maximum rigidity. The cantilever beam is also of a box type construction and radiation-type rib reinforced, providing structural rigidity, minimum vibration and deformation-tree performance.
- The structural parts such as base and table are of a double wall construction, combined and scientifically rib ribreinforced for the best possible rigidity and stability.
- The vertical feed axis is equipped with high precision, preload linear guideways combined with high precision ball screw transmission, providing superior grinding accuracy.
- The vertical feed is controlled by an M.P.G. handwheel instead of a conventional handwheel. Feed is driven by an AC servo motor for effortless operation and high accuracy.
- The table feed speed Is controlled by a 6-step change hydraulic system, which permits speed adjustment according to the workpiece for increased convenience of operation.
- The entire machine is lubricated by an automatic circulated lubrication system. It provides lubrication to all slideways and transmission parts, ensuring high accuracy and long service life.
- AD5 auto down feed system is standard and making operation more convenient.
- An optional vertical wheel head is available which is suitable for grinding box slideways and dovetailed slideways.

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STANDARD ACCESSORIES:

- 1. Grinding wheel
- 2. Wheel flange
- 3. Flange extractor
- 4. Wheel balancing arbor
- 5. Wheel balancing base
- 6. Diamond wheel dresser
- 7. Levelling screw and plates
- 8. NC auto down feed (AD5)
- 9. Parallel dresser (manual)
- 10. Tools & tool box

OPTIONAL ACCESSORIES:

- 1. Electro/Permanent magnetic chuck
- 2. Automatic demagnetizer for electromagnetic chuck
- 3. Power rapid up/down system
- 5. NC auto parallel dressing & compensating system
- 6. Coolant system
- 7. Dust suction system (1/2HP)
- 8. Dust suction w/ coolant system
- 9. Magnetic separator w/ coolant system
- 10. Auto paper strip filter w/ coolant system 19. Crisscross grinding function

- 11. Auto paper strip filter & magentic separator w/ coolant system
- 12. Automatic crossing stroke adjustment by control panel
- 13. Back water splash shield
- 14. Enclosed splash shield
- 15. Spindle motor inverter
- 16. Tool makers vise
- 17. Auto balancing device
- 18. Digital readout unit

STANDARD ACCESSORIES: OPTIONAL ACCESSORIES:



8. NC auto down feed (AD5)



9. Parallel dresser (manual)



1. Electro/Permanent magnetic chuck



8. Dust suction w/ coolant system



2. Automatic demagnetizer for electromagnetic chuck



9. Magnetic separator w/ coolant system



3. Power rapid

10. Auto paper strip filter w/ coolant system



5. NC auto parallel dressing & compensating system



& magentic separator w/ coolant system

SPECIFICATION:

MODEL	BMT 80150AHD	BMT 80200AHD	BMT 80300AHD	BMT 80400AHD			
Grinding Surface of Table	800 x 1500 mm	800 x 2000 mm	800 x 3000 mm	800 x 4000 mm			
Max. Grinding Surface	800 x 1500 mm	800 x 2000 mm	800 x 3000 mm	800 x 4000 mm			
Max. Distance from Spindle Center to Table	80	800 mm (Std.) / 1000 mm (Opt.)					
Total Max. Safety Table Load	2000 kgs	2650 kgs	3950 kgs	5000 kgs			
Table Speed		3~25 M/min					
Table Guideway		V & V	/ Way				
Auto. Cross Feed Increment		0.1~15 mm					
Rapid Power Cross Feed		1500 mm/min					
Cross Feed on Hand Wheel	5 mm/rev.; 0.02 mm/gra.						
Rapid Power Head Elevation	225 mm/min						
Vertical Feed on Hand Wheel							
Auto Down Feed							
Wheel Speed							
Wheel Dimension	405 x 50 x 1	27 mm (Opt.)	405 x 50 x 203 mm				
Spindle Motor		10 HP / 15	5 HP (Opt.)				
Hydraulic Pump	7.5 HP	10	HP	15 HP			
Auto Cross Feed Motor		1/5	5 HP				
Rapid Head Elevation Motor		1KW AC Se	ervo Motor				
Coolant Pump		1/2 HF	Opt.)				
N.W. / G.W.	12800 kgs / 13800kgs	14300 kgs / 15300 kgs	17300 kgs / 18800 kgs	20300 kgs / 21800 kgs			
Floor Space (L x W x H)	5160 x 2400 x 2555 mm	6260 x 2400 x 2555 mm	8460 x 2400 x 2555 mm	10660 x 2400 x 2555 mm			
Packing Dimension (L x W x H) - 40' Flat Rack Container	4390 x 2300 x 2970 mm	5460 x 2300 x 2970 mm	7500 x 2300 x 2970 mm	8500 x 2300 x 2970 mm			

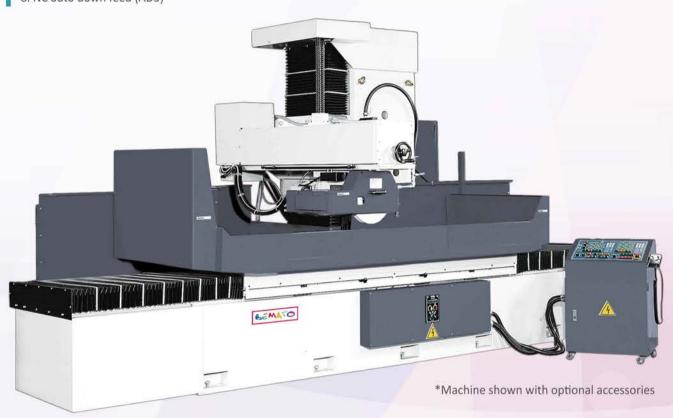
^{*}Specifications are subject to change without prior notice.

BEMATO

W BMT 100150AHD / BMT 100200AHD / BMT 100300AHD / BMT 100400AHD (Longitudinal by hydraulic, Auto cross feed, Auto down feed)

FEATURES:

- 1. Ball screw for vertical
- 2. Linear guide way for vertical
- 3. Manual pulse generator for vertical & AC servo motor
- 4. Longitudinal hydraulic
- 5. Stepless variable proportional valve hydraulic system
- 6. Continuous compulsory lubrication system
- 7. Cross feed by solid state relay
- 8. NC auto down feed (AD5)



- The box type column is ruggedly constructed and combined scientifically with rib reinforcement for maximum rigidity. The cantilever beam is also of a box type construction and radiation-type rib reinforced, providing structural rigidity, minimum vibration and deformation-tree performance.
- The structural parts such as base and table are of a double wall construction, combined and scientifically rib ribreinforced for the best possible rigidity and stability.
- The vertical feed axis is equipped with high precision, preload linear guideways combined with high precision ball screw transmission, providing superior grinding accuracy.
- The vertical feed is controlled by an M.P.G. handwheel instead of a conventional handwheel. Feed is driven by an AC servo motor for effortless operation and high accuracy.
- The table feed speed Is controlled by a 6-step change hydraulic system, which permits speed adjustment according to the workpiece for increased convenience of operation.
- The entire machine is lubricated by an automatic circulated lubrication system. It provides lubrication to all slideways and transmission parts, ensuring high accuracy and long service life.
- AD5 auto down feed system is standard and making operation more convenient.
- An optional vertical wheel head is available which is suitable for grinding box slideways and dovetailed slideways.

STANDARD ACCESSORIES:

- 1. Grinding wheel
- 2. Wheel flange
- 3. Flange extractor
- 4. Wheel balancing arbor
- 5. Wheel balancing base
- 6. Diamond wheel dresser
- 7. Levelling screw and plates 8. NC auto down feed (AD5)
- 9. Parallel dresser (manual)
- 10. Tools & tool box

OPTIONAL ACCESSORIES:

- 1. Electro/Permanent magnetic chuck
- 2. Automatic demagnetizer for electromagnetic chuck
- 3. Power rapid up/down system
- 5. NC auto parallel dressing & compensating system
- 6. Coolant system
- 7. Dust suction system (1/2HP)
- 8. Dust suction w/ coolant system
- 9. Magnetic separator w/ coolant system
- 10. Auto paper strip filter w/ coolant system 19. Crisscross grinding function

- 11. Auto paper strip filter & magentic separator w/ coolant system
- 12. Automatic crossing stroke adjustment by control panel
- 13. Back water splash shield
- 14. Enclosed splash shield
- 15. Spindle motor inverter
- 16. Tool makers vise
- 17. Auto balancing device
- 18. Digital readout unit

STANDARD ACCESSORIES: OPTIONAL ACCESSORIES:



8. NC auto down feed (AD5)



9. Parallel dresser (manual)



 Electro/Permanent magnetic chuck



8. Dust suction w/ coolant system



2. Automatic demagnetizer for electromagnetic chuck



9. Magnetic separator w/ coolant system



up/down system



5. NC auto parallel dressing & compensating system



10. Auto paper strip filter w/ coolant system



11. Auto paper strip filter & magentic separator w/ coolant system

MODEL	BMT 100150AHD	BMT 100200AHD	BMT 100300AHD	BMT 100400AHD			
Grinding Surface of Table	1000 x 1500 mm	1000 x 2000 mm	1000 x 3000 mm	1000 x 4000 mm			
Max. Grinding Surface	1000 x 1500 mm	1000 x 2000 mm	1000 x 3000 mm	1000 x 4000 mm			
Max. Distance from Spindle Center to Table	800	0 mm (Std.) / 1000 mm (O	700 mm (Std.) / 900 mm (Opt.)				
Total Max. Safety Table Load	2400 kgs	3200 kgs	4800 kgs	5500 kgs			
Table Speed		3~25 M/min					
Table Guideway		V & V	/ Way				
Auto. Cross Feed Increment		0.1~15 mm					
Rapid Power Cross Feed		1500 mm/min					
Cross Feed on Hand Wheel	5 mm/rev. ; 0.02 mm/gra.						
Rapid Power Head Elevation	225 mm/min						
Vertical Feed on Hand Wheel	(x 1) 0.1 mm; (x 5) 0.5 mm; (x 10) 1 mm						
Auto Down Feed	0.001~0.999 mm/time						
Wheel Speed							
Wheel Dimension	405 x 50 x 12	27 mm (Opt.)	405 x 50 x 203 mm				
Spindle Motor		10 HP / 19	5 HP (Opt.)				
Hydraulic Pump	7.5 HP	10	HP	15 HP			
Auto Cross Feed Motor		1/5	HP				
Rapid Head Elevation Motor		1KW AC Se	ervo Motor				
Coolant Pump		1/2 HF	(Opt.)				
N.W. / G.W.	13800 kgs / 14800 kgs	15300 kgs / 16500 kgs	18800 kgs / 19800 kgs	21300 kgs / 22800 kgs			
Floor Space (L x W x H)	5160 x 2660 x 2555 mm	6260 x 2660 x 2555 mm	8460 x 2660 x 2555 mm	10660 x 2660 x 2555 mm			
Packing Dimension (L x W x H) - 40' Flat Rack Container	4390 x 2760 x 2970 mm	5460 x 2760 x 2970 mm	7500 x 2760 x 2970 mm	8500 x 2760 x 2970 mm			

^{*}Specifications are subject to change without prior notice.

*Machine shown with optional accessories

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FEATURES:

- 1. X & Z axes driven by AC servo motor & M.P.G.
- 2. Y & Z axes liner guide way & ball screw.
- 3. X axis stepless variable proportional valve hydraulic system & Turcite-B.
- 4. NC auto down feed AD5
- 5. Electro parallel dresser
- 6. Hydraulic oil air chiller



- Rigid slant beam Our double column surface grinder is designed with slant beam construction. This provides outstanding load distribution on the entire beam surface, assuring maximum stability during heavy duty grinding.
- Heavy duty linear guide ways The beam surface Is equipped with two heavy duty linear guide ways with great span for extra smooth movement and high rigidity.
- Precision feed on vertical axis The veritical axis is equipped with high precision linear guide ways combined with high precision ball screw transmission, assuring outstanding feed accuracy and maximum stability.
- Variable table speed The variable feed speed of the table Is controlled by a proportional hydraulic valve, allowing for feed speed adjustment according to the workpiece type for increased convenience of operation.
- All major parts are manufactured from high tensile cast iron, tempered and stress relieved for best rigidity and stability.
- Structural parts are rib reinforced for outstanding rigidity.
- Slant beam construction for outstanding load distribution.
- · Short distance from the wheel spindle to beam surface ensures high stability for heavy duty grinding.
- · Linear guide ways on Y, Z-axis.
- · High precision, pre-tensioned ball screws reduce thermal strain while ensuring high positioning accuracy.
- · Automatic lubrication.

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- · Vertical and cross feed are controlled by AC servo motors and M.P.G. handwheel.
- Extra wide span between columns for outstanding rigidity.
- The machine is available to equip with a vertical wheel head. It is suitable for grinding box slideways and dovetailed slideways.
- AD5 auto down feed system is standard and making operation more convenient.

STANDARD ACCESSORIES:

- 1. Grinding wheel
- 2. Wheel flange
- 3. Flange extractor
- 4. Wheel balancing arbor
- 5. Wheel balancing base
- 6. Diamond wheel dresser
- 7. Levelling screw and plates
- 8. NC auto down feed (AD5)
- 9. Parallel dresser (manual)
- 10. Tools & tool box

OPTIONAL ACCESSORIES:

- 1. Electro/Permanent magnetic chuck
- 2. Automatic demagnetizer for electromagnetic chuck
- 3. Power rapid up/down system
- 5. NC auto parallel dressing & compensating system
- 6. Coolant system
- 7. Dust suction system (1/2HP)
- 8. Dust suction w/ coolant system
- 9. Magnetic separator w/ coolant system
- 10. Auto paper strip filter w/ coolant system

- 11. Auto paper strip filter & magentic separator w/ coolant system
- 12. Automatic crossing stroke adjustment by control panel
- 13. Back water splash shield
- 14. Enclosed splash shield
- 15. Tool makers vise
- 16. Auto balancing device
- 17. Digital readout unit
- 18. Crisscross grinding function

STANDARD ACCESSORIES: OPTIONAL ACCESSORIES:



8. NC auto down feed (AD5)



9. Parallel dresser (manual)



1. Flectro/Permanent magnetic chuck



w/ coolant system



2. Automatic demagnetizer for electromagnetic chuck



9. Magnetic separator w/ coolant system



up/down system

10. Auto paper strip filter

w/ coolant system



5. NC auto parallel dressing & compensating system



& magentic separator w/ coolant system

MODEL	BMT 120200AHD	BMT 120300AHD	BMT 120400AHD	BMT 120500AHD	BMT 120600AHD	
Grinding Surface of Table	1200 x 2000 mm	1200 x 3000 mm	1200 x 4000 mm	1200 x 5000 mm	1200 x 6000 mm	
Max. Grinding Surface	1200 x 2000 mm	1200 x 3000 mm	1200 x 4000 mm	1200 x 5000 mm	1200 x 6000 mm	
Max. Distance from Spindle Center to Table	1000 mm / 12	200 mm (Opt.)	900) mm / 1100 mm (O	pt.)	
Total Max. Safety Table Load	5200 kgs	6340 kgs	7600 kgs	8700 kgs	9880 kgs	
Table Speed			3~25 M/min			
Table Guideway			V & V Way			
Auto. Cross Feed Increment			0.1~35 mm			
Rapid Power Cross Feed			3000 mm/min			
Cross Feed on Hand Wheel		(x 1) 0.1 m	nm; (x 5) 0.5 mm; (x	: 10) 1 mm		
Rapid Power Head Elevation			300 mm/min			
Vertical Feed on Hand Wheel		(x 1) 0.1 m	nm; (x 5) 0.5 mm; (x	10) 1 mm		
Auto Down Feed		0	.001~0.999 mm/tim	ne		
Wheel Speed			1100 rpm			
Wheel Dimension			508 x 76 x 203 mm			
Spindle Motor			20 HP / 30 HP (Opt.)		
Hydraulic Pump	15	HP	20	HP	25 HP	
Auto Cross Feed Motor		1	LKW AC Servo Moto	or		
Rapid Head Elevation Motor			LKW AC Servo Moto	or		
Coolant Pump		1/2 HP (Opt.)				
N.W. / G.W.	20000 kgs / 22000 kgs	24000 kgs / 26300 kgs	28500 kgs / 31000 kgs	33000 kgs / 38000 kgs	37500 kgs / 43000 kgs	
Floor Space (L x W x H)	6600 x 3700 x 4000 mm	8800 x 3700 x 4000 mm	11000 x 3700 x 4000 mm	13200 x 3700 x 4000 mm	15400 x 3700 x 4000 mm	
Packing Size / Container	40' HQ x 1	40' HQ + 20'	40' HQ x 2	40' HQ x 2	40' HQ + 40' FR	

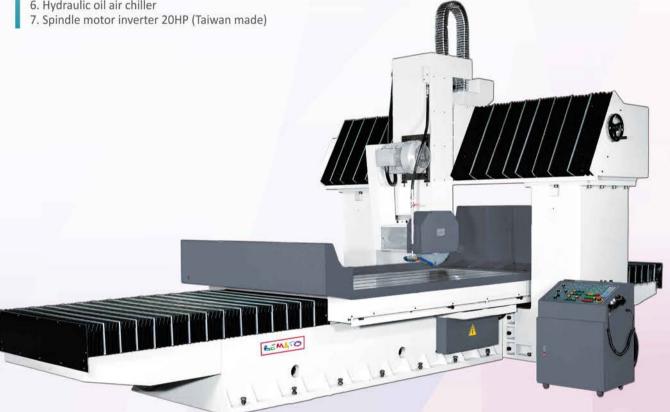
^{*}Specifications are subject to change without prior notice.

*Machine shown with optional accessories

BMT 160200AHD / BMT 160300AHD / BMT 160400AHD / BMT 160500AHD / BMT 160600AHD (Longitudinal by hydraulic, Auto cross feed, Auto down feed)

FEATURES:

- 1. X & Z axes driven by AC servo motor & M.P.G.
- 2. Y & Z axes liner guide way & ball screw.
- 3. X axis stepless variable proportional valve hydraulic system & Turcite-B.
- 4. NC auto down feed AD5
- 5. Electro parallel dresser
- 6. Hydraulic oil air chiller



- Rigid slant beam Our double column surface grinder is designed with slant beam construction. This provides outstanding load distribution on the entire beam surface, assuring maximum stability during heavy duty grinding.
- Heavy duty Linear guide ways The beam surface Is equipped with two heavy duty linear guide ways with great span for extra smooth movement and high rigidity.
- Precision feed on vertical axis The veritical axis is equipped with high precision linear guide ways combined with high precision ball screw transmission, assuring outstanding feed accuracy and maximum stability.
- Variable table speed The variable feed speed of the table Is controlled by a proportional hydraulic valve, allowing for feed speed adjustment according to the workpiece type for increased convenience of operation.
- · All major parts are manufactured from high tensile cast iron, tempered and stress relieved for best rigidity and stability.
- Structural parts are rib reinforced for outstanding rigidity.
- Slant beam construction for outstanding load distribution.
- · Short distance from the wheel spindle to beam surface ensures high stability for heavy duty grinding.
- · Linear guide ways on Y, Z-axis.
- · High precision, pre-tensioned ball screws reduce thermal strain while ensuring high positioning accuracy.
- · Automatic lubrication.
- · Vertical and cross feed are controlled by AC servo motors and M.P.G. handwheel.
- Extra wide span between columns for outstanding rigidity.
- The machine is available to equip with a vertical wheel head. It is suitable for grinding box slideways and dovetailed slideways.
- AD5 auto down feed system is standard and making operation more convenient.

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STANDARD ACCESSORIES:

- 1. Grinding wheel
- 2. Wheel flange
- 3. Flange extractor
- 4. Wheel balancing arbor
- 5. Wheel balancing base
- 6. Diamond wheel dresser
- 7. Levelling screw and plates
- 8. NC auto down feed (AD5) 9. Parallel dresser (manual)
- 10. Tools & tool box

OPTIONAL ACCESSORIES:

- 1. Electro/Permanent magnetic chuck
- 2. Automatic demagnetizer for electromagnetic chuck
- 3. Power rapid up/down system
- 5. NC auto parallel dressing & compensating system
- 6. Coolant system
- 7. Dust suction system (1/2HP)
- 8. Dust suction w/ coolant system
- 9. Magnetic separator w/ coolant system
- 10. Auto paper strip filter w/ coolant system

- 11. Auto paper strip filter & magentic separator w/ coolant system
- 12. Automatic crossing stroke adjustment by control panel
- 13. Back water splash shield
- 14. Enclosed splash shield
- 15. Tool makers vise
- 16. Auto balancing device
- 17. Digital readout unit
- 18. Crisscross grinding function

STANDARD ACCESSORIES: OPTIONAL ACCESSORIES:



8. NC auto down feed (AD5)



9. Parallel dresser (manual)



1. Electro/Permanent magnetic chuck



w/ coolant system



2. Automatic demagnetizer for electromagnetic chuck



9. Magnetic separator w/ coolant system



up/down system

10. Auto paper strip filter

w/ coolant system



5. NC auto parallel dressing & compensating system



11. Auto paper strip filter & magentic separator w/ coolant system

SPECIFICATION:

MODEL	BMT 160200AHD	BMT 160300AHD	BMT 160400AHD	BMT 160500AHD	BMT 160600AHD
Grinding Surface of Table	1600 x 2000 mm	1600 x 3000 mm	1600 x 4000 mm	1600 x 5000 mm	1600 x 6000 mm
Max. Grinding Surface	1600 x 2000 mm	1600 x 3000 mm	1600 x 4000 mm	1600 x 5000 mm	1600 x 6000 mm
Max. Distance from Spindle Center to Table	1000 mm / 12	200 mm (Opt.)	900	mm / 1100 mm (0	Opt.)
Total Max. Safety Table Load	6000 kgs	7300 kgs	9000 kgs	10700 kgs	12400 kgs
Table Speed			3~25 M/min		
Table Guideway			V & V Way		
Auto. Cross Feed Increment			0.1~35 mm		
Rapid Power Cross Feed			3000 mm/min		
Cross Feed on Hand Wheel		(x 1) 0.1 m	m; (x 5) 0.5 mm; (x	x 10) 1 mm	
Rapid Power Head Elevation			300 mm/min		
Vertical Feed on Hand Wheel		(x 1) 0.1 m	m; (x 5) 0.5 mm; (x	x 10) 1 mm	
Auto Down Feed		0.	001~0.999 mm/tin	ne	
Wheel Speed			1100 rpm		
Wheel Dimension			508 x 76 x 203 mm	ı	
Spindle Motor		2	0 HP / 30 HP (Opt	.)	
Hydraulic Pump	15	HP	20	HP	25 HP
Auto Cross Feed Motor		1	KW AC Servo Moto	or	
Rapid Head Elevation Motor		1	KW AC Servo Moto	or	
Coolant Pump			1/2 HP (Opt.)		
N.W. / G.W.	23000 kgs / 25500 kgs	28000 kgs / 30800 kgs	33000 kgs / 36000 kgs	38000 kgs / 41500 kgs	43000 kgs / 48000 kgs
Floor Space (L x W x H)	6600 x 4100 x 4000 mm	8800 x 4100 x 4000 mm	11000 x 4100 x 4000 mm	13200 x 4100 x 4000 mm	15400 x 3700 x 4000 mm
Packing Size / Container	40' HQ x 1	40' HQ + 20'	40' HQ x 2	40' HQ x 2	40' HQ + 40' FR

^{*}Specifications are subject to change without prior notice.

BEMATO

▼ BMT 2550ADP / BMT 3060ADP / BMT 4080ADP (Cross & vertical by AC servo motor, PLC controller)

FEATURES:

- 1. Cross & vertical travel is driven by AC servo Motor & M.P.G system
- 2. LCD touch screen panel (HMI Interface) and PLC controller
- 3. Auto crossing & longitudinal stroke adjustment
- 4. Crisscross grinding
- 5. Micro feed for cross feed
- 6. Auto down feed



- Optimized structure The major parts of our grinders are manufactured from high quality cast iron combined with an outstanding structural design by Finite Element Analysis (FEA). Major parts are stress relieved to ensure maximum rigidity, stability and machining accuracy.
- Turcite-B on slideways The X and Z axes slideways are coated with Turcite-B for stable movement and long term accuracy.
- Precision spindle design The spindle runs in a class P4 high precision angular contact bearing, assuring run-out accuracy in 2 µm. The cartridge-type spindle is completely sealed and lubricated for long working lifetime, providing high accuracy grinding and a long service life.
- X axis driven by stepless variable proportional valve hydraulic system Allowing for feed speed adjustment according to the workpiece type for increased convenience of operation.
- Y & Z axes driven by AC servo motor + MPG hand wheel Providing high accuracy and convenient operating.
- Semi enclosed splash shield (ride side open) More safety and cleaner.
- Cross stroke adjustment for X & Z axes Travel setting by joystick, more convenient.
- Spindle motor inverter Variable spindle speed adjustment for different material.
- Auto dressing and compensation (diamond dresser on the table) function for increasing more processing efficiency.
- Grinding mode: Surface, crisscross, plunge, and pitch (same pitch and same depth).
- Position display for Y & Z axes.
- 10" LCD touch screen panel (PLC controller) and graphical HMI interface. Easier to operate, more friendly and efficient.
- Auto balancing system (option) Providing superior grinding accuracy and finishing.
- NC auto parallel dressing and compensating device (option) (over spindle head) function for increasing more processing efficiency and saving grinding time.

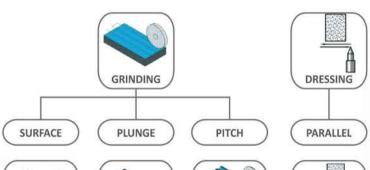
STANDARD ACCESSORIES:

- 1. Grinding wheel 2. Wheel flange
- 3. Flange extractor
- 4. Wheel balancing arbor
- 5. Wheel balancing base
- 6. Diamond wheel dresser
- 7. Levelling screw and plates
- 8. LED Working lamp
- 9. LCD touch screen panel
- 10. PLC controller
- 11. Spindle motor inverter
- 12. Semi-enclosed splash shield
- 13. Tools & tool box

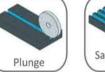
OPTIONAL ACCESSORIES:

- 1. Electro magnetic chuck
- 2. Automatic demagnetizer for electromagnetic chuck
- 3. NC auto parallel dressing & compensating system
- 4. Auto paper strip filter & magentic separator w/ coolant system
- 5. Auto balancing device

MAIN FUNCTION SELECTION:













Parallel dressing on table



FEATURES:



PLC controller



OPTIONAL ACCESSORIES:





1. Electro magnetic chuck

2. Automatic demagnetizer for electromagnetic chuck







3. NC auto parallel dressing & & magentic separator compensating system w/ coolant system

SPECIFICATION:

Crisscross

MODEL	BMT 2550ADP	BMT 3060ADP	BMT 4080ADP	
Grinding Surface of Table	250 x 500 mm	300 x 600 mm	400 x 800 mm	
Max. Distance from Spindle Center to Table	500	500 mm		
Table Speed		5~25 M/min		
Rapid Power Cross Feed		900 mm/min		
Rapid Power Hand Elevation		450 mm/min		
Auto Cross Feed Motor		750W AC Servo Motor		
Rapid Head Elevation Motor		1KW AC Servo Motor		
Cross & Vertical Feed by MPG		/rev; (x5) 0.5 mm/rev; (x1 a.; (x5) 0.005 mm/gra.; (x		
Wheel Dimension	180 x 13 x 31.75 mm	355 x 38 x 127 mm	405 x 50 x 127 mm	
Wheel Speed	2900 rpm	1450) rpm	
Spindle Motor	2 HP	5	HP	
Hydraulic Pump	1 HP	2	HP	
N.W. / G.W.	2000 kgs / 2400 kgs	2500 kgs / 3000 kgs	3700 kgs / 4500 kgs	
Machine Dimension (L x W x H)	2680 x 2350 x 2000 mm	3000 x 2350 x 2460 mm	3300 x 2650 x 2560 mm	
Packing Dimension (L x W x H)	3190 x 2220 x 2520 mm	3500 x 2260 x 2520 mm	3730 x 2280 x 2520 mm	

^{*}Specifications are subject to change without prior notice.

CENTERLESS GRINDER

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▼ BMT 50100ADP / BMT 50150ADP / BMT 50200ADP BMT 60100ADP / BMT 60150ADP / BMT 60200ADP BMT 70100ADP / BMT 70150ADP / BMT 70200ADP (Cross & vertical by AC servo motor, PLC controller)

PLC SURFACE GRINDER

COLUMN TYPE

- 1. Cross & vertical travel is driven by AC servo motor & M.P.G. system
- 2. LCD touch screen panel (HMI Interface) and PLC controller
- 3. Auto crossing & longitudinal stroke adjustment
- 4. Crisscross grinding
- 5. Micro feed for cross feed
- 6. Auto down feed



- Optimized structure The major parts of our grinders are manufactured from high quality cast iron combined with an outstanding structural design by Finite Element Analysis (FEA). Major parts are stress relieved to ensure maximum rigidity, stability and machining accuracy.
- Turcite-B on slideways The X and Z axes slideways are coated with Turcite-B for stable movement and long term accuracy.
- Precision spindle design The spindle runs in a class P4 high precision angular contact bearing, assuring run-out accuracy in 2 µm. The cartridge-type spindle is completely sealed and lubricated for long working lifetime, providing high accuracy grinding and a long service life.
- X axis driven by stepless variable proportional valve hydraulic system Allowing for feed speed adjustment according to the workpiece type for increased convenience of operation.
- Y & Z axes driven by AC servo motor + MPG hand wheel Providing high accuracy and convenient operating.
- Semi enclosed splash shield (ride side open) More safety and cleaner.
- Cross stroke adjustment for X & Z axes Travel setting by joystick, more convenient.
- Spindle motor inverter Variable spindle speed adjustment for different material.
- · Auto dressing and compensation (diamond dresser on the table) function for increasing more processing efficiency.
- Grinding mode: Surface, crisscross, plunge, and pitch (same pitch and same depth).
- Position display for Y & Z axes.
- 10" LCD touch screen panel (PLC controller) and graphical HMI interface. Easier to operate, more friendly and efficient.
- Auto balancing system (option) Providing superior grinding accuracy and finishing.
- · NC auto parallel dressing and compensating device (option) (over spindle head) function for increasing more processing efficiency and saving grinding time.

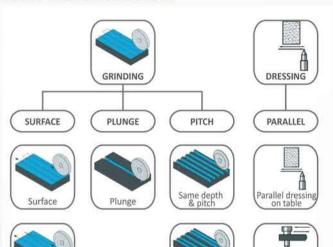
STANDARD ACCESSORIES:

- 1. Grinding wheel
- 2. Wheel flange
- 3. Flange extractor
- 4. Wheel balancing arbor
- 5. Wheel balancing base
- 6. Diamond wheel dresser
- 7. Levelling screw and plates
- 8. LED Working lamp
- 9. LCD touch screen panel
- 10. PLC controller
- 11. Spindle motor inverter
- 12. Semi-enclosed splash shield
- 13. Tools & tool box

OPTIONAL ACCESSORIES:

- 1. Electro magnetic chuck
- 2. Automatic demagnetizer for electromagnetic chuck
- 3. NC auto parallel dressing & compensating system
- 4. Auto paper strip filter & magentic separator w/ coolant system
- 5. Auto balancing device

MAIN FUNCTION SELECTION:



FEATURES:





for X & Z axes

OPTIONAL ACCESSORIES:









3. NC auto parallel dressing & compensating system

4. Auto paper strip filter & magentic separator w/ coolant system

MODEL	BMT 50100ADP BMT 60100ADP BMT 70100ADP	BMT 50150ADP BMT 60150ADP BMT 70150ADP	BMT 50200ADP BMT 60200ADP BMT 70200ADP		
	500 x 1000 mm	500 x 1500 mm	500 x 2000 mm		
Grinding Surface of Table	600 x 1000 mm	600 x 1500 mm	600 x 2000 mm		
	700 x 1000 mm	700 x 1500 mm	700 x 2000 mm		
Max. Distance from Spindle Center to Table		600 mm			
Table Speed		5~25 M/min			
Rapid Power Cross Feed		900 mm/min			
Rapid Power Hand Elevation		300 mm/min			
Auto Cross Feed Motor		1.5KW AC Servo Motor			
Rapid Head Elevation Motor		1KW AC Servo Motor			
Cross & Vertical Feed by MPG	(x1) 0.1 mm/rev; (x5) 0.5 mm/rev; (x10) 1 mm/rev (x1) 0.001 mm/gra.; (x5) 0.005 mm/gra.; (x10) 0.01 mm/gra.				
Wheel Dimension		405 x 50 x 127 mm			
Wheel Speed		1450 rpm			
Spindle Motor		10 HP			
Hydraulic Pump		5 HP			
N.W. / G.W. (C/NO x 2,	6870 kgs / 6800 + 830 kgs	7870 kgs / 8100 + 850 kgs	9070 kgs / 9400 + 900 kgs		
Machine + Semi-enclosed	7170 kgs / 7100 + 830 kgs	8170 kgs / 8400 + 850 kgs	9370 kgs / 9700 + 900 kgs		
Splash Guard)	7470 kgs / 7400 + 830 kgs	8470 kgs / 8700 + 850 kgs	9670 kgs / 10000 + 900 kgs		
	4800 x 2500 x 2040 mm	5000 x 2500 x 2040 mm	6200 x 2500 x 2040 mm		
Machine Dimension (L x W x H)	4800 x 2600 x 2040 mm	5000 x 2600 x 2040 mm	6200 x 2600 x 2040 mm		
	4800 x 2700 x 2040 mm	5000 x 2700 x 2040 mm	6200 x 2700 x 2040 mm		
Packing Dimension (L x W x H) (C/NO x 2, Machine + Semi-enclosed Splash Guard)	3650 x 2300 x 2350 mm + 2280 x 1470 x 1470 mm	3850 x 2300 x 2350 mm + 2280 x 1670 x 1470 mm	4750 x 2300 x 2350 mm + 2280 x 2170 x 1470 mm		

^{*}Specifications are subject to change without prior notice.

3. NC auto parallel dressing & compensating system

4. Auto paper strip filter & magentic separator w/ coolant system

5. Auto balancing device

▼ BMT 80150ADP / BMT 80200ADP / BMT 80300ADP / BMT 80400ADP BMT 100150ADP / BMT 100200ADP / BMT 100300ADP / BMT 100400ADP (Cross & vertical by AC servo motor, PLC controller)

FEATURES:

- 1. Cross & vertical travel is driven by AC servo motor & M.P.G. system
- 2. LCD touch screen panel (HMI Interface) and PLC controller
- 3. Auto crossing & longitudinal stroke adjustment
- 4. Crisscross grinding
- 5. Micro feed for cross feed
- 6. Auto down feed



- Optimized structure The major parts of our grinders are manufactured from high quality cast iron combined with an outstanding structural design by Finite Element Analysis (FEA). Major parts are stress relieved to ensure maximum rigidity, stability and machining accuracy.
- Turcite-B on slideways The X and Z axes slideways are coated with Turcite-B for stable movement and long term accuracy.
- Precision spindle design The spindle runs in a class P4 high precision angular contact bearing, assuring run-out accuracy in 2 µm. The cartridge-type spindle is completely sealed and lubricated for long working lifetime, providing high accuracy grinding and a long service life.
- X axis driven by stepless variable proportional valve hydraulic system Allowing for feed speed adjustment according to the workpiece type for increased convenience of operation.
- Y & Z axes driven by AC servo motor + MPG hand wheel Providing high accuracy and convenient operating.
- Semi enclosed splash shield (ride side open) More safety and cleaner.
- Cross stroke adjustment for X & Z axes Travel setting by joystick, more convenient.
- Spindle motor inverter Variable spindle speed adjustment for different material.
- Auto dressing and compensation (diamond dresser on the table) function for increasing more processing efficiency.
- Grinding mode: Surface, crisscross, plunge, and pitch (same pitch and same depth).
- Position display for Y & Z axes.
- 10" LCD touch screen panel (PLC controller) and graphical HMI interface. Easier to operate, more friendly and efficient.
- Auto balancing system (option) Providing superior grinding accuracy and finishing.
- . NC auto parallel dressing and compensating device (over spindle head) function for increasing more processing efficiency and saving grinding time.

MAIN FUNCTION SELECTION:

4. Wheel balancing arbor

5. Wheel balancing base

6. Diamond wheel dresser

7. Levelling screw and plates

1. Grinding wheel

3. Flange extractor

2. Wheel flange

STANDARD ACCESSORIES:

DRESSING PARALLEL SURFACE PLUNGE PITCH Parallel dressin on table



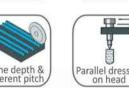
8. LED Working lamp

10. PLC controller

12. Tools & tool box

9. LCD touch screen panel

11. Spindle motor inverter



FEATURES:



PLC controller



OPTIONAL ACCESSORIES:





Electro magnetic chuck
 Automatic demagnetizer



3. NC auto parallel dressing & compensating system



4. Auto paper strip filter & magentic separator w/ coolant system

SPECIFICATION:

MODEL	BMT 80150ADP BMT 100150ADP	BMT 80200ADP BMT 100200ADP	BMT 80300ADP BMT 100300ADP	BMT 80400ADP BMT 100400ADP	
Grinding Surface of Table	800 x 1500 mm 1000 x 1500 mm	800 x 2000 mm 1000 x 2000 mm	800 x 3000 mm 1000 x 3000 mm	800 x 4000 mm 1000 x 4000 mm	
Max. Distance from Spindle Center to Table		800 mm / 1000 mm (Opt.		700 mm / 900 mm (Opt.)	
Table Speed		3~25	M/min		
Rapid Power Cross Feed		900 m	m/min		
Rapid Power Hand Elevation		225 m	m/min		
Auto Cross Feed Motor		750W AC S	ervo Motor		
Rapid Head Elevation Motor		1KW AC Se	ervo Motor		
Cross & Vertical Feed on Handwheel	(x1)	(x1) 0.1 mm/rev; (x5) 0.5 mm/rev; (x10) 1 mm/rev (x1) 0.001 mm/gra.; (x5) 0.005 mm/gra.; (x10) 0.01 mm/gra.			
Wheel Dimension		405 x 50 x 127 mm (M	ax. 405 x 75 x 127 mm)		
Wheel Speed		1450) rpm		
Spindle Motor		10 HP / 15	5 HP (Opt.)		
Hydraulic Pump	7.5 HP		10 HP		
N.W. / G.W.	12800 kgs / 13800 kgs 13800 kgs / 14800 kgs	14300 kgs / 15500 kgs 15300 kgs / 16500 kgs	17300 kgs / 17800 kgs 18800 kgs / 19800 kgs	20300 kgs / 21800 kgs 21300 kgs / 22800 kgs	
Machine Dimension (L x W x H)	5160 x 2400 x 2555 mm 5160 x 2660 x 2555 mm		8460 x 2400 x 2555 mm 8460 x 2660 x 2555 mm	10660 x 2400 x 2555 mm 10660 x 2660 x 2555 mm	
Packing Dimension (L x W x H) - C/NO1	4390 x 2300 x 2970 mm 4390 x 2760 x 2970 mm	5460 x 2300 x 2970 mm 5460 x 2760 x 2970 mm	7500 x 2300 x 2970 mm 7500 x 2760 x 2970 mm	8500 x 2300 x 2970 mm 8500 x 2760 x 2970 mm	
Packing Dimension (L x W x H) - C/NO2	1670 x 1670 x 2060 mm (N.W./G.W.: 630 kgs / 730 kgs) Shipped by 40' FR				

^{*}Specifications are subject to change without prior notice.

CYLINDRICAL GRINDER

CENTERLESS GRINDER

W BMT 2550X / BMT 3060X (Cross & vertical by AC servo motor, PLC controller)

FEATURES:

- 1. Cross & vertical travel is driven by AC servo motor & M.P.G. system
- 2. LCD touch screen panel (HMI Interface) and PLC controller
- 3. Auto crossing & longitudinal stroke adjustment
- 4. Crisscross grinding
- 6. Auto down feed



Excellent Operation

- Self-induced graphically-controlled interface with intuitionally finger-touched buttons makes the control of the machine easier and allows an operator to input parameters through screen-touched buttons easily.
- Use an imbedded PLC language for a TFT human-machine interface controller. All programs and figures are developed by ourselves to ensure the quality.
- The Multi-functional grinding and polishing dressing parameters can reduce operators' technical threshold.

Optimized Structure

- The main structure is analyzed by the finite element technique with different combination of external forces to ensure the stiffness of the machine.
- The base of the grinder is expanded for the purpose of increasing the supporting capability and stability of the machine.
- The fully-supported rail design reinforces the precision and stability of the machine.
- The CP4 high-precision spindle with pre-stressed adjustment increases the rigidity and precision of machine during grinding. **Customer Experience Design**
- · A friendly-operated interface is designed to reduce human power and increase productivity. Such a design fulfills the trend of wise-machine development but not increases too much cost.
- A special joy stick is designed to control the axial movement to facilitate the operation.
- A fool-proofing parameter controlled safe guard is designed for avoiding tools getting damaged or operators getting hurt.

- We offer customers a structural-transmitting module interface for different combination of working conditions.
- The control panel is designed with modules which can match with different types of surface grinders to make debugging and maintenance easy.

Customized Function Selection

- · Axial-controlled functions can be selected according to different grinding condition, and the program and graphs can be developed by the requests from customers.
- Safe guard can be selected by customers with standard half-covered, half-open-full-covered and completely-covered module.
- An optional grinder self-balanced device is offered to provide superior grinding accuracy and finishing.
- An optional over head auto dressing and compensation system is offered for increasing more processing efficiency.
- Many optional devices, such as self-balanced equipment, cooling system, etc. can be selected and easily installed by the customers.

BEMLTO

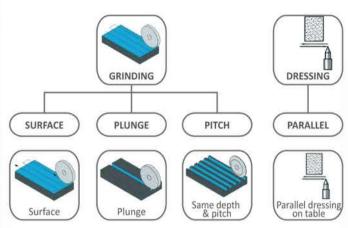
STANDARD ACCESSORIES:

- 1. Grinding wheel
- 2. Wheel flange
- 3. Flange extractor
- 4. Wheel balancing arbor
- 5. Wheel balancing base 6. Diamond wheel dresser
- 7. Levelling screw and plates
- 8. LED Working lamp
- 9. LCD touch screen panel
- 10. PLC controller
- 11. Spindle motor inverter
- 12. Semi-enclosed splash shield
- 13. Tools & tool box

OPTIONAL ACCESSORIES:

- 1. Electro/permanent magnetic chuck
- 2. Automatic demagnetizer for electromagnetic chuck
- 3. NC auto parallel dressing & compensating system
- 4. Auto paper strip filter & magentic separator w/ coolant system
- 5. Auto balancing device

MAIN FUNCTION SELECTION:









FEATURES:





Cross stroke adjustment for X & 7 axes

OPTIONAL ACCESSORIES:





1. Electro magnetic chuck 2. Automatic demagnetizer



3. NC auto parallel dressing & compensating system

4. Auto paper strip filter & magentic separator w/ coolant system

MODEL	BMT 2550X	BMT 3060X	
Grinding Surface of Table	250 x 500 mm	300 x 600 mm	
Max. Grinding Surface	255 x 510 mm	305 x 610 mm	
Max. Distance from Spindle Center to Table	500 mm	600 mm	
Rapid Power Up/down Feed	550 m	m/min	
Rapid Power Cross Feed	1100 m	nm/min	
Table Speed	3~25	M/min	
Min. Feeding Setting	0.001 mm		
Wheel Speed	60Hz: 3500 rpm 50Hz: 2900 rpm	60Hz: 1750 rpm 50Hz: 1450 rpm	
Wheel Dimension	180 x 13 x 31.75 mm	355 x 50 x 127 mm	
Spindle Motor	3 HP / 5 HP (Opt.)	7.5 HP / 10 HP (Opt.)	
Hydraulic Pump	1 HP	2 HP	
Cross Feed Motor	750W AC S	ervo Motor	
Vertical Feed Motor	750W AC S	ervo Motor	
N.W. / G.W.	2500 kgs / 2850 kgs	3000 kgs / 3500 kgs	
Machine Dimension (L x W x H)	2800 x 2500 x 2300 mm	2950 x 2600 x 2400 mm	
Packing Dimension (L x W x H)	3350 x 2130 x 2230 mm	3500 x 2300 x 2400 mm	

^{*}Specifications are subject to change without prior notice.

▼ BMT 200R / BMT 250R / BMT 300R / BMT 400R

FEATURES:

- 1. Saddle type optimized structure
- 2. Suitable for grinding spacer, ring, screw nut ...etc.
- 3. Need concentric circles surface or need better accuracy and quality for circle work piece



- Optimized structure The major parts are manufactured from high quality cast iron combined with an outstanding structural design. Major parts are stress relieved to ensure maximum rigidity, stability and machining accuracy.
- Turcite-B slideways The X, Z axes slideways are coated with Turcite-B for stable movement and long term accuracy.
- Precision spindle design The CP4 high-precision spindle with pre-stressed adjustment increases the rigidity and precision of machine during grinding.
- · High precision rotary table High precision rotary base design and cross axis uses high precision ball screw transmission system to get the best precision.
- Auto crossing stroke adjustment Auto crossing stroke adjustment of cross feed makes operation more convenient.
- Semi enclosed splash shield Semi enclosed splash shield makes operation safer and cleaner.
- Auto down feed control (option) Available to equip with an auto down feed control system (AD5) for greatly increasing operational convenience.



STANDARD ACCESSORIES:

- 1. Grinding wheel 2. Wheel flange
- 3. Flange extractor
- 4. Wheel balancing arbor
- 5. Wheel balancing base
- 6. Diamond wheel dresser 7. Levelling screw and plates
- 8. Working lamp
- 9. Parallel dressing (manual)
- 10. Semi-enclosed splash shield
- 11. Round shape permanent magnetic chuck
- 12. Automatic crossing stroke adjustment by control panel switch
- 13. Tools & tool box

OPTIONAL ACCESSORIES:

- 1. Round shape electromagnetic chuck with chuck controller
- 2. Micro feed for cross/vertical feed 9. Auto paper strip filter
- 3. Power rapid up/down system
- 4. NC auto down feed system (AD5)
- 5. Coolant system 6. Dust suction system (1/2HP)
- 7. Dust suction w/ coolant system
- 8. Magnetic separator
- w/ coolant system
- w/ coolant system
- 10. Auto paper strip filter & magentic separator
- w/ coolant system 11. Spindle motor inverter
- 12. Digital readout unit

OPTIONAL ACCESSORIES:



1. Round shape electromagnetic chuck



6. NC auto parallel dressing & compensating system



2. Micro feed for cross/vertical feed



8. Dust suction w/ coolant system



3. Power rapid up/down system



11. Magnetic separator w/ coolant system



4. NC auto down feed (AD5)



12. Auto paper strip filter w/ coolant system



5. Coolant system





13. Auto paper strip filter & magentic separator w/ coolant system

MODEL	BMT 200R	BMT 250R	BMT 300R	BMT 400R	
Table Diameter	200 mm	250 mm	300 mm	400 mm	
Max. Grinding Radius	130 mm	140 mm	190 mm	240 mm	
Max. Distance from Spindle Center to Table	400	mm	300	mm	
Rotary Table Speed		20~11	.0 rpm		
Rapid Power Cross Feed		1000 m	nm/min		
Cross Feed on Hand Wheel		5 mm/rev, 0	.02 mm/gra.		
Vertical Feed on Hand Wheel		2 mm/rev, 0	.01 mm/gra.		
Rapid Power Head Elevation		550 mm/s	min (Opt.)		
Auto Down Feed	0.001~0.9	999 mm/time; 2 mi	m/rev, 0.005 mm/	gra. (Opt.)	
Spindle Motor	2	HP	5 HP		
Cross Feed Motor	1/5 HP A	AC Motor	400W AC Servo Motor		
Spindle Motor for Rotary Table	12	0W	200W	400W	
Wheel Speed	60Hz: 3500 rpm;	; 50Hz: 2900 rpm	60Hz: 1750 rpm	; 50Hz: 1450 rpm	
Wheel Dimension	180 x 13 x 31.75 mm		355 x 38 x 127 mm		
N.W. / G.W.	1300 kgs / 1500 kgs		1600 kgs / 1850 kgs		
Machine Dimension (L x W x H)	1500 x 1650 x 1800 mm		1850 x 1900 x 2100 mm		
Packing Dimension (L x W x H)	1700 x 1640	0 x 2050 mm	2280 x 1790 x 2100 mm		

^{*}Specifications are subject to change without prior notice.



*Machine shown with optional accessories

SPECIFICATION:

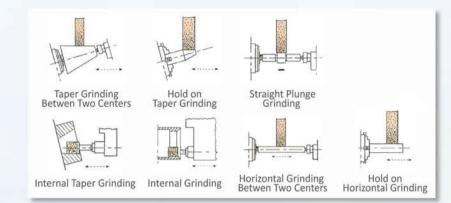
MODEL		BMT 2706H	BMT 2710H	BMT 2715H	BMT 2720H	
	Max. Swing Diameter		270	mm		
CAPACITY	Max. Grinding Surface (Dia x L)	250 x 600 mm	250 x 1000 mm	250 x 1500 mm	250 x 2000 mm	
	Weight on Center	70 kgs		130 kgs		
	Spindle Speed		Vari. Speeds, 60Hz: 11~50	00 rpm; 50Hz: 9~420 rpn	n	
WORK	Swivel Angle		120° (CCW: 9	90°; CW: 30°)		
HEAD	Center Taper		M [*]	Γ4		
	Spindle Rotation		Setting, Normal an	d Reverse Rotation		
	Horizontal Travel Speed	50~4000 mm/min		50~3000 mm/min		
TABLE	Handwheel Feed		20 mi	n/rev		
TABLE	Swivel Angle CCW / CW	11°/6°	9° / 5°	7° / 4°	5°/3°	
	Min. Travel		8 n	nm		
	Wheel Size	40	05 x 25~50 x 152.4 mm /	455 x 50 x 152.4 mm (Op	ot.)	
	Max. Peripheral		2000 i	n/min		
	Wheel Speed	2.5	teps, 60Hz: 1499 / 1600 i	pm; 50Hz: 1508 / 1603 i	1603 rpm	
WHEEL	Total Front & Rear Travel	Grinding Wheel 175 mm				
HEAD	Speedy Feed Travel		H type 40 mm / NC1 T	ype Adjustable Setting		
	Total Feed Travel		Grinding Wh	ieel 135 mm		
	Handwheel Feed		1 n	nm		
	Center Travel		30	mm		
AILSTOCK	Center Taper		M [*]	Γ4		
	Wheel Motor		5 HP / 4P; 7	.5 HP (Opt.)		
	Workhead Motor		1/2 H	P / 6P		
	Hydraulic Pump, Tank		2 HP / 4	1P, 60 L		
MOTOR	Lubrication Pump, Tank		1 HP / 4	1 HP / 4P, 30 L		
	Coolant Pump, Tank		1/4 HP /	2P, 100 L		
	Magnetic Separator		1/25 H	IP / 4P		
	Internal Grinding Motor	2 HP / 2P				
	N.W. / G.W.	2850 kgs / 3250 kgs	3770 kgs / 4200 kgs	4600 kgs / 5250 kgs	5100 kgs / 6000 kg	
OTHERS	Machine Dimension (L x W x H)	2620 x 2090 x 1760 mm	3250 x 2090 x 1760 mm	4470 x 2090 x 1760 mm	7950 x 2090 x 1760 r	
	Packing Dimension (L x W x H)	2800 x 2250 x 2100 mm	3400 x 2250 x 2100 mm	4500 x 2250 x 2100 mm	6150 x 2250 x 2100 i	

^{*}Specifications are subject to change without prior notice.

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FEATURES FOR BMT 27 / 35 series:

- The workhead can swivel 120°, variable spindle speed.
- The spindle can be fixed and runs reversibly, making it ideal for flexible grinding operations for internal and external cylindrical grinding applications.
- The grinding wheel spindle is supported by two special hydrodynamic bearings on the ends with five-point support, providing maximum rigidity and stability of spindle running. In case insufficient lubrication oil occurs, the spindle stops automatically to avoid wearing on the spindle and bearings.
- The forced lubrication system of the grinding wheel spindle features vibration absorbing function. The oil film pressure, created by the hydrodynamic bearings, automatically absorbs vibration according to the current working condition.



STANDARD ACCESSORIES FOR BMT 27 / 35 Series:

- 1. Grinding wheel
- 2. Wheel flange
- 3. Wheel dresser
- 4. 2-point steady rest
- 5. Coolant pump
- 6. Tools and tool box

OPTIONAL ACCESSORIES FOR BMT 27 / 35 Series:

- 1. Internal grinding attachment
- 2. Magnetic separator
- 3. Balancing arbor
- 4. Balancing base
- 5. 3-Jaw chuck
- 6. 3-point steady rest
- 7. High speed spindle
- 8. Center ring and jaw plate
- 9. Paper filter

SPECIFICATION:

MODEL		BMT 3506H	BMT 3510H	BMT 3515H	BMT 3520H	
	Max. Swing Diameter		350	mm		
CAPACITY	Max. Grinding Surface (Dia x L)	330 x 600 mm	330 x 1000 mm	330 x 1500 mm	330 x 2000 mm	
	Weight on Center	70 kgs	30 30 100 000 200 000 000 000 000	130 kgs	I South Miles and South American	
	Spindle Speed		Vari. Speeds, 60Hz: 11~5	00 rpm; 50Hz: 9~420 rpr	n	
WORK	Swivel Angle		120° (CCW:	90°; CW: 30°)		
HEAD	Center Taper		M	T 4		
	Spindle Rotation		Setting, Normal an	nd Reverse Rotation		
	Horizontal Travel Speed	50~4000 mm/min		50~3000 mm/min		
TABLE	Handwheel Feed		20 m	m/rev		
TABLE	Swivel Angle CCW / CW	11° / 6°	9°/5°	7° / 4°	5°/3°	
	Min. Travel		18	mm		
	Wheel Size	40	05 x 25~50 x 152.4 mm /	455 x 50 x 152.4 mm (Op	ot.)	
	Max. Peripheral	2000 m/min				
MALIETI	Wheel Speed	2 Steps, 60Hz: 1499 / 1600 rpm; 50Hz: 1508 / 1603 rpm				
WHEEL	Total Front & Rear Travel		heel 192 mm			
HEAD	Speedy Feed Travel	H type 40 mm / NC1 Type Adjustable Setting				
	Total Feed Travel		Grinding WI	heel 152 mm		
	Handwheel Feed		1 r	mm		
TAILSTOCK	Center Travel		30	mm		
AILSTOCK	Center Taper		M	T 4		
	Wheel Motor		5 HP / 4P; 7	7.5 HP (Opt.)		
	Workhead Motor		1/2 H	IP / 6P		
	Hydraulic Pump, Tank		2 HP /	4P, 60 L		
MOTOR	Lubrication Pump, Tank		1 HP /	4P, 30 L		
	Coolant Pump, Tank		2P, 100 L			
	Magnetic Separator		1/25 H	HP / 4P		
	Internal Grinding Motor		2 HF	P / 2P		
	N.W. / G.W.	2950 kgs / 3350 kgs	3870 kgs / 4300 kgs		5200 kgs / 6100 kg	
OTHERS	Machine Dimension (L x W x H)	2620 x 2090 x 1760 mm	3250 x 2090 x 1760 mm	4470 x 2090 x 1760 mm	7950 x 2090 x 1760 r	

^{*}Specifications are subject to change without prior notice.

INTERNAL GRINDER

CENTERLESS GRINDER

www.e-bemato.com

▼ BMT 650UH / BMT 650UH1 / BMT 800UH / BMT 800UH1 (Hydraulic table traverse, wheelhead rapid approach and retraction)



*Machine shown with optional accessories

SPECIFICATION:

MODEL	BMT 650UH	BMT 650UH1	BMT 800UH	BMT 800UH
Max. Swing Diameter	300 mm	350 mm	300 mm	350 mm
Distance Between Center	650 mm		800) mm
Weight on Center		120	kgs	
Wheel Size		355 x 38	x 127 mm	
Wheel Spindle Speed		1600	rpm	
Wheel Swivel Angle		0~:	30°	
Wheel Hydraulic Rapid Feed Stroke		40 ו	mm	
Wheel Total Amount of Handfeed		160	mm	
Wheel One Revolution of Handwheel		1 n	nm	
Wheel Feed per Graduation		0.002	5 mm	
Workhead Swivel Angle		0~9	90°	
Workhead Spindle Speed	Vari.	Speeds, 15~10	0 rpm; 30~20	0 rpm
Workhead Center Taper		M ⁻	Γ4	
Tailstock Center Taper		M	Г 4	
Tailstock Spindle Stroke		40 ו	mm	
Table Traverse Speed		40~4000	mm/min	
Table Swivel Angle	0~	10°	0	~9°
Table Traverse on Handhweel		14 mr	m/rev	
Grinding Wheel Motor		5 1	HP	
Workhead Spindle Motor		1/2	HP	
Hydraulic Pump		2	HP	
Coolant Pump	1/8 HP			
N.W. / G.W.	2100 kgs / 2500 kgs 2300 kgs / 2		/ 2700 kgs	
Machine Dimension (L x W x H)	3490 x 1270	0 x 1520 mm	3890 x 127	0 x 1520 mm
Packing Dimension (L x W x H)		2300 x 1650	x 1820 mm	

STANDARD ACCESSORIES FOR BMT 650UH~1500UH:

- 1. Swivel base motor-driven workhead
- 2. Lever-operated tailstock
- 3. Tailstock centers
- 4. Grinding wheel
- 5. Wheel flange & extractor
- 6. Wheel dresser holder
- 7. Coolant system
- 8. Lubricantion system
- 9. Table swivel indicator
- 10. Splash guard
- 11. Diamond dressing tool
- 12. Tools and tool box

OPTIONAL ACCESSORIES FOR BMT 650UH~1500UH:

- 1. Internal grinding attachment
- 2. 3-point steady rest
- 3. 2-point steady rest
- 4. 3-Jaw self-centering chuck
- 5. 4-Jaw independent chuck
- 6. Permanent magnetic chuck
- 7. Magnet coolant filter
- 8. Radius wheel dresser
- 9. Angular wheel dresser
- 10. Wheel balancing unit



W BMT 1000UH / BMT 1000UH1 / BMT 1200UH / BMT 1200UH1 / BMT 1500UH / BMT 1500UH1 (Hydraulic table traverse, wheelhead rapid approach and retraction)



FEATURES FOR BMT 650UH ~ BMT 1500UH:

- Heavy bed provides a rigid base to carry all units and possesses great stiffness. Sufficient slideway length supports the table in all position.
- Eight-speed type workhead with all belt drive provides full power at all speeds.
- Wheel spindle is induction hardened and precision ground.
- · Wheel spindle lubricates automatically and is electrically interlocked with motor. These ensure the durability of the grinding wheel spindle and bearings, and also the roundness, superior finishing of the workpiece.
- Hydraulic table traverse has end dwell at both ends of the stroke, and is equipped with independent, stepless speed controls, for both directions.

MODEL	BMT 1000UH	BMT 1000UH1	BMT 1200UH	BMT 1200UH1	BMT 1500UH	BMT 1500UH
Max. Swing Diameter	300 mm	400 mm	300 mm	400 mm	300 mm	400 mm
Distance Between Center	1000) mm	1200) mm	1500) mm
Weight on Center			250) kgs		
Wheel Size			406 x 38	x 127 mm		
Wheel Spindle Speed			1375	rpm		
Wheel Swivel Angle			0~	30°		
Wheel Hydraulic Rapid Feed Stroke			40	mm		
Wheel Total Amount of Handfeed			295	mm		
Wheel One Revolution of Handwheel			1 r	nm		
Wheel Feed per Graduation			0.002	.5 mm		
Workhead Swivel Angle			0~	90°		
Workhead Spindle Speed		Var	i. Speeds, 15~10	00 rpm; 30~200 i	rpm	
Workhead Center Taper			M	T 4		
Tailstock Center Taper			M	T 4		
Tailstock Spindle Stroke			40	mm		
Table Traverse Speed			40~4000	mm/min		
Table Swivel Angle	0~7.5°	0~6°	0~7.5°	0~6°	0~7.5°	0~6°
Table Traverse on Handhweel			14 m	m/rev		
Grinding Wheel Motor			7.5	HP		
Workhead Spindle Motor	1/2 HP	1 HP	1/2 HP	1 HP	1/2 HP	1 HP
Hydraulic Pump			2	HP		
Coolant Pump	1/8 HP					
N.W. / G.W.	2800 kgs / 3200 kgs 3100 kgs / 3500 kgs 3400 kgs / 3850 kgs			/ 3850 kgs		
Machine Dimension (L x W x H)	4090 x 1400	0 x 1545 mm	4290 x 1400	x 1545 mm	5990 x 1400	0 x 1545 mm
Packing Dimension (L x W x H)	3300 x 1850	0 x 1920 mm	3500 x 1850	0 x 1920 mm	4300 x 1850	0 x 1920 mm

^{*}Specifications are subject to change without prior notice.

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V BMT 1600UH / BMT 1800UH / BMT 2000UH (Hydraulic table traverse, wheelhead rapid approach and retraction)



- Heavy bed provides a rigid base to carry all units and possesses great stiffness. Sufficient slideway length supports the table in all position.
- · Can grind light to medium size straight faced rolls, machine columns, printing cylinders and car axles.
- Sloping table top allows the workhead and tailstock to be moved laterally without losing alignment.
- Hydraulic wheelhead control with guick approach and return.
- Wheelhead spindle are pressure lubricated and a pressure switch is electrically interlocked with wheel motor.
- Hydraulic table traverse have end dwell at both end of stroke and equipped with independent stepless speed control for both directions.
- Workhead spindle drive from disco adjustable speed motor.

*Specifications are subject to change without prior notice.

- Swivel table equipped with a dial indicator function with adjusting device and aids in making exact setting.
- Air bearing provides convient means of moving the workhead and tailstock.

SPECIFICATION:

MODEL	BMT 1600UH	BMT 1800UH	BMT 2000UH
Max. Swing Diameter		400 mm	
Distance Between Center	1600 mm	1800 mm	2000 mm
Weight on Center		350 kgs	
Wheel Size		508 x 38 x 203 mn	n
Wheel Spindle Speed		1100 rpm	
Wheel Hydraulic Rapid Feed Stroke		60 mm	
Wheel Total Amount of Handfeed		220 mm	
Wheel One Revolution of Handwheel		1 mm	
Wheel Feed per Graduation		0.0025 mm	
Workhead Swivel Angle		0~90°	
Workhead Spindle Speed		10~100 rpm	
Workhead Center Taper		MT 5	
Tailstock Center Taper	MT 5		
Tailstock Spindle Stroke	45 mm		
Table Traverse Speed		30~2000 mm/mir	i
Table Swivel Angle	7°	6.5°	6°
Table Traverse on Handhweel		4.5 mm/rev	
Grinding Wheel Motor		10 HP	
Workhead Spindle Motor		1 HP	
Hydraulic Pump		2 HP	
Lubrication Pump		1/4 HP	
Coolant Pump		1/8 HP	
N.W. / G.W.	3800 kgs / 4300 kgs	4200 kgs / 4700 kgs	5000 kgs / 5500 kgs
Machine Dimension (L x W x H)	5820 x 1640 X 1430 mm	6020 x 1640 x 1430 mm	6860 x 1640 x 1430 mm
Packing Dimension (L x W x H)	4500 x 2100 x 1780 mm		5140 x 2100 x 1780 mm

STANDARD ACCESSORIES:

- 1. Face and side wheel dressing attachment
- 2. Grinding wheel
- 3. Wheel flange
- 4. Wheel balancing arbor
- 5. Wheel flange removal
- 6. Cemented carbide center
- 7. Levelling screws and plates
- 8. Splash guard
- 9. Wheel dressing tool
- 10. Table swivel in
- 11. Tools and tool box

OPTIONAL ACCESSORIES:

- 1. 2-point steady rest
- 2. Grinding wheel balancing unit
- 3. Magnetic coolant filter
- 4. Radius wheel dresser
- 5. Angle wheel dresser
- 6. 3-Jaw self-centering chuck
- 7. 4-Jaw self-centering chuck

BMT 2000UH1 / BMT 2500UH / BMT 3000UH / BMT 4000UH / BMT 3000UH1 / BMT 4000UH1 (Hydraulic table traverse, wheelhead rapid approach and retraction)



*Machine shown with optional accessories

- Apply for grinding of the straight faced rolls, large machinery columns, car axles, printing cylinders, large motor amatures and other work of same nature.
- Heavy bed are subtantially ribbed provides a rigid base to carry all units and possesses great stiffness. Sufficient slideway length to support the table in all position.
- Sloping table top allows the workhead and tailstock to be moved laterally without losing alignment.
- Hydraulic wheel head control with quick approach and return.
- Wheel head spindle are pressure lubricated and a pressure switch is electrically inter locked with wheel motor.
- Hydraulic table traverse has end dwelling at both end of stroke and equipped with independent stepless speed control
- Workhead spindle drive from D.C. adjustable speed motor.
- Swivel table equipped with a dial indicator function with adjusting device and aids in making exact setting.
- Swivel table equipped with a dial indicator function with adjusting device and aids in making exact setting.
- Air bearing provides convient means of moving the workhead and tailstocks.
- Work carriage has telescoping guard to protecting sliding way from dirt.

STANDARD ACCESSORIES:

BEMATO

- 1. Face and side wheel dressing attachment
- 2. Grinding wheel
- 3. Wheel flange
- 4. Wheel balancing arbor
- 5. Wheel flange removal
- 6. Cemented carbide center 7. Levelling screws and plates
- 8. Splash guard
- 9. Wheel dressing tool
- 10. Table swivel in
- 11. Tools and tool box

OPTIONAL ACCESSORIES:

- 1. 2-point steady rest
- 2. Grinding wheel balancing unit
- 3. Magnetic coolant filter
- 4. Radius wheel dresser
- 5. 3-Jaw self-centering chuck
- 6. 4-Jaw self-centering chuck
- 7. Frequency converters for grinding wheels
- 8. Light-emitting diodes

SPECIFICATION:

MODEL	BMT 2000UH1	BMT 2500UH	BMT 3000UH	BMT 4000UH	BMT 3000UH1	BMT 4000UH1	
Max. Swing Diameter		500	mm		600	mm	
Distance Between Center	2000 mm	2500 mm	3000 mm	4000 mm	3000 mm	4000 mm	
Weight on Center							
Wheel Size			660 x 63.5	x 203 mm			
Wheel Hydraulic Rapid Feed Stroke		60 mm					
Wheel Total Amount of Handfeed			290	mm			
Wheel One Revolution of Handwheel			1 n	nm			
Wheel Feed per Graduation			0.002	5 mm			
Workhead Spindle Speed		10~100 rpm					
Workhead Center Taper		MT 5 MT 6					
Tailstock Center Taper		MT 5 MT 6					
Tailstock Spindle Stroke		55 mm					
Table Traverse Speed		30~3000 mm/min					
Table Swivel Angle			6	o°			
Table Traverse on Handhweel			4.5 m	m/rev			
Workrest Capacity Type 500 mm			80~15	52 mm			
Grinding Wheel Motor			15	HP			
Workhead Spindle Motor			31	HP			
Hydraulic Pump			31	HP			
Lubrication Pump			1/4	HP			
Coolant Pump			1/4	HP			
N.W. / G.W.	7500 kgs / 8000 kgs	8000 kgs / 8600 kgs	8500 kgs / 9200 kgs	10500 kgs / 11500 kgs	11000 kgs / 13000 kgs	13500 kgs / 15500 kgs	
Machine Dimension (L x W x H)	4870 x 1950 x 1690 mm	5780 x 1950 x 1690 mm	6870 x 1950 x 1690 mm	8870 x 1950 x 1690 mm	6870 x 1950 x 1740 mm	8870 x 1950 x 1740 mm	
Packing Dimension (Lx W x H)	5370 x 2450 x 2190 mm	6370 x 2450 x 2190 mm	7370 x 2450 x 2190 mm	9370 x 2450 x 2190 mm	7370 x 2250 x 2190 mm	9370 x 2250 x 2190 mm	

^{*}Specifications are subject to change without prior notice.

SPECIFICATION:

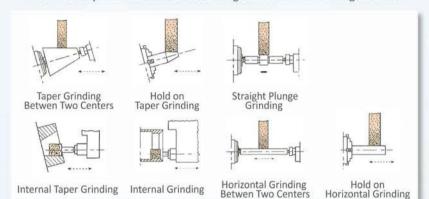
	MODEL	BMT 2706J-NC1	BMT 2710J-NC1	BMT 2715J-NC1	BMT 2720J-NC1		
	Max. Swing Diameter		270	mm			
CAPACITY	Max. Grinding Surface (Dia x L)	250 x 600 mm	250 x 1000 mm	250 x 1500 mm	250 x 2000 mm		
	Weight on Center	70 kgs 130 kgs					
	Spindle Speed	Vari. Speeds, 60Hz: 11~500 rpm; 50Hz: 9~420 rpm					
WORK	Swivel Angle	120° (CCW: 90°; CW: 30°)					
HEAD	Center Taper	MT 4					
	Spindle Rotation		Setting, Normal an	d Reverse Rotation			
	Horizontal Travel Speed	50~4000 mm/min	4000 mm/min 50~3000 mm/min				
TABLE	Handwheel Feed						
TABLE	Swivel Angle CCW / CW	11°/6°	9° / 5°	7° / 4°	5°/3°		
	Min. Travel		8 mm				
	Wheel Size	405 x 25~50 x 152.4 mm / 455 x 50 x 152.4 mm (Opt.)					
	Max. Peripheral		m/min				
WHEEL	Wheel Speed	2 Steps, 60Hz: 1499 / 1600 rpm; 50Hz: 1508 / 1603 rpm					
	Total Front & Rear Travel	Grinding Wheel 175 mm					
HEAD	Speedy Feed Travel	H type 40 mm / NC1 Type Adjustable Setting					
	Total Feed Travel	Grinding Wheel 135 mm					
	Handwheel Feed		1 r				
AILSTOCK	Center Travel		30	30 mm			
AILSTOCK	Center Taper		M	T 4			
	Wheel Motor		5 HP / 4P; 7	.5 HP (Opt.)			
	Workhead Motor		1/2 H	P / 6P			
	Hydraulic Pump, Tank		2 HP /	4P, 60 L			
MOTOR	Lubrication Pump, Tank		1 HP /	4P, 30 L			
MOTOR	Coolant Pump, Tank		1/4 HP /	2P, 100 L			
	Magnetic Separator		1/25 H	IP / 4P			
	Internal Grinding Motor		2 HP	/ 2P			
	X Servo Motor		2	HP			
	N.W. / G.W.	2850 kgs / 3250 kgs	3770 kgs / 4200 kgs	4600 kgs / 5250 kgs	5100 kgs / 6000 kg		
OTHERS	Machine Dimension (L x W x H)	2620 x 2090 x 1760 mm	3250 x 2090 x 1760 mm	4470 x 2090 x 1760 mm	7950 x 2090 x 1760 m		
	Packing Dimension (L x W x H)	2800 x 2250 x 2100 mm	3400 x 2250 x 2100 mm	4500 x 2250 x 2100 mm	6150 x 2250 x 2100 n		

^{*}Specifications are subject to change without prior notice.

35

FEATURES FOR BMT 27 / 35 series:

- The workhead can swivel 120°, variable spindle speed.
- The spindle can be fixed and runs reversibly, making it ideal for flexible grinding operations for internal and external cylindrical grinding applications.
- The grinding wheel spindle is supported by two special hydrodynamic bearings on the ends with five-point support, providing maximum rigidity and stability of spindle running. In case insufficient lubrication oil occurs, the spindle stops automatically to avoid wearing on the spindle and bearings.
- The forced lubrication system of the grinding wheel spindle features vibration absorbing function. The oil film pressure, created by the hydrodynamic bearings, automatically absorbs vibration according to the current working condition.



STANDARD ACCESSORIES FOR BMT 27 / 35 Series:

- 1. Grinding wheel
- 2. Wheel flange
- 3. Wheel dresser
- 4. 2-point steady rest
- 5. Coolant pump
- 6. Tools and tool box

OPTIONAL ACCESSORIES FOR BMT 27 / 35 Series:

- 1. Internal grinding attachment
- 2. Magnetic separator
- 3. Balancing arbor
- 4. Balancing base
- 5. 3-Jaw chuck
- 5. 3-Jaw Chuck
- 6. 3-point steady rest
- 7. High speed spindle
- 8. Center ring and jaw plate
- 9. Paper filter

SPECIFICATION:

	MODEL	BMT 3506J-NC1	BMT 3510J-NC1	BMT 3515J-NC1	BMT 3520J-NC1		
	Max. Swing Diameter		350	mm			
CAPACITY	Max. Grinding Surface (Dia x L)	330 x 600 mm	330 x 1000 mm	330 x 1500 mm	330 x 2000 mm		
	Weight on Center	70 kgs					
	Spindle Speed	Vari. Speeds, 60Hz: 11~500 rpm; 50Hz: 9~420 rpm					
WORK	Swivel Angle	120° (CCW: 90°; CW: 30°)					
HEAD	Center Taper		M	Γ4			
	Spindle Rotation		Setting, Normal an	d Reverse Rotation			
	Horizontal Travel Speed	50~4000 mm/min 50~3000 mm/min					
TABLE	Handwheel Feed		20 mi	m/rev			
TABLE	Swivel Angle CCW / CW	11°/6°	9°/5°	7° / 4°	5°/3°		
	Min. Travel	8 mm					
	Wheel Size	405 x 25~50 x 152.4 mm / 455 x 50 x 152.4 mm (Opt.)					
	Max. Peripheral	2000 m/min					
WHEE!	Wheel Speed	2 Steps, 60Hz: 1499 / 1600 rpm; 50Hz: 1508 / 1603 rpm					
	Total Front & Rear Travel		Grinding Wh	neel 192 mm			
HEAD	Speedy Feed Travel	H type 40 mm / NC1 Type Adjustable Setting					
	Total Feed Travel	Grinding Wheel 152 mm					
	Handwheel Feed		1 r	nm			
AUSTOCK	Center Travel		30	mm			
TAILSTOCK	Center Taper		M	Τ4			
	Wheel Motor		5 HP / 4P; 7	.5 HP (Opt.)			
	Workhead Motor		1/2 H	P / 6P			
	Hydraulic Pump, Tank		2 HP / 4	4P, 60 L			
MOTOR	Lubrication Pump, Tank		1 HP /	4P, 30 L			
WOTOK	Coolant Pump, Tank		1/4 HP /	2P, 100 L			
	Magnetic Separator		1/25 H	IP / 4P			
	Internal Grinding Motor		2 HP	/ 2P			
	X Servo Motor		2	HP			
	N.W. / G.W.	2950 kgs / 3350 kgs	3870 kgs / 4300 kgs	4700 kgs / 5350 kgs	5200 kgs / 6100 kgs		
OTHERS	Machine Dimension (L x W x H) Packing Dimension (L x W x H)						

^{*}Specifications are subject to change without prior notice.

CYLINDRICAL GRINDER

INTERNAL GRINDER

OTHER GRINDERS

CYLINDRICAL GRINDER

INTERNAL GRINDER

CENTERLESS GRINDER

OTHER GRINDERS

TOOL GRINDER

7. High speed spindle

8. Center ring and jaw plate

10. Mitsubishi CNC controller

11. Thickness measuring gauge

15. Automatic grinding wheel

balancing system 16. Wheel crash control device

BMT 2706J-CNC / BMT 2710J-CNC / BMT 2715J-CNC / BMT 2720J-CNC (X & Z axes servo motor, Automatic grinding cycle, Automatic Dressing Compensation, **Dressing Feeding / Automatic Coordinate Setting)**





FEATURES FOR BMT 27 / 35 series:

*Machine shown with optional acccessories

- Feeding mode Manual grinding feeding, Z-axis hydraulic movement/manual movement
- · A competitive edge for flexible grinding.
- The workhead can swivel 120°, variable spindle speed
- The spindle can be fixed and runs reversibly, making it ideal for flexible grinding operations for internal and external cylindrical grinding applications.
- The machine base is one-piece manufactured from Meehanite cast iron, tempered for maximum stability of material. Box type base construction features superior stability and rigidity.
- Hydraulic tailstock The sleeve movement is hydraulically operated for convenient workpiece loading and unloading. Workpiece clamping and unloading force can be adjusted by turning a knob. The sleeve is precision machined from hardened alloy, featuring maximum wear resistance and rigidity.

SPECIFICATION:

ax. Swing Diameter ax. Grinding Surface (Dia x L) eight on Center indle Speed ivel Angle inter Taper indle Rotation ivel Angle CCW / CW ax. Feed Rate in. Setting Unit	11°/6°		250 x 1500 mm 130 kgs 00 rpm; 50Hz: 9~420 rpm 0°; CW: 30°) 4 d Reverse Rotation 7° / 4°	250 x 2000 mm				
eight on Center indle Speed ivel Angle inter Taper indle Rotation ivel Angle CCW / CW ax. Feed Rate in. Setting Unit	70 kgs \ 11° / 6°	/ari. Speeds, 60Hz: 11~50 120° (CCW: 9 MT Setting, Normal and 9° / 5°	130 kgs 00 rpm; 50Hz: 9~420 rpm 0°; CW: 30°) 74 d Reverse Rotation 7° / 4°	1				
indle Speed ivel Angle inter Taper indle Rotation ivel Angle CCW / CW ax. Feed Rate in. Setting Unit	11°/6°	120° (CCW: 9 MT Setting, Normal and 9° / 5° 8 m/	00 rpm; 50Hz: 9~420 rpm 0°; CW: 30°) - 4 d Reverse Rotation 7° / 4°					
ivel Angle inter Taper indle Rotation ivel Angle CCW / CW ix. Feed Rate in. Setting Unit ivel Size	11°/6°	120° (CCW: 9 MT Setting, Normal and 9° / 5° 8 m/	0°; CW: 30°) 4 d Reverse Rotation 7° / 4°					
nter Taper indle Rotation ivel Angle CCW / CW ax. Feed Rate n. Setting Unit neel Size		Setting, Normal and 9° / 5° 8 m/	4 d Reverse Rotation 7° / 4°	5°/3°				
indle Rotation ivel Angle CCW / CW ax. Feed Rate n. Setting Unit neel Size		Setting, Normal and 9° / 5° 8 m/	Reverse Rotation 7° / 4°	5°/3°				
ivel Angle CCW / CW ax. Feed Rate n. Setting Unit neel Size		9° / 5° 8 m/	7° / 4°	5°/3°				
ax. Feed Rate n. Setting Unit neel Size		8 m/		5°/3°				
n. Setting Unit neel Size			min					
neel Size		0.004	8 m/min					
		0.001 mm						
ACCORDANCE OF CONTRACTOR	405 x 25~50 x 152.4 mm / 455 x 50 x 152.4 mm (Opt.)							
ax. Peripheral		n/min						
neel Speed	2 Steps, 60Hz: 1499 / 1600 rpm; 50Hz: 1508 / 1603 rpm							
ax. Feed Rate	6 m/min							
ax. Stroke	Grinding Wheel 175 mm							
ax. Setting Unit		0.001 mm						
nter Travel		30 mm						
nter Taper		MT	4					
neel Motor		5 HP / 4P; 7.	5 HP (Opt.)					
orkhead Motor		2.4	HP					
draulic Pump, Tank		1 HP / 4	P, 60 L					
orication Pump, Tank		1 HP / 4	P, 30 L					
olant Pump, Tank		1/4 HP / 2	2P, 100 L					
agnetic Separator		1/25 H	P / 4P					
ervo Motor (X)		1.6	HP					
ervo Motor (Y)	2.4	HP	3.35	HP				
W. / G.W.	4250 kgs / 4850 kgs	5370 kgs / 6000 kgs	6500 kgs / 7400 kgs	7400 kgs / 8400 kg				
ax ax ax ant ant or die e	K. Feed Rate K. Stroke K. Setting Unit Ker Travel Ker Taper Keel Motor Kehead Motor Kehead Motor Kerication Pump, Tank Kerication Pu	K. Feed Rate K. Stroke K. Setting Unit Ker Travel Ker Taper Keel Motor Kehead Kehe	A. Feed Rate A. Stroke A. Stroke A. Setting Unit A. Setting Unit B. Setting Unit C. O.001 Set Travel C. Setting Unit C. Setting Unit	6 m/min 6. Stroke 6 m/min 7. Stroke 7. Stroke 7. Setting Unit 7. Setting Unit 8. Setting Unit 8. Setting Unit 9. O.001 mm 9. Setting Unit 9. Setti				

^{*}Specifications are subject to change without prior notice.

SPECIFICATION:

CNC Control

MODEL		BMT 3506J-CNC	BMT 3510J-CNC	BMT 3515J-CNC	BMT 3520J-CNC		
	Max. Swing Diameter	350 mm					
CAPACITY	Max. Grinding Surface (Dia x L)	330 x 600 mm	330 x 1000 mm	330 x 1500 mm	330 x 2000 mm		
	Weight on Center	70 kgs					
	Spindle Speed	V	/ari. Speeds, 60Hz: 11~50	00 rpm; 50Hz: 9~420 rpm	n		
Swivel An	Swivel Angle	120° (CCW: 90°; CW: 30°)					
WORKHEAD	Center Taper		MI	Γ4			
	Spindle Rotation		Setting, Normal and	d Reverse Rotation			
	Swivel Angle CCW / CW	11°/6°	9°/5°	7° / 4°	5°/3°		
TABLE	Max. Feed Rate	"	8 m/	min min			
	Min. Setting Unit		0.001 mm				
	Wheel Size	405 x 25~50 x 152.4 mm / 455 x 50 x 152.4 mm (Opt.)					
	Max. Peripheral	2000 m/min					
WHEEL	Wheel Speed	2 Steps, 60Hz: 1499 / 1600 rpm; 50Hz: 1508 / 1603 rpm					
HEAD	Max. Feed Rate	6 m/min					
	Max. Stroke	Grinding Wheel 175 mm					
	Max. Setting Unit		0.001	mm			
TAILSTOCK	Center Travel		30 r	mm			
TAILSTOCK	Center Taper		MI	Γ4			
	Wheel Motor		5 HP / 4P; 7	.5 HP (Opt.)			
	Workhead Motor		2.4	HP			
	Hydraulic Pump, Tank		1 HP / 4	IP, 60 L			
MOTOR	Lubrication Pump, Tank		1 HP / 4	IP, 30 L			
WOTOR	Coolant Pump, Tank		1/4 HP / 1	2P, 100 L			
	Magnetic Separator		1/25 H	IP / 4P			
	X Servo Motor (X)		1.6	HP			
	X Servo Motor (Y)	2.4	HP	3.3	5 HP		
	N.W. / G.W.	4350 kgs / 4950 kgs	5470 kgs / 6100 kgs	6600 kgs / 7500 kgs	7500 kgs / 8500 kg		
OTHERS	Machine Dimension (L x W x H)	3740 x 2160 x 2310 mm	4700 x 2160 x 2310 mm	6400 x 2160 x 2310 mm	6800 x 2160 x 2310 r		
	N.W. / G.W.	4350 kgs / 4950 kgs 3740 x 2160 x 2310 mm	5470 kgs / 6100 kgs 4700 x 2160 x 2310 mm	6600 kgs / 7500 kgs 6400 x 2160 x 2310 mm	7500 6800 x		

^{*}Specifications are subject to change without prior notice.

STANDARD ACCESSORIES

- 2. Wheel flange
- 3. Wheel dresser
- 4. Multi-plunge grinding 5. Traverse grinding
- 6. Multi-plunge taper grinding

GRINDING CYCLES:

2. Plunge with oscillation

3. Angle plunge grinding

1. Plunge without oscillation

- 7. Traverse taper grinding
- 8. Shoulder plunge without oscillation

Internal Taper Grinding Internal Grinding

- 9. Shoulder traverse grinding

- 10. Shoulder plunge with oscillation

FOR BMT 27 / 35 Series:

- 1. Grinding wheel
- 4. 2-point steady rest
- 5. Coolant pump
- 6. FANUC CNC controller

Horizontal Grinding Hold on Between Two Centers Horizontal Grinding

- 7. Tools and tool box
- FOR BMT 27 / 35 Series:
 - 1. Internal grinding attachment

 - 4. Balancing base
 - 5. 3-Jaw chuck
 - 6. 3-point steady rest

 - 9. Paper filter

 - 12. Touch probe gauge
 - 13. Z axis linear scale
 - 14. Auto in-process gauge

BENCH GRINDER & BELT GRINDER

GRINDER

CYLINDRICAL

CENTERLESS GRINDER

OTHER GRINDERS

2. Magnetic separator

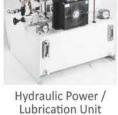
3. End face grinding attachment

5. Hydraulic rotary cylinder

7. Oil skimmer



End Face Grinding Attachment (Optional) Swiveling Spindle Head









Motor Fixing Bar



Precision Feed Positioning

NC Mitsubishi Control

Table fast approach Rough grinding Sinding grinding finished Grinding wheel moves to right for starts

SPECIFICATION:

Spindle Head Driven

by Servo Motor

	MODEL	BMT 150J-NC	BMT 3006J-NC	BMT 3012J-NC		
	Range of I.D. Grinding	6~150 mm	20~300 mm			
	Max. Grinding Depth	150 mm	300 mm			
CAPACITY	Max. Holding Length	200 mm	600 mm	1200 mm		
	Swing Over Bed	500 mm	500 mm 480			
Swing in Chung Guard		280 mm	350	mm		
WHEEL	Rapid Feed Speed		5 m/min			
FEEDING	Max. Stroke	100 mm	200	mm		
X-AXIS	Min. Setting Unit	0.001 mm				
WHEEL	Rapid Feed Speed	8 m/min				
FEEDING	Max. Stroke	450 mm	600 mm	800 mm		
Z-AXIS	Min. Setting Unit	0.001 mm				
Spindle Speed			10~1000 rpm			
WORKHEAD	Spindle Taper	A2-5	Cylindri	cal Type		
	Swivel Angle	±8°	(-3°+15° (f))	(-3°+12° (f))		
	G/W Spindle Motor	3 HP / 2P; 5 HP / 2P (Opt.)	3 HP / 2P; 7.5	HP / 2P (Opt.)		
	Spindle Head Motor	Servo 2 HP	Servo	4.7 HP		
	Z-axis Servo Motor	2 HP	2.7	HP		
MOTOR	X-axis Servo Motor	1/2 HP	1.3	HP		
MOTOR	Coolant Pump	1/4 HP / 2P				
	Hydraulic Lubrication		1/4 HP / 2P			
	Hydraulic Pump		1 HP / 4P			
	Rotary Table		<u>, </u>			
	N.W. / G.W.	2500 kgs / 2700 kgs	5000 kgs / 5500 kgs	6300 kgs / 6700 kgs		
OTHERS	Packing Dimension (L x W x H)	2900 x 1900 x 2100 mm	3900 x 2200 x 1800 mm	4400 x 2200 x 1800 mm		

^{*}Specifications are subject to change without prior notice.

▼ BMT 150J-NC BEMATO M BMT 3006J-NC / BMT 3012J-NC

> *Machine shown with optional acccessories



FEATURES:

- Self-developed conversational operational interface for maximum operational convenience, and is easy to learn and understand.
- Automatic operation and multiple settings. This allows for selecting coarse grinding, fine grinding, non-sparkle grinding and dressing.
- High precision NC control provides automatic dressing with compensation function.
- Ruggedly constructed throughout assures maximum rigidity and stability.
- Table spindle, X-axis and Z-axis are driven by servo motors.
- Intermittent lubrication on X-axis provides maximum smoothness of movement.
- End face grinding device (optional) The machine is available to equip with an end face grinding device, allowing the machine to perform internal and end face grinding at one time. This not only greatly increases machining efficiency but also achieves high perpendicularity accuracy.
- Swiveling spindle head The workhead can be swivelled allowing for grinding tapered parts.
- Motor fixing bar Just as the motor starts running, a vibration occurs. The fixing bar is used for holding the motor in place. Amicrometric adjustment knob is provided for adjusting the belt tension.
- Precise feed positioning The grinding wheel feed is driven by a high performance servo motor, combined with precision ball screw transmission, providing high positioning accuracy.
- Spindle head servo motor The spindle head is driven by a high performance servo motor, providing accurate variable speed change. The servo motor drive features no speed loss and constant torque output no matter if the spindle is running at high or low speed. It guarantees outstanding grinding surface quality, and allows spindle positioning control for convenient workpiece release.
- Automatic belt tension control The belt tension is automatically controlled by the motor weight to assure proper belt tension at all times. This ensures full power transmission from the motor. The specially designed belt tension eliminates too tight or too loose tension problems that may affect grinding quality.
- Hydraulic power / lubrication unit The hydraulic power unit consists of two gear pumps, providing hydraulic power to the chuck and wheel dressing device. It also delivers lubrication oil to base slideways. The hydraulic power unit consists of high quality parts, featuring low noise running and long service life. A fan cooling device is mounted on the hydraulic power unit, providing efficient
- Massive machine structure Optimal structural design & guarantees lifetime accuracy. To maintain the long term accuracy after years of operation, the machine structure of our internal grinding machine is carefully designed and manufactured. The machine base is manufactured from high quality cast iron (FC30), tempered and stress relieved for maximum stability of material. Great span between slideways provides firm support for wheel head assembly. Ruggedly constructed throughout for outstanding rigidity and stability. Scientific rib reinforcement on the base structure for increased machine rigidity and deformation-free performance.

BEMATO STANDARD ACCESSORIES:

- 3. Levelling plate
- 6. Tools and tool box

- 4. Hydraulic 3-jaw chuck
- 6. Oil mist lubricator for
- grinding wheel

BENIGN ENTERPRISE CO., LTD.

BENCH GRINDER & BELT GRINDER

BEMATO

2. Magnetic separator

3. End face grinding attachment

5. Hydraulic rotary cylinder

6. Oil mist lubricator for

7. Oil skimmer



4. Hydraulic 3-jaw chuck

grinding wheel





End Face Grinding Attachment

(Optional)

Spindle Head Driven by Servo Motor







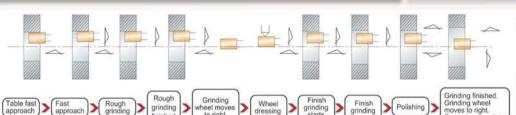
Hydraulic Power /

Lubrication Unit

Motor Fixing Bar



FUNAC Controller



SPECIFICATION:

	MODEL	BMT 150J-CNC	BMT 150J-CNC/B		
	Range of I.D. Grinding	6~150	mm		
	Max. Grinding Depth	150 n	nm		
CAPACITY	Max. Holding Length	200 n	nm		
	Swing Over Bed	500 n	nm		
	Swing in Chung Guard	280 n	nm		
WHEEL	Rapid Feed Speed	8 m/min	5 m/min		
FEEDING	Max. Stroke	100 n	nm		
X-AXIS	Min. Setting Unit	0.001	mm		
WHEEL	Rapid Feed Speed	8 m/r	min		
FEEDING	Max. Stroke	450 n	nm		
Z-AXIS	Min. Setting Unit	0.001 mm			
	Spindle Speed	10~1000 rpm			
VORKHEAD	Spindle Taper	A2-	5		
	Swivel Angle	±8°	±15°		
Table Speed		20	0~20 rpm		
ROTARY	Min. Unit	•	0.001°		
TABLE	Swivel Angle	-	±90°		
	G/W Spindle Motor	3 HP / 2P; 5 HP / 2P (Opt.)	Built-in Type 10 HP		
	Spindle Head Motor	Servo 2	2 HP		
	Z-axis Servo Motor	1.6 H	HP .		
MOTOR	X-axis Servo Motor	1 H	P		
MOTOR	Coolant Pump	1/4 HP	/ 2P		
	Hydraulic Lubrication	1/4 HP	/ 2P		
	Hydraulic Pump	1 HP /	/ 4P		
	Rotary Table	2	1.6 HP		
OTHERS	N.W. / G.W.	2500 kgs / 2700 kgs	3100 kgs / 3300 kgs		
OTHERS	Packing Dimension (L x W x H)	2900 x 1900 x	x 2100 mm		

^{*}Specifications are subject to change without prior notice.

BMT 150J-CNC BMT 150J-CNC/B (B Axis)





B Axis for BMT 150J-CNC/B

*Machine shown with optional acccessories

FEATURES:

- The structural parts are manufactured from high quality Meehanite cast iron, tempered and precision machined for maximum durability and long service life. The machine design meets human-engineering theorem, and features easy operation and
- Versattile cyclic grinding motions include fully automatic grinding, coarse grinding trimming, fing grinding and spark-free grinding.

 High accuracy, convenient operation and increased productivity. The machine is ideal for both mass production and small lot flexible grinding operations
- The spindle head employs high accuracy roller bearings, featuring high accuracy, high rigidity and quiet running. It can be swiveled +8°, making the machine ideal for grinding big taper of workpiece.
- The feed axis employs up and roller type linear guideways combined with servo motor drive. It provides rapid traverse and high positioning accuracy, and is suitable for fully automatic grinding functions, such as blind hole grinding, and face grinding and taper grinding. The control system consists of high quality electronic parts that meet European safety regulations. The electrical cabinet features
- dust-proof and water-proof construction. The control system also features self-diagnostic function with warning lamp indication.

 The CNC machine is equipped with a FANUC (Oi-Mate TC) control. It employs macro (macro programs) operation interface combined with the use of an 8.4" colorful LCD screen, greatly upgrading production and providing outstanding grinding accuracy. It can conduct fine surface grinding of interior radii and end faces, and the device monitors the wheel during operation, protecting it from overloading.
- Forced lubrication system for bed surfaces reduces friction to a minimum. The bed is designed with heat dissipation and outstanding
- End face grinding device (optional) The machine is available to equip with an end face grinding device, allowing the machine to perform internal and end face grinding at one time. This not only greatly increases machining efficiency but also achieves high perpendicularity accuracy.
- Motor fixing bar Just as the motor starts running, a vibration occurs. The fixing bar is used for holding the motor in place. Amicrometric adjustment knob is provided for adjusting the belt tension.
- Precise feed positioning The grinding wheel feed is driven by a high performance servo motor, combined with precision ball screw transmission, providing high positioning accuracy.
- Spindle head servo motor The spindle head is driven by a high performance servo motor, providing accurate variable speed change. The servo motor drive features no speed loss and constant torque output no matter if the spindle is running at high or low speed. It guarantees outstanding grinding surface quality, and allows spindle positioning control for convenient workpiece release.

 • Automatic belt tension control - The belt tension is automatically controlled by the motor weight to assure proper belt tension at all
- times. This ensures full power transmission from the motor. The specially designed belt tension eliminates too tight or too loose tension problems that may affect grinding quality.
- Hydraulic power / lubrication unit The hydraulic power unit consists of two gear pumps, providing hydraulic power to the chuck and wheel dressing device. It also delivers lubrication oil to base slideways. The hydraulic power unit consists of high quality parts, featuring low noise running and long service life. A fan cooling device is mounted on the hydraulic power unit, providing efficient
- Massive machine structure Optimal structural design & guarantees lifetime accuracy. To maintain the long term accuracy after
 years of operation, the machine structure of our internal grinding machine is carefully designed and manufactured.
 The machine base is manufactured from high quality cast iron (FC30), tempered and stress relieved for maximum stability of material. Great span between slideways provides firm support for wheel head assembly. Ruggedly constructed throughout for outstanding rigidity and stability. Scientific rib reinforcement on the base structure for increased machine rigidity and deformation-free performance.
- B axis for BMT 150J-CNC/B The high accuracy rotary table is composed by special Aluminum-Nickel, Bronze worm wheel, harding steel worm, precise bearing and etc., that maintains precise divided accuracy for long term usage. In addition, the design of double leads and bearings is suitable for heavy grinding procedure and continuous process. Occlusion area reaches 35~45%. Good abrasion resistance, no need to adjust backlash within 2 years. Keep accuracy within 0.003 degree. Repeated positioning accuracy can be reached 0.001. It satisfies fast positioning grinding requirement.

CENTERLESS GRINDER

GRINDER

CYLINDRICAL GRINDER

INTERNAL GRINDER

BMT 12BNJ BMT 12HJ (Hydrodynamic, with servo motor, variable speeds) BMT 12SJ (Hydrostatic, with servo motor, variable speeds)



FEATURES:

- Main structure of the machine They are cast of high grade FC-30 iron, melted by advanced induction furnace, then cast in resin cores. In order to ensure stability and rigidity, they are heat-treated with normalizing procedure prior to machining.
- Spindle precision ground hydrostatic bearing Substantial decrease in heat deformation associated with hydrodynamic bearing. Minimal friction, lateral displacement, and pressure. Extended tool life under heavy cut loads. The grinding wheel spindle runs on hydrostatic bearing with high pressure oil film for added precision under heavy loads. Substantially reduces wear while prolonging spindle trueness. SNCM-210H carbon steel hardened beyond HRC60, Yielding high torsion resistance.
- Spindle hydrodynamic bearing They are made of SNCM-220H Ni-Cr-Mo alloy steel and case-hardened, carbonize, then computerized sub-zero degree treated, to surface hardness over HRC62 at 1.0mm depth. Core hardness is kept at about HRC25-30 to ensure consistency of high precision grinding operation. Spindle withstand high torsion and have a long and lasting life. They are made of KJ-4 alloy bushing metal with a three point hydraulic cycle system. The semi-hydraulic float spindle is protected by an oil membrane which results in minimal contact friction. This device is specially designed for high speed and heavy load operation.
- Regulating wheel drive A Japanese servo motor provides control of speeds from 10 to 250 RPM., and is used for the regulating wheel which can be adjusted to ideal linear speeds. When the diameter of the regulating wheel changes the same linear speed can still be maintained so as grind the best quality products. The motor is driven by a timing-belt to reduce vibration and noise. Since the motor housing and spindle housing are joined together as an integrated body, when the regulating wheel tilts the motor also follows. This completely overcomes problems caused by unparallelism and torsion of belt pulleys and the belts.
- Spindle oil circulation hydrodyanmic (BMT 12HJ) There is a variable vane type oil pump for the hydraulic dressing and enforced spindle oil circulation. The oil tank is located outside of the machine for easy maintenance. Two layers of filter plus a pressure regulator ensure the cleanliness of spindle oil and the consistency of oil film thickness, thus extending the service life of the wheel spindle and the steadiness of accuracy.
- Spindle oil circulation hydrostatic (BMT 125J) Hydraulic pump for grinding wheel head and spindle motor driver with sensing function. When press wheel start button, before oil reach alloy bearing will through pressure detect switch, if pressure is not enough, it cannot push the switch, the spindle will not start. Therefore, when pressure is not enough or oil pipe blocked, pressure switch will stop the wheel spindle automatically. It will protect the wheel spindle and alloy bearing.
- Adjusting valves Grinding wheel spindle with high pressure hydrostatic device, apply a regulator on reentrance for adjusting high pressure oil to support radial center. The setting work pressure is 20 kg/cm².
- Slide device The lower slide consists of two internally mounted V-shaped slides and cuneiform protector to ensure smooth movement. stable operation and prevent the entering of debris or liquid from the working environment. The swivel slides on a dovetail flute and swivels ±5 degrees. There is a fine tuning hand wheel for precise adjustment. The accuracy per calibration is 0.001mm in diameter for high precision and easy operation.
- . Wheel dressing device The device is made of FC-30 cast iron and normalized then precisely ground. It is driven by a hydraulic system with a step-less speed regulator for easy and steady dressing. There is a safety handle for emergency purposes. In order to upgrade the straightness and the surface finish on through-feed grinding of long work pieces, please adjust the angle of the dressing device (swivels ±5 degrees). The regulating wheel should be adjusted to resemble a concave barrel to increase contact length while grinding.

STANDARD ACCESSORIES:

- 1. Grinding wheel
- 2. Wheel flange
- 3. Thrufeed standard workrest & blade
- 4. Infeed standard workrest & blade
- 5. Work lamp
- 6. Diamond tool
- 7. Thrufeed safety device
- 8. Flange extractor
- 9. Levelling screw & plate
- 10. Thrufeed process gauge
- 11. Coolant pump
- 12. Hydraulic pump
- 13. Tools and tool box

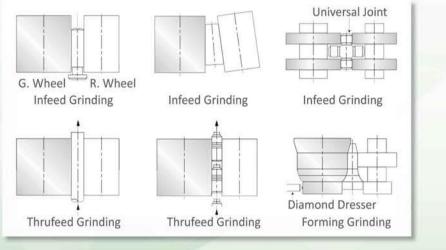
OPTIONAL ACCESSORIES:

- 1. Paper filter
- 2. Magnetic separator
- 3. Hydrocyclone coolant filtering unit
- 4. Work ejector device
- 5. Forming dressing device
- 6. Long V-shaped support
- 7. Manual parts feeder for infeed grinding
- 8. Automatic receiver for thrufeed grinding 17. Oil cooler
- 9. Automatic thrufeed device
- 10. Vibratory parts feeder & straight line feeder
- 11. Auto thrufeed taper grinding device

- 13. Wheel balancing arbor
- 15. Off-line gauging, non-contace O.D. measuring system
- 16. Grinding wheel automatic balancing system

BEMATO

- dressing attachment
- 20. Grinding balancer for wheels



SPECIFICATION:

MODEL	BMT 12BNJ	BMT 12HJ / BMT 12SJ	
Standard Work Rest Diameter	1~25 mm		
Special Work Rest Diameter	25~40 mm		
Grinding Wheel Size	305 x 150 x 120 mm		
Regulating Wheel Size	205 x 15	50 x 90 mm	
Grinding Wheel Speed	1900 rpm		
Regulating Wheel Speed	7 Steps, 20~337 rpm	Vari. Speeds, 10~300 rpm	
Grinding Wheel Motor	7.5 HP		
Regulating Wheel Motor	1 HP	2 HP Servo Motor	
Hydraulic Pump	1 HP		
Coolant Pump	1/8 HP		
Regulating Wheel Feed on Handwheel	4 mm/rev,	0.02 mm/gra.	
Table Feed on Handwheel	7 mm/rev,	0.05 mm/gra.	
Table Micro Feed on Handwheel	0.2 mm/rev,	0.001 mm/gra.	
Dressing Handwheel	1.25 mm/rev	v, 0.01 mm/gra.	
Regulating Wheel Tilte Angle	(+5	°~-3°)	
Regulating Wheel Swivel Angle		±5°	
N.W. / G.W.	1600 kgs / 1750 kgs		
Machine Dimension (L x W x H)	1800 x 140	00 x 1400 mm	
Packing Dimension (L x W x H)	2300 x 110	00 x 1800 mm	

^{*}Specifications are subject to change without prior notice.

CYLINDRICAL GRINDER

BMT 18J / BMT 18AJ / BMT 18BJ BMT 18HJ / BMT 18AHJ / BMT 18BHJ (Hydrodynamic, with servo motor, variable speeds) BMT 18SJ / BMT 18ASJ / BMT 18BSJ (Hydrostatic, with servo motor, variable speeds)



FEATURES:

- Main structure of the machine They are cast of high grade FC-30 iron, melted by advanced induction furnace, then cast in resin cores. In order to ensure stability and rigidity, they are heat-treated with normalizing procedure prior to machining.
- Spindle precision ground hydrostatic bearing Substantial decrease in heat deformation associated with hydrodynamic bearing. Minimal friction, lateral displacement, and pressure. Extended tool life under heavy cut loads. The grinding wheel spindle runs on hydrostatic bearing with high pressure oil film for added precision under heavy loads. Substantially reduces wear while prolonging spindle trueness. SNCM-210H carbon steel hardened beyond HRC60, Yielding high torsion resistance.
- Spindle hydrodynamic bearing They are made of SNCM-220H Ni-Cr-Mo alloy steel and case-hardened, carbonize, then computerized sub-zero degree treated, to surface hardness over HRC62 at 1.0mm depth. Core hardness is kept at about HRC25-30 to ensure consistency of high precision grinding operation. Spindle withstand high torsion and have a long and lasting life. They are made of KJ-4 alloy bushing metal with a three point hydraulic cycle system. The semi-hydraulic float spindle is protected by an oil membrane which results in minimal contact friction. This device is specially designed for high speed and heavy load operation.
- · Regulating wheel drive A Japanese servo motor provides control of speeds from 10 to 250 RPM., and is used for the regulating wheel which can be adjusted to ideal linear speeds. When the diameter of the regulating wheel changes the same linear speed can still be maintained so as grind the best quality products. The motor is driven by a timing-belt to reduce vibration and noise. Since the motor housing and spindle housing are joined together as an integrated body, when the regulating wheel tilts the motor also follows. This completely overcomes problems caused by unparallelism and torsion of belt pulleys and the belts.
- Spindle oil circulation hydrodyanmic (BMT 18HJ / BMT 18AHJ / BMT 18BHJ) There is a variable vane type oil pump for the hydraulic dressing and enforced spindle oil circulation. The oil tank is located outside of the machine for easy maintenance. Two layers of filter plus a pressure regulator ensure the cleanliness of spindle oil and the consistency of oil film thickness, thus extending the service life of the wheel spindle and the steadiness of accuracy.
- Spindle oil circulation hydrostatic (BMT 18SJ / BMT 18ASJ / BMT 18BSJ) Hydraulic pump for grinding wheel head and spindle motor driver with sensing function. When press wheel start button, before oil reach alloy bearing will through pressure detect switch, if pressure is not enough, it cannot push the switch, the spindle will not start. Therefore, when pressure is not enough or oil pipe blocked, pressure switch will stop the wheel spindle automatically. It will protect the wheel spindle and alloy bearing.
- Adjusting valves Grinding wheel spindle with high pressure hydrostatic device, apply a regulator on reentrance for adjusting high pressure oil to support radial center. The setting work pressure is 20 kg/cm².
- Slide device The lower slide consists of two internally mounted V-shaped slides and cuneiform protector to ensure smooth movement, stable operation and prevent the entering of debris or liquid from the working environment. The swivel slides on a dovetail flute and swivels ±5 degrees. There is a fine tuning hand wheel for precise adjustment. The accuracy per calibration is 0.001mm in diameter for high precision and easy operation.
- Wheel dressing device The device is made of FC-30 cast iron and normalized then precisely ground. It is driven by a hydraulic system with a step-less speed regulator for easy and steady dressing. There is a safety handle for emergency purposes. In order to upgrade the straightness and the surface finish on through-feed grinding of long work pieces, please adjust the angle of the dressing device (swivels ±5 degrees). The regulating wheel should be adjusted to resemble a concave barrel to increase contact length while grinding.

STANDARD ACCESSORIES:

- 1. Grinding wheel
- 2. Wheel flange
- 3. Thrufeed standard workrest & blade 4. Infeed standard workrest & blade
- 5. Work Jamp
- 6. Diamond tool
- 7. Thrufeed safety device
- 8. Flange extractor
- 9. Levelling screw & plate
- 10. Thrufeed process gauge
- 11. Coolant pump
- 12. Hydraulic pump
- 13. Tools and tool box

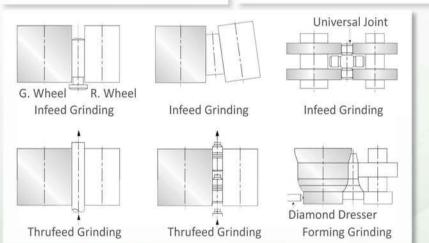
OPTIONAL ACCESSORIES:

- 1. Paper filter
- 2. Magnetic separator
- 3. Hydrocyclone coolant filtering unit
- 4. Work ejector device
- 5. Forming dressing device
- 6. Long V-shaped support
- 7. Manual parts feeder for infeed grinding 8. Automatic receiver for thrufeed grinding 17. Oil cooler
- 9. Automatic thrufeed device
- 10. Vibratory parts feeder & straight line
- 11. Auto thrufeed taper grinding device

- 12. Auto infeed forming grinding
- 13. Wheel balancing arbor
- 14. Wheel balancing base

BEMATO

- 15. Off-line gauging, non-contace O.D. measuring system
- 16. Grinding wheel automatic balancing system
- 18. Rotary type grinding wheel
- dressing attachment
- 19. Jib crane & hook for wheel
- 20. Grinding balancer for wheels 21. Oil mist / vapour receiver



GRINDING ACCURACY:

- Workpiece (Dia. x L): 2 x 20 mm
- Metal: SUJ-2
- Hardness: HRC-62
- Grinding wheel: WA 1000#
- Cut-off = 0.25 mm
- Taversing Length = 1.0 mm
- Mag = 10000
- Ra = 0.02 μm
- RMax = 0.28 μm
- Rz = 0.24 μm
- RMS = 0.02 μm
- Rt = 0.22 μm
- Rtm = 0.20 µm

SPECIFICATION:

MODEL	BMT 18J	BMT 18HJ BMT 18SJ	BMT 18AJ	BMT 18AHJ BMT 18ASJ	BMT 18BJ	BMT 18BHJ BMT 18BSJ
Standard Work Rest Diameter			1~50	1~50 mm		
Special Work Rest Diameter		40~10		00 mm		
Grinding Wheel Size	455 x 205 >	455 x 205 x 228.6 mm 455 x 255 x 2		228.6 mm	455 x 305	228.6 mm
Regulating Wheel Size	255 x 205 x	(111.2 mm	255 x 255 x	k 111.2 mm	255 x 305 x	x 111.2 mm
Grinding Wheel Speed			1500) rpm		
Regulating Wheel Speed	10 Steps, 13~316 rpm	Vari. Speeds, 10~250 rpm		Vari. Speeds, 10~250 rpm		Vari. Speeds 10~250 rpm
Grinding Wheel Motor		15 HP		20 HP		
Regulating Wheel Motor	2 HP	4 HP Servo Motor	2 HP	4 HP Servo Motor	3 HP	5 HP Servo Motor
Hydraulic Pump	1 HP					
Coolant Pump		1/4 HP			1/2 HP	
Regulating Wheel Feed on Handwheel			3.5 mm/rev,	0.05 mm/gra.		
Regulating Micro Feed on Handwheel			0.1 mm/rev, (0.001 mm/gra		
Table Feed on Handwheel			9 mm/rev, 0	0.05 mm/gra.		
Table Micro Feed on Handwheel			0.2 mm/rev, (0.001 mm/gra		
Dressing Handwheel			2 mm/rev, 0	0.01 mm/gra.		
Regulating Wheel Tilt Angle			(+5°	~-3°)		
Regulating Wheel Swivel Angle			±	5°		
N.W. / G.W.	2800 kgs	/ 3100 kgs	2900 kgs	/ 3200 kgs	3000 kgs	/ 3300 kgs
Machine Dimension (L x W x H)			2200 x 1300	x 1550 mm		
Packing Dimension (L x W x H)			3200 x 2200	x 1900 mm		

^{*}Specifications are subject to change without prior notice.

BMT 20SJ

*Machine shown with

optional acccessories

STANDARD ACCESSORIES:

5. Work lamp

6. Diamond tool

7. Thrufeed safety device

8. Flange extractor

9. Levelling screw & plate

10. Thrufeed process gauge

11. Coolant pump

12. Hydraulic pump

13. Tools and tool box

OPTIONAL ACCESSORIES:

1. Paper filter

2. Magnetic separator

3. Hydrocyclone coolant filtering unit

4. Work ejector device

5. Forming dressing device

6. Long V-shaped support

7. Manual parts feeder for infeed grinding

8. Automatic receiver for thrufeed grinding 17. Oil cooler

9. Automatic thrufeed device

10. Vibratory parts feeder & straight line feeder

11. Auto thrufeed taper grinding device

12. Auto infeed forming grinding

13. Wheel balancing arbor

14. Wheel balancing base

15. Off-line gauging, non-contace O.D. measuring system

16. Grinding wheel automatic balancing system

BEMATO

18. Rotary type grinding wheel dressing attachment

19. Jib crane & hook for wheel

20. Grinding balancer for wheels

21. Oil mist / vapour receiver

Universal Joint G. Wheel R. Wheel Infeed Grinding Infeed Grinding Infeed Grinding Diamond Dresser Thrufeed Grinding Thrufeed Grinding Forming Grinding

BEMATO

BMT 20SJ (Hydrostatic, with servo motor, variable speeds)

FEATURES:

- . Main structure of the machine They are cast of high grade FC-30 iron, melted by advanced induction furnace, then cast in resin cores. In order to ensure stability and rigidity, they are heat-treated with normalizing procedure prior to machining.
- Spindle precision ground hydrostatic bearing Substantial decrease in heat deformation associated with hydrodynamic bearing. Minimal friction, lateral displacement, and pressure. Extended tool life under heavy cut loads. The grinding wheel spindle runs on hydrostatic bearing with high pressure oil film for added precision under heavy loads. Substantially reduces wear while prolonging spindle trueness. SNCM-210H carbon steel hardened beyond HRC60, Yielding high torsion resistance.
- Spindle hydrodynamic bearing They are made of SNCM-220H Ni-Cr-Mo alloy steel and case-hardened, carbonize, then computerized sub-zero degree treated, to surface hardness over HRC62 at 1.0mm depth. Core hardness is kept at about HRC25-30 to ensure consistency of high precision grinding operation. Spindle withstand high torsion and have a long and lasting life. They are made of KJ-4 alloy bushing metal with a three point hydraulic cycle system. The semi-hydraulic float spindle is protected by an oil membrane which results in minimal contact friction. This device is specially designed for high speed and heavy load operation.
- Regulating wheel drive A Japanese servo motor provides control of speeds from 10 to 250 RPM., and is used for the regulating wheel which can be adjusted to ideal linear speeds. When the diameter of the regulating wheel changes the same linear speed can still be maintained so as grind the best quality products. The motor is driven by a timing-belt to reduce vibration and noise. Since the motor housing and spindle housing are joined together as an integrated body, when the regulating wheel tilts the motor also follows. This completely overcomes problems caused by unparallelism and torsion of belt pulleys and the belts.
- Spindle oil circulation hydrodyanmic (BMT 20HJ) There is a variable vane type oil pump for the hydraulic dressing and enforced spindle oil circulation. The oil tank is located outside of the machine for easy maintenance. Two layers of filter plus a pressure regulator ensure the cleanliness of spindle oil and the consistency of oil film thickness, thus extending the service life of the wheel spindle and the steadiness of accuracy.
- Spindle oil circulation hydrostatic (BMT 20SJ) Hydraulic pump for grinding wheel head and spindle motor driver with sensing function. When press wheel start button, before oil reach alloy bearing will through pressure detect switch, if pressure is not enough, it cannot push the switch, the spindle will not start. Therefore, when pressure is not enough or oil pipe blocked, pressure switch will stop the wheel spindle automatically. It will protect the wheel spindle and alloy bearing.
- Adjusting valves Grinding wheel spindle with high pressure hydrostatic device, apply a regulator on reentrance for adjusting high pressure oil to support radial center. The setting work pressure is 20 kg/cm².
- Slide device The lower slide consists of two internally mounted V-shaped slides and cuneiform protector to ensure smooth movement, stable operation and prevent the entering of debris or liquid from the working environment. The swivel slides on a dovetail flute and swivels ±5 degrees. There is a fine tuning hand wheel for precise adjustment. The accuracy per calibration is 0.001mm in diameter for high precision and easy operation.
- . Wheel dressing device The device is made of FC-30 cast iron and normalized then precisely ground. It is driven by a hydraulic system with a step-less speed regulator for easy and steady dressing. There is a safety handle for emergency purposes. In order to upgrade the straightness and the surface finish on through-feed grinding of long work pieces, please adjust the angle of the dressing device (swivels ±5 degrees). The regulating wheel should be adjusted to resemble a concave barrel to increase contact length while grinding.

SPECIFICATION:

MODEL	BMT 20J	BMT 20HJ / BMT 20SJ
Standard Work Rest Diameter	1~5	0 mm
Special Work Rest Diameter	40~100 mm	
Grinding Wheel Size	510 x 205	5 x 254 mm
Grinding Wheel Speed	1350	0 rpm
Grinding Wheel Motor	20) HP
Regulating Wheel Size	305 x 205 x 127 mm	
Regulating Wheel Speed	10 Steps, 13~316 rpm	Vari. Speeds, 10~250 rpm
Regulating Wheel Motor	3 HP	4 HP Servo Motor
Regulating Wheel Feed on Handwheel	3.5 mm/rev, 0.05 mm/gra.	
Regulating Micro Feed on Handwheel	0.1 mm/rev, 0.001 mm/gra.	
Table Feed on Handwheel	9 mm/rev, 0.05 mm/gra.	
Table Micro Feed on Handwheel	0.2 mm/rev, 0.001 mm/gra.	
Dressing Handwheel	2 mm/rev, 0	0.01 mm/gra.
Regulating Wheel Tilt Angle	(+5°	°~-3°)
Regulating Wheel Swivel Angle	<u> </u>	:5°
Hydraulic Pump	1	HP
Coolant Pump	1/2	2 HP
N.W. / G.W.	3200 kgs	/ 3500 kgs
Machine Dimension (L x W x H)	2400 x 130	0 x 1550 mm
Packing Dimension (L x W x H)	3200 x 220	0 x 1900 mm

^{*}Specifications are subject to change without prior

CYLINDRICAL GRINDER

BMT 2408HJ / BMT 2410HJ / BMT 2412HJ (Hydrodynamic, with servo motor, variable speeds)



FEATURES:

- Main structure of the machine They are cast of high grade FC-30 iron, melted by advanced induction furnace, then cast in resin cores. In order to ensure stability and rigidity, they are heat-treated with normalizing procedure prior to machining,
- Spindle precision ground hydrostatic bearing Substantial decrease in heat deformation associated with hydrodynamic bearing. Minimal friction, lateral displacement, and pressure. Extended tool life under heavy cut loads. The grinding wheel spindle runs on hydrostatic bearing with high pressure oil film for added precision under heavy loads. Substantially reduces wear while prolonging spindle trueness. SNCM-210H carbon steel hardened beyond HRC60, Yielding high torsion resistance.
- Spindle hydrodynamic bearing They are made of SNCM-220H Ni-Cr-Mo alloy steel and case-hardened, carbonize, then computerized sub-zero degree treated, to surface hardness over HRC62 at 1.0mm depth. Core hardness is kept at about HRC25-30 to ensure consistency of high precision grinding operation. Spindle withstand high torsion and have a long and lasting life. They are made of KJ-4 alloy bushing metal with a three point hydraulic cycle system. The semi-hydraulic float spindle is protected by an oil membrane which results in minimal contact friction. This device is specially designed for high speed and heavy load operation.
- Regulating wheel drive A Japanese servo motor provides control of speeds from 10 to 250 RPM., and is used for the regulating wheel which can be adjusted to ideal linear speeds. When the diameter of the regulating wheel changes the same linear speed can still be maintained so as grind the best quality products. The motor is driven by a timing-belt to reduce vibration and noise. Since the motor housing and spindle housing are joined together as an integrated body, when the regulating wheel tilts the motor also follows. This completely overcomes problems caused by unparallelism and torsion of belt pulleys and the belts.
- Spindle oil circulation hydrodyanmic There is a variable vane type oil pump for the hydraulic dressing and enforced spindle oil circulation. The oil tank is located outside of the machine for easy maintenance. Two layers of filter plus a pressure regulator ensure the cleanliness of spindle oil and the consistency of oil film thickness, thus extending the service life of the wheel spindle and the steadiness of accuracy.
- Adjusting valves Grinding wheel spindle with high pressure hydrostatic device, apply a regulator on reentrance for adjusting high pressure oil to support radial center. The setting work pressure is 20 kg/cm².
- Slide device The lower slide consists of two internally mounted V-shaped slides and cuneiform protector to ensure smooth movement, stable operation and prevent the entering of debris or liquid from the working environment. The swivel slides on a dovetail flute and swivels ±5 degrees. There is a fine tuning hand wheel for precise adjustment. The accuracy per calibration is 0.001mm in diameter for
- . Wheel dressing device The device is made of FC-30 cast iron and normalized then precisely ground. It is driven by a hydraulic system with a step-less speed regulator for easy and steady dressing. There is a safety handle for emergency purposes. In order to upgrade the straightness and the surface finish on through-feed grinding of long work pieces, please adjust the angle of the dressing device (swivels ±5 degrees). The regulating wheel should be adjusted to resemble a concave barrel to increase contact length while grinding.



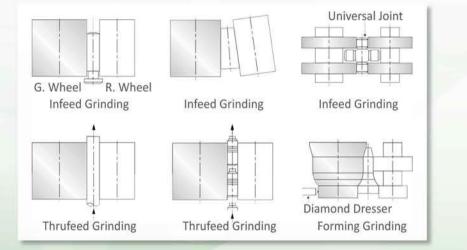
STANDARD ACCESSORIES:

- 1. Grinding wheel
- 2. Wheel flange
- 3. Thrufeed standard workrest & blade
- 4. Infeed standard workrest & blade
- 5. Work lamp
- 6. Diamond tool
- 7. Thrufeed safety device
- 8. Flange extractor
- 9. Levelling screw & plate
- 10. Thrufeed process gauge
- 11. Coolant pump
- 12. Hydraulic pump
- 13. Tools and tool box

OPTIONAL ACCESSORIES:

- 1. Paper filter
- 2. Magnetic separator
- 3. Hydrocyclone coolant filtering unit
- 4. Work ejector device
- 5. Forming dressing device
- 6. Long V-shaped support
- 7. Manual parts feeder for infeed grinding
- 9. Automatic thrufeed device
- 10. Vibratory parts feeder & straight line feeder
- 11. Auto thrufeed taper grinding device

- 12. Auto infeed forming grinding
- 13. Wheel balancing arbor
- 14. Wheel balancing base
- 15. Off-line gauging, non-contace O.D. measuring system
- 16. Grinding wheel automatic balancing system 8. Automatic receiver for thrufeed grinding 17. Oil cooler
 - 18. Rotary type grinding wheel dressing attachment
 - 19. Jib crane & hook for wheel
 - 20. Grinding balancer for wheels
 - 21. Oil mist / vapour receiver



SPECIFICATION:

MODEL	BMT 2408HJ	BMT 2410HJ	BMT 2412HJ		
Standard Work Rest Diameter		2~60 mm			
Special Work Rest Diameter		50~150 mm			
Grinding Wheel Size	610 x 205 x 304.8 mm	610 x 255 x 304.8 mm	610 x 305 x 304.8 mm		
Grinding Wheel Speed	1050 rpm				
Grinding Wheel Motor	25 HP	HP			
Regulating Wheel Size	305 x 205 x 127 mm	305 x 255 x 127 mm	305 x 305 x 127 mm		
Regulating Wheel Speed	Vari. Speeds, 10~250 rpm				
Regulating Wheel Motor	4 HP Servo Motor 5 HP Serv		vo Motor		
Regulating Wheel Feed on Handwheel	2.5 mm/rev, 0.01 mm/gra.				
Regulating Micro Feed on Handwheel	0.02 mm/rev, 0.001 mm/gra.				
Table Feed on Handwheel	2.	5 mm/rev, 0.01 mm/gr	ra.		
Table Micro Feed on Handwheel	0.0	2 mm/rev, 0.001 mm/	gra.		
Dressing Handwheel	2	mm/rev, 0.01 mm/gra	a.		
Regulating Wheel Tilt Angle		(+3°~-5°)			
Regulating Wheel Swivel Angle		±1°			
Hydraulic Pump		1 HP			
Coolant Pump		1/2 HP			
N.W. / G.W.		6500 kgs / 7000 kgs			
Machine Dimension (L x W x H)		2800 x 1500 x 1650 mn	n		
Dealing Dimension (Ly Wy LI)	3000 x	1800 x 1950 mm (Mac	chine) +		
Packing Dimension (L x W x H)	2600 x 1400 x 1300 mm (Accessories)				

^{*}Specifications are subject to change without prior notice.

SURFACE GRINDER

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*Machine shown with optional accessories

STANDARD ACCESSORIES:

- 1. Grinding wheel
- 2. Wheel extractor
- 3. Wheel hub
- 4. Wheel dresser
- 5. Diamond dressing tool
- 6. Centers
- 7. Balancing mandrel
- 8. Splash guard
- 9. 3-Jaw chucks & plates 10. Tools and tool box

OPTIONAL ACCESSORIES:

- 1. Automatic sizing gauge 2. Wheel balancing unit
- 3. Magnetic coolant filter
- 4. Radius wheel dresser



FEATURES:

- Hydraulic wheelhead control with guick approach and return.

▼ BMT 2500SG / BMT 3000SG

- Air bearing provides convinent means of moving the work head and tailstock.
- Heavy bed provides a rigid base to carry all units and possesses great stiffness, and sufficient slideway length to support the table in all positions.

*Machine shown with optional acccessories

SPECIFICATION:

MODEL	BMT 1600SG	BMT 2100SG	BMT 2500SG	BMT 3000SG		
Max. Distance Between Centers	1650 mm	2170 mm	2570 mm	3070 mm		
Max. Distance Between Chucks	1600 mm	2100 mm	2500 mm	3000 mm		
Center Height	275 mm		350 mm			
Swing Over Table	550 mm		700 mm			
Stroke	200 mm	280 mm	340	mm		
Wheelhead Quick Approach Distance	150 mm	165 mm	180	mm		
Max. Weight of Crankshaft	350 kgs	500 kgs	800) kgs		
Workhead Spindle Speed	20~100 rpm					
Table Traverse Manual		4.5 mm/turn				
Table Traverse Electric		2800 mm/min				
Table Traverse Hydraulic		60~3000 mm/min				
Wheelhead Feed		0.0025 mm/gra.				
Wheel Size	710 x 19~38 x 203 mm	812 x 22~3	8 x 203 mm	915 x 22~38 x 305 mm		
Wheelhead Motor	7.5 HP	10	HP	15 HP		
Workhead Motor	1 HP	2	HP	5 HP		
Table Traverse Electric Motor	1 HP		E-Electric Traverse			
Hydraulic Pump		2 HP		3 HP		
Lubrication Pump		1/4	HP			
Coolant Pump	1/8 HP		1/4 HP			
N.W. / G.W.	4800 kgs / 6000 kgs	6500 kgs / 7800 kgs	7300 kgs / 8800 kgs	9500 kgs / 10200 kgs		
Machine Dimension (L x W x H)	4500 x 1860 x 1600 mm	6400 x 2000 x 1850 mm	7000 x 1860 x 2000 mm	7600 x 2400 x 2230 mm		
Packing Dimension (L x W x H)	4600 x 1950 x 2000 mm	6000 x 2160 x 2200 mm	7000 x 2200 x 2250 mm	8000 x 2510 x 2250 mm		

^{*}Specifications are subject to change without prior notice.

▼ BMT 3000HR / BMT 3500HR / BMT 4000HR



*Machine shown with optional accessories

- **FEATURES:** • Suitable for grinding plain-faced rolls, large mechanical columns, car axles, printing cylinders, and large motor armatures.
- Heavy-duty bed is sturdy and rigid.
- Oblique worktable-top naturally enables the work-head and tailstock to adhere to calibrated side for consistent core accuracy.
- Grinding wheel is electrically controlled for speedy moving of cutter.
- Grinding spindle is force-lubricated and has electric interlock for safety.
- Main axle is DC-motor driven for seamless transmission.
- Swivel table has an indicator for convenient, precise angle setting.
- Work-head and tailstock feature air-bearing design for easy movement.
- Work carriage has telescopic guards for dust and moisture protection.

SPECIFICATION:

MODEL	BMT 3000HR	BMT 3500HR	BMT 4000HR	
Max. Swing Diameter	800 mm			
Distance Between Center	3000 mm	3500 mm	4000 mm	
Weight on Center		2000 kgs		
Wheel Size		812 x 76 x 304 mm		
Wheel Hydraulic Rapid Feed Stroke		60 mm		
Wheel Total Amount of Handfeed		420 mm		
Wheel One Revolution of Handwheel		1 mm		
Wheel Feed per Graduation		0.005 mm		
Workhead Spindle Speed		10~1000 rpm		
Workhead Center Taper		MT 6		
Tailstock Center Taper		MT 6		
Tailstock Spindle Stroke		60 mm		
Table Traverse Speed	25~1600 rpm			
Table Swivel Angle	±50°			
Table Traverse on Handhweel	4.5 mm/rev			
Workrest Capacity Type	200~400 mm			
Grinding Wheel Motor		20 HP		
Workhead Spindle Motor		7.5 HP		
Hydraulic Pump		3 HP		
Lubrication Pump	1/4 HP			
Coolant Pump	1/4 HP			
N.W. / G.W.	15500 kgs / 17000 kgs	16500 kgs / 18000 kgs	17500 kgs / 20000 kgs	
Machine Dimension (L x W x H)	6960 x 2700 x 1706 mm 7960 x 2700 x 1706 mm 8960 x 2700 x 1706 mm			
Packing Dimension (L x W x H)	7260 x 2000 x 3000 mm	8260 x 2000 x 3000 mm	9260 x 2000 x 3000 mm	

^{*}Specifications are subject to change without prior notice.

STANDARD **ACCESSORIES:**

- 1. Grinding wheel & flange
- 2. Wheel extractor
- 3. Wheel balancing arbor
- 4. Wheel dresser
- 5. Face and side wheeldressing attachment
- 6. Cemented-carbide center
- 7. Levelling screws & plates
- 8. Splash guard
- 9. Swivel angle gauge
- 10. Tools and tool box

OPTIONAL ACCESSORIES:

- Wheel balancing unit
 Magnetic coolant filter
- 3. 2-point steady rest 4. 3-Jaw self-centering chuck
- with back plate

COMPLEX MACHINE

▼ BMT D150A - CNC Single Spindle Grinding Machine

FEATURES:

- Single grinding wheel spindle
- Available to mount with turning Spindle(optional)
- FANUC controller
- · Semi-air tight cover



*Machine shown with optional acccessories

WBMT D150B **CNC Internal External End Face Grinding Complex Machine**

FEATURES:

- Twin grinding wheel spindles
- Available to mount with end face grinding head (optional)
- FANUC controller
- · Fully enclosed splash guard



W BMT D320GT **CNC Internal External Grinding Complex Machine**

FEATURES:

- Twin grinding wheel spindles
- Available to mount with turning spindle (optional)
- FANUC controller
- Fully enclosed splash guard



FEATURES:

*Machine shown with optional acccessories

- Massive machine structure The ultimate of rigidity and stability
- Linear ways & ball screws The X-axis & Z-axis all employ high precision class linear ways and C1 type ball screws to achieve the highest accuracy and rigidity.
- High quality cast iron The structural parts are manufactured from high quality FC30 cast iron, tempered and stress relieved for outstanding machining accuracy and stability.
- . Massive base The oversized and massive base is rib reinforced according to dynamic principle, resulting in exceptional stability.
- Servomotor drive X-axis & Z-axis movements are driven by servomotor with minimum setting unit of 0.001 mm.



FANUC Controller



Touch-Sensing Screen



Single Grinding Spindle for BMT D150A



Single Grinding Spindle & Turning Spindle Assembly



End Face Grinding Head for BMT D150B









Grinding Examples



Twin Grinding Spindles for BMT D320GT

STANDARD ACCESSORIES:

- 1. CNC Controller
- 2. Inverter for X axis workpiece motor

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- 3. Inverter for Z axis workpiece motor
- 4. Inverter for Y axis workpiece motor for BMT D320GT
- 5. Z axis grinding spindle
- 6. Face grinding spindle & built-in spindle for BMT D150B
- 7. Hydraulic chuck
- 8. Hydraulic cylinder
- 9. Work light
- 10. Auto lubrication pump
- 11. Coolant pump
- 12. Paper filter system
- 13. Magnetic chip conveyor
- 14. Hydraulic unit with pump
- 15. Heat exchanger for electrical cabinet
- 16. Diamond dresser
- 17. Foundation bolts and blocks
- 18. Semi-enclosed cover for BMT D150A
- 19. Fully enclosed cover for BMT D150B & BMT D320GT
- 20. Tools and tool box

OPTIONAL ACCESSORIES:

- 1. Heidenhain linear scale on X axis
- 2. Oil mist collector
- 3. Oil skimmer
- 4. Internal turning spindle unit
- 5. Fully enclosed cover for BMT D150A

SPECIFICATION:

	MODEL	BMT D150B	BMT D150A	BMT D320GT
	Grinding Diameter	4~200 mm	4~240 mm	4~320 mm
CAPACITY	Max. Grinding Depth	150 m	150 mm	
CAPACITY	Swing Over Table	380 m	nm	350 mm
	Swing Over Splash Guard	200 mm	200 mm 320	
CONTROL	Control System	FANUC / S	SYNTEC	FANUC
	Spindle Speed		0~1000 rpm	
WORK	X-axis Feed Rate		10 M/min	
WORK	X-axis Travel	300 m	nm	390 mm
HEAD	Min. Unit of X-axis Movement	0.001	mm	0.0001 mm
	Swivel Angle	(-5° ~ +	15°)	(-5° ~ +30°)
	Max. Feed Rate of Y / Z-axis	Z-axis only: 10 M/min Z-axis only: 400+100 mm		10 M/min
TABLE	Y / Z-axis Travel			350+200 mm
TABLE	Min. Unit of Y / Z-axis Movement	0.001 mm		0.0001 mm
	Distance from Wheel Center to Floor	1060 mm		
PUMP	Hydraulic Pump, Tank	1 HP, 30 L		
PUIVIP	Coolant Pump, Tank	1/4 HP,	1/4 HP, 150 L	
	X / Y / Z Axis Servo Motor	X & Z-axis on	X & Z-axis only: 1.6 HP	
DRIVE	Grinding Wheel Motor (B1 / B2)	B1: 3 HP / 2P; B2: 6 HP / 4P	B1 only: 3 HP / 2P	3 HP / 2P
MOTOR	Workhead Motor	3 HP / 4P		
	Automatic Lubricator	2 L		4 L
OTHERS	N.W.	3000 kgs		4750 kgs
UTHERS	Machine Dimension (L x W x H)	2200 x 2300 x 1700 mm		2500 x 2100 x 1950 m

^{*}Specifications are subject to change without prior notice.

SURFACE GRINDER

GRINDER

W BMT U2

*Machine shown with optional accessories

FEATURES:

- For grinding HSS and carbide engaving cutter as well as single lip or multiplelip cutters of various shapes such as radius cutters or negative taper angle of cutters.
- The universal index head is provided at 241 positions so that any particular angle or shape can be obtained, free 360° or 10° rotation is allowed for grinding End Mills. Twist Drill, Lathe Tools, only replace the attachment to the index head without complex setup.

STANDARD ACCESSORIES: OPTIONAL ACCESSORIES:

- 1. Wheel dresser with diamond
- 2. Wheel flange mounted
- 3. Grinding wheel
- 4. Collets x 5pcs (4,6,8,10,12mm)
- 5. Aligning finger
- 6. Drive belt
- 7. Lock pin 8. Tools

- 1. Twist drill grinding attachment
- 2. End mill grinding attachment
- 3. Lathe tool grinding attachment
- 4. Grinding wheel balancing stand
- 5. Collet
- 6. Diamond grinding wheel 7. 20, 25mm cutter
- 8. Tool cabinet

SPECIFICATION:

MODEL	BMT U2	
Max. Collet Capacity	18 mm	
Max. Grinding Diameter	25 mm	
Taper Angle	0~180°	
Relief Angle	0~45°	
Negative Angle	0~26°	
Grinding Speed	5000 rpm	
Cup Grinding Wheel Size	100 x 50 x 20 mm	
Power	200V	
Motor	1/3 HP	
N.W. / G.W.	45 kgs / 60 kgs	
Machine Dimension (L x W x H)	450 x 400 x 350 mm	
Packing Dimension (L x W x H)	550 x 450 x 470 mm	

^{*}Specifications are subject to change without prior notice.



*Machine shown with optional accessories

FEATURES:

- Precision endmill grinder
- Specially designed machine structure permits the set-up of cutting lips and edges (OD) last sharpened at the same time.
- · Simple to set up & easy to operate.
- · Grinding fast and high accuracy.

STANDARD ACCESSORIES: OPTIONAL ACCESSORIES:

- . Grinding wheel
- 2. Diamond dresser
- 3. Work light 4. 5C collet x 7pcs
- 5. Wheel wrench
- 6. Tools

- 1. SDC diamond grinding wheel
 - 2. CBN diamond grinding wheel
 - 3. Floor table

SPECIFICATION:

MODEL	BMT 25PP	
Grinding Capacity	6~25 mm	
Longitudinal Travel of Table	50 mm	
Cross Travel of Saddle	50 mm	
Wheel Size	125 x 50 x 31.75 mm	
Power	110V / 220V / 380V	
Speed	3600 rpm	
Motor	1/2 HP	
N.W. / G.W.	50 kgs / 75 kgs	
Packing Dimension (L x W x H)	650 x 500 x 680 mm	

^{*}Specifications are subject to change without prior notice.



*Machine shown with optional accessories

FEATURES:

FEATURES:

W BMT 32N

 Double wheels. It only needs to rotate the motor when want to grind the tool with different materials. It can increase the safety & save the time for replacing & rep airing the grinding wheel.

Grinding tools include drills, step drills, NC drills, taps,

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- counter sink drills, end mill lips, round bars.
- Adopts precise 6 pawl self-centering chuck, clipping one time and can grind th blade of drills and do the repairing of drills abdomen. The angle of drill both sides and the length of blade are same after grinding. It can keep the accuracy of the center without off center.
- Unique & patented cam-replacement-free. Patent no. 75717.
- Simple to set up & easy to operate.
- · Grinding fast and high accuracy.

Unique & patented cam-replacement-free

BEMATO

2. Diamond

SPECIFICATION:

Patent no. 75717.

MODEL	BMT 32N
Grinding Capacity	1.5~32 mm
Longitudinal Travel of Table	120 mm
Cross Travel of Saddle	135 mm
Rotary Angle of Wheelhead	360°
Point Angle	90~180°
Wheel Size	125 x 50 x 31.75 mm
Power	110V / 220V / 380V
Speed	3600 rpm
Motor	3/4 HP
N.W. / G.W.	95 kgs / 125 kgs
Packing Dimension (L x W x H)	850 x 550 x 670 mm

^{*}Specifications are subject to change without prior notice.

TAP GRINDER

UNIVERSAL DRILL &

V BMT 60N / BMT 80N / BMT 100N



- Grinding tools include drills, step drills, taps, counter sink, round bars, lips of end mills, etc.
- · Adopts precise 6 pawl self-centering chuck, clipping one time and can grind th blade of drills and do the repairing of drills abdomen. The angle of drill both sides and the length of blade are same after grinding. It can keep the accuracy of the center without off center.
- The main spindle have the grinding wheel 2pcs. The blade and the center of drills can be grinded on time. It can save time for changing the grinding wheel.
- The motor can be removed 160mm up and down, it can increase the control of the machinery.
- Double cams (Patent No. 135236) can grind the drills from one flute to six flutes, including odd number of flutes and even number of flutes.

SPECIFICATION:

MODEL	BMT 60N	BMT 80N	BMT 100N	
Grinding Capacity	2~60 mm	4~80 mm	5~100 mm	
Longitudinal Travel of Table	250 mm			
Cross Travel of Saddle		180 mm		
Vertical Adjustment of Wheelhead	165 mm			
Rotary Angle of Wheelhead	360°			
Clearance Angle	0~18°			
Point Angle	40~180°			
Wheel Size	180 x 32 x 31.75 mm, 180 x 19 x 31.75 mm			
Power	220V / 380V			
Speed	3600 rpm			
Motor	1/2 HP 1 HP			
N.W. / G.W.	270 kgs / 320 kgs	310 kgs / 370 kgs	330 kgs / 390 kgs	
Packing Dimension (L x W x H)	950 x 1000 x 1540 mm	1120 x 1000	0 x 1540 mm	

*Machine shown with optional accessories



Patent No. 135236

*Specifications are subject to change without prior notice.





*Machine shown with optional accessories

OPTIONAL ACCESSORIES FOR BMT 600 ONLY:

1. Table

2. Diamond grinding wheel

OPTIONAL ACCESSORIES FOR BMT 600 & BMT 50PP:



Lathe Tools
Grinding Attachment
(Grinds general lathe tools,
CNC lathe tools)



Grinding Attachment
Unique cam, Patent No. 75717
(Grinding capacity: 1.5~32mm,
straight shank & taper shank)



Grinding Attachment (Grinding capacity: 6~25 mm, adopts precision 5C collets)



(Grinds end mills, reamers, hobs, side cutters, etc.)

FEATURES:

- The machinery can grind drills, step drills, NC drills, taps, end mills, ball radius end mills, lathe tools, ball radius lathe tools, counter sinks, side cutters, round bars, reamers, hobs, round cutters, etc by changing the attachments.
- Adopt import & precise roll guide on the table.
 The table is stable and can be operated smoothly.
- Adopt FC30 cast iron with high toughness. It can keep the precision of the machine in a long time.
- The motor can be rotated 360°. It can increase the grinding function & range of machinery. Patent No. 42447.

SPECIFICATION:

MODEL	BMT 600
Longitudinal Travel of Table	185 mm
Cross Travel of Saddle	120 mm
Vertical adjustment of Wheelhead	140 mm
Rotary Angle of Wheelhead	360°
Working Table Area	125 x 520 mm
Wheel Size	125 x 50 x 31.75 mm
Power	110V / 220V / 380V
Speed	3600 rpm
Motor	1/2 HP
N.W. / G.W.	150 kgs / 190 kgs
Packing Dimension (L x W x H)	750 x 700 x 750 mm

^{*}Specifications are subject to change without prior notice.



FEATURES FOR BMT 600 & BMT 50PP:



OPTIONAL ACCESSORIES FOR BMT 50PP ONLY:



Drills & Taps
Grinding Attachment
Double cams, Patent No. 135236
(Grinding capacity: 2~60mm,

(Grinding capacity: 2~60mm, straight shank & taper shank, Point angle of drills: 40~180°, Clearance angle of drills 0~18°)



Type End Mills & Cutters

Grinding Attachment (Grinding capacity: 6~25mm, grinds end mills, ball radius end mills, ball radius lathe tools, carving cutters)

FEATURES:

- The machinery can grind drills, step drills, NC drills, taps, end mills, ball radius end mills, lathe tools, ball radius lathe tools, counter sinks, side cutters, round bars, reamer hobs, round cutters, etc by changing the attachments.
- Double wheels. It only needs to rotate the motor when want to grind the tool of different materials. It can increase the safety & save the time for changing & repairing the grinding wheel.
- Adopt import & precise roll guide on the table.
 The table is stable and can be operated smoothly.
- Adopt FC30 cast iron with high toughness. It can keep repairing the precision of the machine in a long time.
- The main spindle of wheel head is designed three axis.
 The motor can be rotated 360° in horizontal plane and also can be set the incline angle & escape angle of drill easily. It can increase the grinding function & range of machinery. Patent No. 42447.

MODEL	BMT 50PP	
Longitudinal Travel of Table	230 mm	
Cross Travel of Saddle	180 mm	
Vertical adjustment of Wheelhead	120 mm	
Rotary Angle of Wheelhead	360°	
Rotary Angle of Up-Down Spindle	360°	
Working Table Area	620 x 190 mm	
Wheel Size	180 x 25 x 31.75 mm, 125 x 50 x 31.75 mm	
Power	110V / 220V / 380V	
Speed	3600 rpm	
Motor	3/4 HP	
N.W. / G.W.	260 kgs / 310 kgs	
Packing Dimension (L x W x H)	1000 x 850 x 1540 mm	

^{*}Specifications are subject to change without prior notice.

FEATURES:

- Adopts precise 6 pawl chuck, could grind the 6 faces of the gun drill just be clipped one time.
 Any sizes could be ground and could keep the gun drill center without off center.
- Use the leverage, could grind the inner angle and out angle of the gun drill at the same time.
 Simple and safe operation, anybody could quickly learn how to use.



SPECIFICATION:

59

MODEL	BMT 8PP BMT 11P	
Longitudinal Travel of Table	185 mm	
Cross Travel of Saddle	120 mm	
Vertical adjustment of Wheelhead	140 mm	
Rotary Angle of Wheelhead	360°	
Working Table Area	125 x 520 mm	
Wheel Size	125 x 50 x 31.75 mm	
Power	110V / 220V / 380V	
Speed	3600 rpm	
Motor	1/2 HP	
N.W. / G.W.	190 kgs / 240 kgs 150 kgs / 180	
Packing Dimension (L x W x H)	770 x 800 x 1540 mm 750 x 700 x 800	

^{*}Specifications are subject to change without prior notice.

▼ BMT 50SPP (Slitting Cutter Grinder)

SLITTING CUTTER GRINDER

DIAMOND WHEEL DRESSING GRINDER



MODEL	BMT 50SPP	BMT 50WPP
Longitudinal Travel of Table	230 mm	
Cross Travel of Saddle	180	mm
Vertical adjustment of Wheelhead	120	mm
Rotary Angle of Wheelhead	36	60°
Rotary Angle of Up-Down Spindle	360°	
Working Table Area	620 x 190 mm	
Wheel Size	180 x 25 x 31.75 mm, 125 x 50 x 31.75 mr	
Power	110V / 220V / 380V	
Speed	3600 rpm	
Motor	3/4 HP	
N.W. / G.W.	260 kgs / 310 kgs 280kgs / 320	
Packing Dimension (L x W x H)	1000 x 850 x 1540 mm	

^{*}Specifications are subject to change without prior notice.

₩ BMT 610

FEATURES:

- Work table is driven by steel rollers for smooth movement.
- Pretty and sturdy, suitable for various tool grinder.
- Pneumatic axis seat is made of headed treated aluminum alloy, easy operation and high accuracy.
- Driven by worm and gear, grinding wheel's swivel angles are adjustable
- Eliminates forward/backward feed rod screw's clearance / gap.



W BMT 205

FEATURES:

- A straight shank end mill can be sharpened easily by holding on C2AH fixture with 5C collet.
- 90° V type slideway can bear power from each side.
- Slideway undergoes special heat-treatment which makes it very durable.
- Adopting cylindrical supporting precision pitch, it can take more strength.
- Has low friction between cage and the cylindrical supporter, giving the table smooth movement.



W BMT 457

61

FEATURES:

- This machine is designed specially and accurately for grinding the miscellaneous tangalloy milling cutter, tool-bit and the other cutter or any special machine tools by the simpliest method.
- The main motor is biaxial motor with mounted angular contact ball bearings, giving high power but low vibration, which provides precise roundness and high accuracy. This motor is powerful and ball bearings are easy to maintain and repair.

W BMT 305

FEATURES:

- 90° V type slideway can bear power from each side. Slideway undergoes special heat-treatment which makes it very durable.
- Adopting cylindrical supporting precision pitch,
- Has low friction between cage and the cylindrical



FUNCTIONS:



Sharpening a ball radius end mill held on C1RG attachment



Sharpening turning tool set-up on C2LH fixture



Sharpening circular saw blade held on C1SG attachment



end mill grinder



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Engraving, radius and Drill, tap, end mill grinder



Sharpening gear hob held on C2T12 fixture with a AB01-AB04 arbor, C2R2 plain tooth rest is indexed against index disc



Sharpening side milling cutter held on C2T12 fixture with a AB01-AB04 arbor, C2R2 plain tooth rest is indexed against index disc



Sharpening face milling cutter being held in the C2SF fixture with a AA20-AA26 arbor, cutter is indexed with C2R1 univ tooth rest, and wheel is diamond cup wheel



held on C2SH fixture with a AA01-AA15 arbor, C2R1 plain tooth rest is indexed against index disc

STANDARD ACCESSORIES FOR BMT 205 & BMT 610:

- 1. Cup wheel
- 2. Saurcer wheel guard
- 3. Adjusting tools
- 4. 5C collet set (7pcs)
- STANDARD ACCESSORIES FOR BMT 305 & BMT 457:
- 1. Cup wheel
- 2. Tool bit grinding attachment
- 3. Face mill holder
- 4. Cutter arbor 1" OD
- 5. Toothrest
- 6. Center MT3
- 7. Adjusting tools
- 8. Coolant system

OPTIONAL ACCESSORIES FOR ALL MODELS:

- 1. C1RG Radius attachment
- 2. C2SH Sharpening side milling center,
- 3. C2LH Sharpening turning tool work holding fixture
- 4. C3RG ER collet dividing punch grinding attachment 17. Index discs
- 5. C2SF Sharpening face milling center, sensitive work 18. Collet fixtures
- 5C collet taper
- 7. C1SG Circular saw blade grinding attachment
- (up to 508mm dia.)
- 8. C2T12 Tailstock (right & left) for BMT 610 only
- 9. C2R1 Universal tooth rest
- 11. C2D1 Diamond wheel dresser

- sensitive work held B&S taper No.11 (with AK-24 index disc)

- head NT50 taper with AK-24 index disc 6. C2AH End mill grinder, air bearing fixture 5C,

- 10. C1DG(D) Universal grinder attachment
- 12. C2R2 Plain tooth rest

- 13. Saucer wheel 14. Straight wheel
- 15. 4" & 6" diamond
 - cup wheel
- 16. 4" 3-jaw chuck
- 19. Taper sleeves
- 20. Taper Arbors 21. Arbors for face mills
- & end mills
- 22. Cutter and hob grinding
- 23. Straight sleeves 5C
- 24. Floor stand for BMT 205 & BMT 610

MODEL	BMT 610	BMT 205	BMT 305	BMT 457
Distance Between Center	250 mm	270 mm	380 mm	405 mm
Working Table Area	133 x 470 mm	130 x 550 mm	110 x 675 mm	120 x 700 mm
Longitudinal Travel of Table	250 mm	200 mm	305 mm	420 mm
Swing Over Table	208 mm	280	mm	208 mm
Cross Travel of Saddle	160 mm	150	mm	100 mm
Swivel Adjustment of Table	C)°	45°	15°
Vertical Adjustment of Wheel	190 mm	290 mm	160 mm	150 mm
Swivel Adjustment of Column	360°			
Vertical Tilting Range Wheelhead	360° 30°			0°
Saucer Wheel Diameter	150 mm			
Flaring Cup Diameter	150 mm	125	mm	150 mm
Speed	60Hz: 3450 rpm; 50Hz: 2850 rpm			
Motor	1/3 HP 1/2 HP		HP	
N.W. / G.W.	125 kgs / 160 kgs	160 kgs / 200 kgs	320 kgs / 400 kgs	220 kgs / 260 kgs
Packing Dimension (L x W x H)	762 x 686 x 762 mm	720 x 610 x 880 mm	940 x 930 x 1600 mm	870 x 750 x 1300 m

^{*}Specifications are subject to change without prior notice.

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FEATURES:

- Inclination of wheelhead The wheelhead can easily tilt up to ±15 degrees, with a 360-degrees swivel on the horizontal plane. The wheelhead can grind any angle as the operator request. TWo pairs of angular contact ball is designed to support the spindle, bearing and tighten by nuts. The inner of wheel spindle has greased with lubricant. Additional lubricant is not needed.
- Universal workhead The workhead can rotate and adjust accurately in any angle, at either horizontal or vertical position. Spindle has taper at both ends, NT50 (BT50) and MT50, that could increase working efficiency by various collets.
- Working table The working table can rotate 120 degrees, with ±60 degrees graduated scale attached. At the same time, the workhead can rotate 360 degrees to grind various cutting tool.
- Precision ball groove of conformation The machine apply precise ball groove which has special alloy steel. The working table is driven by roll type of steel cable, that improves the work efficiency for operators.
- Clutch The feed of working table can control at various speeds, both at low and high speeds. Working table has feed knob on both sides, while the clutch handle on teh right hand side controls at lower speeds, to prevent the interruption of its precision.
- Tailstock There are two tailstocks: one is fixed by bolt, while another one is fixed by spring pressure. The combination of tailstock and workhead works very well at steadily holding the workpiece, and achieve the best grinding result.
- Centralized lubrication The machines have centralized lubrication system that ensure the great supply of lubricant to every part evenly. With such lubrication system, it ensures the machine to stay in great condition, and moreover it extends the durable life of machine.

OPTIONAL ACCESSORIES:



Radius Grinding Attachment Workhead Indexing Attachment



Helical Grinding Attachment



Surface Grinding Attachment



Cylindrical Grinding Attachment



Drill Pointing Attachment



Internal Grinding Attachment



Lathe & Planer Tool **Grinding Attachment**

BEMATO STANDARD ACCESSORIES:

- 1. Workhead
- 2. Left-hand & right-hand tailstock
- 3. Diamond dresser holder
- 4. Wheel guard
- 5. Wheel guard holder
- 6. Universal toth rest plate & blade holder extension
- 7. Center gauge
- 8. Plain tooth rest holder (with offset blade)
- 9. Micrometer adjustable toothrest (with round top blade)
- 10. Levelling pads
- 11. Reducing collet B&S
- 12. Grinding wheel sleeves
- 13. Grinding wheels
- 14. Center for workhead spindle B&S No.7
- 15. Tools & tool cabinets



- 1. CCD measurement
- 2.5C collector
- 3. Radius grinding attachment
- 4. Face end grinding attachment
- 5. Helical grinding attachment
- 6. Cylindrical grinding attachment
- 7. Internal grinding attachment
- 8. Workhead indexing attachment
- 9. Extension grinding wheel spindle
- 10. Surface grinding attachment
- 11. Drill pointing attachment
- 12. Lathe & planer tool grinding attachment
- 13. Spring collet chuck
- 14. Wet grinding attachment with splash plate
- 15. Dust collector

SPECIFICATION:

MODEL	BMT 40UT	BMT 60UT
Longitudinal Movement of Table	400 mm	600 mm
Distance Between Center	700 mm	900 mm
Cross Movement of Saddle	250	mm
Vertical Movement of Wheelhead	250	mm
Distance Between Tailstock to Workhead	580 mm	780 mm
Workhead Taper	MT 5 / NT 50	/ BT 50 (Opt.)
Table T-slot	15 mm (0.05~0.10 mm)	
Table Working Range	135 x 945 mm	135 x 1140 mm
Grinding Spindle Speed	2600 / 3700 / 6200 rpm	
Rotative Angle of Table	±60°	
JOG Adjustment of Table	±10°	±7°
Inclination of Wheelhead	±1	5°
Rotative Angle of Wheelhead	36	0°
Distance between Spindle Center to Table	50~300 mm	
Distance between Spindle Center to T-slot		
Spindle Motor	1.5 HP	
N.W.	1160 kgs 1260 kgs	
Machine Dimension (L x W x H)	1735 x 1550 x 1480 mm 2740 x 1550 x 1384 r	

^{*}Specifications are subject to change without prior

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BMT 50N / BMT 80NFC

SPECIFICATION:

MODEL	BMT 32	BMT 50N	BMT 80NFC		
Drilling Capacity	1.5~32 mm	1.5~32 mm 2~51 mm			
Drilling Front Angle	40~180°				
Drilling Back Angle		0~18°			
Spindle Roundness		0.01 mm			
Spindle Speed	,	0~2880 rpm			
Wheel Size	180 x 19 x 31.75 mm		15/		
Wheel Size - Recessed Type	· · · · · · · · · · · · · · · · · · ·	180 x 32 x 31.75 mm			
Wheel Size - Dish Type	-	165 x 2	1 x 31.75 mm		
Infeed Shaft of Grinding Wheel - Left / Right Stroke	150 mm	2	240 mm		
Infeed Shaft of Grinding Wheel - Front / Back Stroke	140 mm	180 mm	200 mm		
Infeed Shaft of Grinding Wheel - Up / Down Stroke	×ã:	1	110 mm		
Swivel Shaft - Up / Down Angle	0~20°				
Weight	120 kgs	300 kgs	380 kgs		
Machine Dimension (L x W x H)	700 x 700 x 380 mm	750 x 925 x 1300 m	nm 800 x 1000 x 1380		

^{*}Specifications are subject to change without prior notice.

₩ BMT 160U



*Machine shown with optional accessories



MODEL	BMT 160U
Tool Diameter	2~200 mm
Range of Grinding Tool Length of the Spiral	160 mm
Range of Grinding Tool Angle of the Spiral	0~90°
Wheel Shaft Diameter	31.75 mm
Wheel Shaft Rotation Direction	Forward / Reverse
Wheel Shaft Up / Down Stroke	230 mm
Wheel Shaft Swivel Angle	±30°
Workbench Left / Right Stroke	380 mm
Workbench Front / Back Stroke	130 mm
Workbench Left / Right High Speed Move Distance	18 mm
Spindle Speed	0~2880 rpm
Spindle Motor	3 HP
Weight	540 kgs
Machine Dimension (L x W x H)	1400 x 1250 x 1300 mm

^{*}Specifications are subject to change without prior notice.

V BMT 304CM (8 Axis)

FEATURES FOR BMT 304CM:

- Our CM series sharpen and recondition complex tool shapes and parts.
- Turntable and guide bar allows workpieces grinding from different direction.
- Turntable and workhead set can rotate horizontally for 210° angle.



*Machine shown with optional accessories



GRINDING FUNCTIONS:



Screw Slot Sufrace Grinding



Grinding Outer Diameter



Formed Milling Cutter Grinding



ARC Grinding





Side Milling Cutter Grinding



Centering Device



Vertical Milling Cutter Grinding

STANDARD ACCESSORIES:

- 1. Wheelhead toothrest assembly with extension bar
- 2. Grinding wheel guards with extension bar 3. Frank stock support

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- 4. Straight cylindrical collets
- 5. Grinding wheel flanges
- 6. Diamond holder bracket
- 7. Toothrest centering gauge
- 8. Ajustable tailstock support unit
- 9. Levelling blocks
- 10. Standard arbor
- 11. Index plates for spiral lead mechanism
- 12. Grinding wheel (one each of straight, flaring cup and dish shape)
- 13. Diamond truing tool with diamond nib
- 14. Spring-loaded index pawl for workhead
- 15. Tools & tool box

OTHER STANDARD ACCESSORIES FOR BMT 304CMA ONLY:

- 16. Grinding attachment for large face milling cutter
- 17. 4" 6-jaw chuck for workhead
- 18. Wheel flange with 2 collets for internal grinding
- 19. Wet grinding attachment with water proof equipment

OPTIONAL ACCESSORIES:

- 1. Large cutter radius grinding attachment for BMT 304CM
- 2. 4"universal 6-jaw chuck for BMT 304CM 3. Additional index plates for spiral lead
- indexing unit 24T 4. Extended collet set with wrench for smaller
- collet included in 3mm collet
- 5. Frequency inverter for grinding wheel spindle
- 6. Upgrading grinding wheel spindle motor 7. Dust collector

MODEL	BMT 304CM	BMT 304CMA		
Max. Swing Diameter	304	mm		
Max. Collet Work Diameter	32 mm			
Min. Collect Work Diameter	5 r	nm		
Max. Spiral Angle	6	0°		
Max. Distance Between Spindle Nose to Tailstock Center	100 mm / 152 mm			
Wheel Diameter	100	mm		
Workhead Slide Travel	130 mm			
Workhead Offset Slide Travel	100 mm			
Workhead Front of Center	50	mm		
Workhead Rear of Center	50	mm		
Rotation of Horizontal Plane of Workhead	±1	05°		
Rotation of Vertical Plane of Workhead	±4	10°		
Wheelhead Longitudinal Slide Travel	110	mm		
Wheelhead Vertical Slide Travel	240	mm		
Wheelhead Cross Slide Travel	170	mm		
Workhead Spindle Speed	÷	60Hz: 440 rpm; 50Hz: 370 rpn		
Wheelhead Spindle Speed	4000 / 6000) / 8000 rpm		
Workhead Motor	1/4	HP		
Wheelhead Motor	1/2	HP		
N.W.	860 kgs	1030 kgs		
Machine Dimension (L x W x H)	1600 x 1150 x 1650 mm	2100 x 1150 x 2050 mm		

^{*}Specifications are subject to change without prior

▼ BMT 125PP (Diamond Grinder)



*Machine shown with optional accessories

SPECIFICATION:

MODEL	BMT 125PP
Power	110V / 220V
Speed	3600 rpm
Motor	1/3 HP
Weight	37 kgs

^{*}Specifications are subject to change without prior notice.

▼ BMT 50PCBN (Diamond & PCBN Tool Grinder)



*Machine shown with optional accessories

FEATURES:

- Fast grinding
- Easy operation
- High precision



SPECIFICATION:

MODEL	BMT 50PCBN				
Cross Travel of Saddle	80 mm				
Longitudinal Travel of Saddle	50 mm				
Wheel Shift in both Sides	100 mm				
Wheel Swing in both Sides	Vari. speed, 10~30 times/min				
Wheel Head Tilt	±15°				
Table Swivel	92°±5°				
Graduation of Table	1°				
Radius Angle	0~20 R				
Tool Lift	±15°				
Wheel Size	D150 x W20 x X10 x T40 x H40 mm				
Wheel Speed	Vari. speed, 1000~5000 rpm				
N.W. / G.W.	270 kgs / 330 kgs				
Packing Dimension (L x W x H)	950 x 1000 x 1680 mm				

^{*}Specifications are subject to change without prior notice.

PRECISION SPINDLE GRINDER / POLISHER



W BMT A1



*Machine shown with optional accessories

FEATURES:

- Automatic spindle polishing control.
- Extra high accuracy.
- No damage to spindle body.
- Only one setting is required for maximum convenience of operation.
- Reduce the spindle to vibrate, extend spindle life.
- · Increase working accuracy.
- · Extend cutter tool life

SPECIFICATION:

MODEL	BMT A1		
Spindle Grinding Specification	BT / NT		
Special Mirror-effect Grinding Wheel	20 x 20 x 6 mm		
Power	110V / 220V / 240V		
Speed	30000 rpm		
N.W. / G.W.	15 kgs		
Packing Dimension (L x W x H)	260 x 200 x 310 mm		

^{*}Specifications are subject to change without prior notice.

HOLDER MAINTENANCE & POLISH MACHINE

W BMT A2



*Machine shown with optional accessories

FEATURES:

- Only one setting is required for maximum convenience of operation.
- Clean, polish, rust cleaning, grease dirt cleaning.
- Increase holder accuracy.
- Extend holder life.



MODEL	BMT A2		
Spindle Grinding Specification	BT		
Power	110V / 220V		
Machine Dimension (L x W x H)	400 x 400 x 460 mm		

^{*}Specifications are subject to change without prior notice.



FEATURES:

- This machine is specially designed for sharpening hob.
- The powerful dust collector eliminates the grinding dust completely.
- The index head is completely enclosed to prevent dust intrustion to the rolling wheel and sine-bar. The rolling wheel is fixed on the work spindle and fastened to the rod which connected with sine-bar by the steel belts. The indexing is accomplished by the index plate which mounted on the work spindle.
- The grinding wheel head is provided with a dressing unit which makes the effective grinding surface. of the wheel through the center line of the hob without special adjustment. The horizontally positioned grinding spindle is mounted on the precision four angular contact bearings and two radial ball bearings.
- Truing dresser unit To ensure the effective grinding surface of the grinding wheel to be at angle of 15°, the truing dresser is equipped on the grinding head. If grinding spiral hob, the position of the truing dresser can be adjusted according to the demand of grinding wheel surface.

SPECIFICATION:

MODEL	BMT 16HS
Max. Hob Diameter	200 mm
Max. Hob Length	250 mm
Max. Module	M16
Min. Lead of Hob	1400 mm
Longitudinal Movement of Table	380 mm
Wheelhead Vertical Travel	130 mm
Distance Between Center	550 mm
Diameter of Index Plate	120 mm
Diameter of Grinding Wheel	250 mm
Wheelhead Spindle Speed	2300 rpm
Wheelhead Motor	2 HP
Dust Collector Motor	0.54 HP
N.W. / G.W.	1200 kgs / 1500 kgs
Machine Dimension (L x W x H)	1000 x 1500 x 1713 mm

STANDARD ACCESSORIES:

- 1. Grinding wheel
- 2. Hob mandrel
- 3. Index plate
- 4. Dust collector 5. Tools and tool box



*Specifications are subject to change without prior notice.

W BMT 300LY / BMT 500LY / BMT 600LY

PRECISION ROD CUT-OFF &

END SURFACE GRINDING MACHINE



*Machine shown with optional accessories

FEATURES:

- . The dimensions precision of cut-off length of workpiece are not subject to the effect of the difference of thickness of cut-off disc.
- During operation, the grinding wheel may be micro adjusted and repaired without changing its dimensions.
- The rapid positioning ruler is in the unit of 20mm and provided with a micro ruler (0~25mm) of which the zero point is the dimension at the rapid positioning point.
- During operation, a shaft with two tapered ends is used for transmission and characterized by high stability, low wearing rate and long life.
- The tightness of belt may be automatically adjusted and controlled. The larger the resistance, the tigheter the belt.
- The rapid chuck (1~25 mm) is used to hold the workpiece in place. It is fast and quick to open and close it .

MODEL	BMT 300LY	BMT 500LY	BMT 600LY		
Max. Cutting Capacity		25 mm			
Cut-off Wheel Size	180 x 1 x 31.8 mm				
Emery Cup Wheel Size	WA	100 x 50 x 20	mm		
Rule Length	300 mm	500 mm	600 mm		
Speed		3600 rpm			
Motor	1 HP / 1 PH				
Weight	88 kgs				
Machine Dimension (L x W x H)	430 x 360 x 500 mm				
Packing Dimension (L x W x H)	590 x 560 x 670 mm				

^{*}Specifications are subject to change without prior notice.

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W BMT 611GR



▼ BMT 811GR / BMT 831GR / BMT 831AGR BMT 813GR / BMT 833GR / BMT 833AGR



STANDARD ACCESSORIES:

- 1. Guards & toolrests
- 2. Switches
- 3. Disc flanges
- 4. Grinding wheel
- 5. Eye shield

OPTIONAL ACCESSORIES:

- 1. Stands
- 2. Dust collector
- 3. Diamond wheel dresser
- 4. Independent stop switch
 - * NVR = Non Voltage Reset EMS = Emergency Stop OLP = Overload Protection

SPECIFICATION:

MODEL	BMT 611GR	BMT 811GR	BMT 831GR	BMT 831AGR	BMT 813GR	BMT 833GR			
Output	150W	300W 420W			300W 520W				
Guard Type	BS: 165 x 40 x 2.0 mm			2B: 225 x 5	5 x 2.0 mm				
Guard Extractor / Chip Outlet	-		34 mm						
Guard Thickness				2.0 mm					
Wheel Speed			50HZ, 2P: 28	50 rpm / 60 HZ,	2P: 3450 rpm				
Wheel Type				A36 + A60					
Wheel Size	150 x 25 x 20 mm	200 x 19 x 15.8 mm	200 x 25 x 20 mm				200 x 25 x 20 mm		
Pole / Phase		2P /	1PH			2P / 3PH			
Eye Shield (L x M x H)	110 x 90 x 5 mm		130 x 100 x 5 mm						
Machine Dimension	410 x 220 x 260 mm	100 x 30 x 5 mm	470 x 265	x 300 mm	100 x 30 x 5 mm	470 x 265	x 300 mm		
Packing Dimension - Carton	430 x 220 x 250 mm			525 x 335	x 295 mm				
Net Weight	10.5 kgs			20.5	kgs				
Toolrest	E			Adjustable					
Switch	NVR + EMS	Rocker	NVR	+ EMS	Button	NVR	+ EMS		
CE standard	YES	NO	Y	ES	NO	Y	ES		
		OPTI	ONAL ACCESSO	DRIES					
Stand		Stand A / Stand S							
Dust Collector Without Power		DCWP-B							
Powered Dust Collector	-		DCP2501			DCP2503			

^{*}Specifications are subject to change without prior notice.

W BMT 1001GR / BMT 1003GR BMT 1031GR / BMT 1033GR



*Machine shown with optional accessories

STANDARD ACCESSORIES:

- 1. Guards & toolrests
- 2. Switches
- 3. Disc flanges
- 4. Grinding wheel
- 5. Eye shield

OPTIONAL ACCESSORIES:

- 1. Stands
- 2. Dust collector
- 3. Diamond wheel dresser
- 4. Independent stop switch
 - * NVR = Non Voltage Reset EMS = Emergency Stop OLP = Overload Protection

SPECIFICATION:

MODEL	BMT 1001GR/4P	BMT 1031GR/4P	BMT 1003GR/4P	BMT 1033GR/4P	BMT 1031GR/2P	BMT 1033GR/2P	BMT 1203GR	BMT 1223GR
Output		56	560W 750W		1500W			
Guard Type	A: 2.5 mm	3B: 280 x 85 x 2.5 mm	A: 2.5 mm	3B: 280 x 85 x 2.5 mm	3B: 280 x 85 x 4.0 mm		6B: 320 x 75 x 3.5 mm	
Guard Extractor / Chip Outlet				34	mm			
Guard Thickness		2.5	mm		4.0	mm	3.5	mm
Wheel Speed			1420 rpm 1720 rpm			2850 rpm 3450 rpm		1420 rpm 1720 rpm
Wheel Type				A36 -	+ A60			
Wheel Size		250 x 38 x 25.4 mm					300 x 50 x 25.4 mm	
Pole / Phase	4P /	1PH	4P /	3PH	2P /	3PH	4P / 3PH	
Eye Shield (L x M x H)				140 x 11	0 x 5 mm			
Machine Dimension			600 x 360	x 420 mm			760 x 490 x 440 mm	
Packing Dimension			640 x 360 x 42	0 mm (Carton)			790 x 460 x 560 mm (Wooden Crate)	
Net Weight			47	kgs			76 kgs	
Toolrest				Adjus	stable			
Switch	Button	NVR + EMS + OLP	Button	1	NVR + EMS + OLP		NVR + Button	NVR + Button + OLP
CE standard	NO	YES	NO	NO YES		NO	YES	
			OPTIONAL A	CCESSORIES				
Stand	Stand B / Stand L Stand L1							d L1
Dust Collector Without Power		DCWP-B						
Powered Dust Collector	DCP2	2501	DCP:	2503	DCP2501		DCP2503	

^{*}Specifications are subject to change without prior notice.

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W BMT 611GR



▼ BMT 811GR / BMT 831GR / BMT 831AGR BMT 813GR / BMT 833GR / BMT 833AGR



STANDARD ACCESSORIES:

- 1. Guards & toolrests
- 2. Switches
- 3. Disc flanges
- 4. Grinding wheel
- 5. Eye shield

OPTIONAL ACCESSORIES:

- 1. Stands
- 2. Dust collector
- 3. Diamond wheel dresser
- 4. Independent stop switch
 - * NVR = Non Voltage Reset EMS = Emergency Stop OLP = Overload Protection

SPECIFICATION:

MODEL	BMT 611GR	BMT 811GR	BMT 831GR	BMT 831AGR	BMT 813GR	BMT 833GR			
Output	150W	300W 420W			30	0W	520W		
Guard Type	BS: 165 x 40 x 2.0 mm		2B: 225 x 55 x 2.0 mm						
Guard Extractor / Chip Outlet	(1−)		34 mm						
Guard Thickness				2.0 mm					
Wheel Speed			50HZ, 2P: 28	350 rpm / 60 HZ, 2	2P: 3450 rpm				
Wheel Type				A36 + A60					
Wheel Size	150 x 25 x 20 mm	200 x 19 x 15.8 mm 200 x 25 x 20 mm 200 x 19 x 15.8 mm				200 x 25	200 x 25 x 20 mm		
Pole / Phase		2P /	2P / 1PH 2P / 3PH						
Eye Shield (L x M x H)	110 x 90 x 5 mm	100 x 30 x 5 mm 130 x 100 x 5 mm			100 x 30 x 5 mm	130 x 100 x 5 mm			
Machine Dimension	410 x 220 x 260 mm			470 x 265	x 300 mm				
Packing Dimension - Carton	430 x 220 x 250 mm			525 x 335	x 295 mm				
Net Weight	10.5 kgs			20.5	kgs				
Toolrest				Adjustable					
Switch	NVR + EMS	Rocker	NVR	+ EMS	Button	NVR	+ EMS		
CE standard	YES	NO	Υ	ES	NO	Y	ES		
		OF	TIONAL ACCESS	ORIES					
Stand		Stand A / Stand S							
Dust Collector Without Power		DCWP-B							
Powered Dust Collector	2.5		DCP2501			DCP2503			

^{*}Specifications are subject to change without prior notice.

W BMT 1001GR / BMT 1003GR BMT 1031GR / BMT 1033GR



*Machine shown with optional accessories

STANDARD ACCESSORIES:

- 1. Guards & toolrests
- 2. Switches
- 3. Disc flanges
- 4. Grinding wheel
- 5. Eye shield

OPTIONAL ACCESSORIES:

- 1. Stands
- 2. Dust collector
- 3. Diamond wheel dresser
- 4. Independent stop switch
 - * NVR = Non Voltage Reset EMS = Emergency Stop OLP = Overload Protection

SPECIFICATION:

MODEL	BMT 1001GR/4P	BMT 1031GR/4P	BMT 1003GR/4P	BMT 1033GR/4P	BMT 1031GR/2P	BMT 1033GR/2P	BMT 1203GR	BMT 1223G
Output		56	OW		75	0W	150	00W
Guard Type	A: 2.5 mm	3B: 280 x 85 x 2.5 mm	A: 2.5 mm	3B: 280 x 85 x 2.5 mm	3B: 280 x 8	35 x 4.0 mm	6B: 320 x 7	5 x 3.5 mm
Guard Extractor / Chip Outlet				34	mm			
Guard Thickness		2.5	mm		4.0	mm	3.5	mm
Wheel Speed			1420 rpm 1720 rpm			50HZ, 4P: 1420 rpm 60HZ, 4P: 1720 rpm		
Wheel Type				A36 -	+ A60			
Wheel Size	250 x 38 x 25.4 mm				300 x 50 x 25.4 mm			
Pole / Phase	4P /	4P / 1PH		4P /	3PH			
Eye Shield (L x M x H)				140 x 11	.0 x 5 mm			
Machine Dimension			600 x 360	x 420 mm			760 x 490	x 440 mm
Packing Dimension		640 x 360 x 420 mm (Carton)			790 x 460 x 560 mm (Wooden Crate)			
Net Weight			47	kgs			76 kgs	
Toolrest				Adjus	stable			
Switch	Button	NVR + EMS + OLP	Button	1	NVR + EMS + OL	.P	NVR + Button	NVR + Button + OLP
CE standard	NO	YES	NO		YES		NO	YES
			OPTIONAL A	CCESSORIES				
Stand	Stand B / Stand L Stand L1					nd L1		
Dust Collector Without Power		DCWP-B						
Powered Dust Collector	DCP	2501	DCP	2503	DCP2501		DCP2503	

^{*}Specifications are subject to change without prior notice.

BMT 831CN / BMT 831ACN BMT 833CN / BMT 833ACN

W BMT 1031CN / BMT 1033CN



STANDARD ACCESSORIES:

- 1. Guards & toolrests
- 2. Switches
- 3. Disc flanges
- 4. Grinding wheel
- 5. Wire brush
- 6. Eye shield
- 7. CE standard

OPTIONAL ACCESSORIES:

- 1. Stands
- 2. Dust collector
- 3. Diamond wheel dresser
- 4. High efficiency mop
- 5. Polish compound
- 6. Independent stop switch
 - * NVR = Non Voltage Reset EMS = Emergency Stop OLP = Overload Protection

SPECIFICATION:

MODEL	BMT 831CN	BMT 831ACN	BMT 833CN	BMT 833ACN	BMT 1031CN	BMT 1033CN	
Output	300W	420W	300W	520W	75	0W	
Guard Type	2B: 225	x 55 x 2.0 mm +	4B: 225 x 110	x 2.0 mm	3B: 280 x 85 x 4.0 mm + 5B: 225 x 110 x 4.0 m		
Guard Extractor / Chip Outlet		34 mm + 100 mm					
Guard Thickness		2.5	mm		4.0 mm	+ 2.5 mm	
Wheel Speed		50HZ	, 2P: 2850 rpm	/ 60HZ, 2P: 345	0 rpm		
Wheel Type		A	60		A	36	
Wheel Size		200 x 25	x 20 mm		250 x 38 x 25.4 mm		
Wire Brush		200 x 19 x 16 mm				x 25.4 mm	
Pole / Phase	2P / 1PH		2P /	2P/3PH		2P / 3PH	
Eye Shield (L x M x H)	130 x 100 x 5 mm				140 x 110 x 5 mm		
Machine Dimension	520 x 410 x 300 mm				650 x 410 x 420 mm		
Packing Dimension (Carton)		575 x 310 x 350 mm				x 420 mm	
Net Weight		20.5	kgs		46 kgs		
Toolrest			Adju	stable			
Switch		NVR +	+ EMS		NVR + EMS + OLP		
CE standard			Υ	ES			
		OPTIONAL A	CCESSORIES				
Stand	Stand A / Stand S				Stand B / Stand L		
Dust Collector Without Power							
Powered Dust Collector	DCP	2501	DCP	2503	DCP2501	DCP2503	

^{*}Specifications are subject to change without prior notice.

▼ BMT 6211GS / BMT 8431GS / BMT 8433GS

GRINDER & SANDER



STANDARD ACCESSORIES:

- 1. Guards & toolrests
- 2. Switches
- 3. Disc flanges
- 4. Sanding attachment 5. Grinding wheel
- 6. Eye shield
- 7. CE standard

OPTIONAL ACCESSORIES:

- 1. Stands
- 2. Dust collector
- 3. Diamond wheel dresser
- 4. Independent stop switch
 - * NVR = Non Voltage Reset EMS = Emergency Stop OLP = Overload Protection

MODEL	BMT 6211GS	BMT 8431GS	BMT 8433GS	BMT 843GSA	BMT 1043GS	
Output	200W	420W	520W	1000W	1120W	
Guard Type	BS: 165 x 40 x 2.0 mm	2B: 225 x 55 x 2.0 mm		m	3B: 280 x 85 x 2.5 mm	
Guard Extractor / Chip Outlet		34 m	m x 2		34 mm + 100 mm	
Guard Thickness		2.0	mm		2.5 mm	
Wheel Speed		50HZ, 2P: 2	850 rpm / 60HZ, 21	P: 3450 rpm		
Wheel Type		A	60		A36	
Wheel Size	150 x 25 x 20 mm		200 x 25 x 20 mm		250 x 38 x 25.4 mm	
Belt Size	50 x 995 mm		100 x 995 mm		100 x 1120 mm	
Belt Speed		15 m/sec 24 m/sec			30 m/sec	
Pole / Phase	2P/1I	1PH 2P,			/ 3PH	
Eye Shield (L x M x H)	110 x 90 x 5 mm		130 x 100 x 5 mm		140 x 110 x 5 mm	
Machine Dimension	410 x 215 x 585 mm		520 x 270 x 620 mm	1	630 x 360 x 680 mm	
Packing Dimension (Carton)	555 x 375 x 260 mm		610 x 490 x 295 mm	1	650 x 540 x 425 mm	
Net Weight	16 kgs	29	kgs	35.5 kgs	50 kgs	
Toolrest			Adjustable			
Switch		NVR + EMS		NVR +	EMS + OLP	
CE standard			YES			
		OPTIONAL ACCES	SORIES			
Stand	Stand A / Stand S				Stand B / Stand L	
Dust Collector Without Power						
Powered Dust Collector	DCP2501 DCP2503					

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OPTIONAL ACCESSORIES:



Chamfering Attachment Stable steel material for table. High trim capacity. Contant chamfer (45 degree) by using rail stop.

SPECIFICATION:

MODEL	BMT 380	BMT 680	
Belt Size	2000 x 75 mm	2000 x 150 mm	
Belt Speed	30 M/sec @ 50Hz	36 M/sec @ 60Hz	
Grinding Surface	75 x 500 mm	150 x 500 mm	
Contact Wheel	Ø200, 75 mm wide	Ø200, 150 mm wide	
Motor	3 HP; Opt. 5 HP	5 HP	
N.W. / G.W.	85 kgs / 90 kgs	100 kgs / 110 kgs	
Cuft	7'	8.5'	
Package	Ca	rton	

MODEL	BMT 380A	BMT 680A			
Dust Collector	Тур	oe A			
Dust Hose Size	Ø 76 mm				
Blower Wheel	Ø 229 mm				
Capacity	700 CFM				
Motor	1/2 HP; Opt. 3/4 HP				
N.W. / G.W.	105 kgs / 135 kgs	120 kgs / 150 kgs			
Cuft	26'				
Package	Wooden Case				

▼ BMT 4481GS / BMT 4483GS



*Machine shown with optional accessories



- 1. Guards & toolrests
- 2. Switches
- 3. Stands for BMT 4591GS & BMT 4593GS

STANDARD ACCESSORIES:

- 4. Sanding attachment
- 5. Eye shield
- 6. CE standard

OPTIONAL ACCESSORIES:

- 1. Stands
- 2. Dust collector
- High efficiency mop
 Polish compound
- 5. Independent stop switch
 - * NVR = Non Voltage Reset EMS = Emergency Stop OLP = Overload Protection

SPECIFICATION:

MODEL	BMT 4481GS	BMT 4483GS	BMT 4591GS	BMT 4593GS	
Output	750W		150	00W	
Drive Wheel	126 x 1	.05 mm	170 x 1	.06 mm	
Wheel Speed		50HZ, 2P: 2850 rpr	m / 60HZ, 2P: 3420 rpr	n	
Guard Extractor / Chip Outlet		100 mm			
Belt Size	100 x 1	220 mm	100 x 1	500 mm	
Belt Speed	19 m/sec 25 m/		n/sec		
Pole / Phase	2P / 1PH	2P / 3PH	2P / 1PH	2P / 3PH	
Eye Shield (L x M x H)		130 x	100 x 5 mm		
Machine Dimension	630 x 390	x 270 mm	820 x 480 x 1100 mm		
Packing Dimension (Carton)	525 x 335	x 295 mm	790 x 460 x 560 mm	790 x 360 x 420 mm	
Net Weight	27	kgs	67	kgs	
Toolrest		Ad	justable		
Switch		NVR +	OLP (IP54)		
CE standard			YES		
	OPTIC	ONAL ACCESSORIES			
Stand	Stand B1		Standard machine already has stand.		
Dust Collector Without Power		D	CWP-D		
Powered Dust Collector	DCP2501	DCP2503	DCP2501	DCP2503	

^{*}Specifications are subject to change without prior notice.

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ACCESSORIES FOR BENCH / BELT GRINDER

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*Notes: Except for metal belt grinder series (BMT 380 / BMT 680 series)











Wheel

High Efficiency Мор

Polish Polish Compound





* NVR = Non Voltage Reset EMS = Emergency Stop OLP = Overload Protection

NVR+EMS

Independent **Emergency Stop**

NVR+EMS+OLP

Diamond Wheel Dresser

POWERED DUST COLLECTOR:

MODEL	DCP2501	DCP2503			
Capacity	750 CFM (21.2 m ³ /min)				
Hose Diameter	5" or 4" x 2				
Air Speed	28 M/S				
Static Pressure	5.5" H ₂ O (140 kg/m ²)				
Motor	230V / 50HZ / 1PH 1/2 HP	400V / 50HZ / 3PH 1/2 HP			
Packing Dimension	830 x 503 x 680 mm				
Net Weight	45	kgs			

^{*}Specifications are subject to change without prior notice.



DUST COLLECTOR WITHOUT POWER:

MODEL	DCWP-A	DCWP-B	DCWP-C	DCWP-D	
Capacity		Air Bag Ca	apacity 22L		
Flex Tube (Dia x piece)	34 mm x 1	34 mm x 2	34 mm x 1 100 mm x 1	100 mm x 2	
Clamp Size (Dia x piece)	34 mm x 1	34 mm x 2	34 mm x 1 100 mm x 1	100 mm x 2	
Dimension (Dia x H)	360 x 355 mm				
Net Weight	6.5 kgs	7 kgs	6.5 kgs		

^{*}Specifications are subject to change without prior notice.



STANDS:

MODEL	STAND S	STAND L	STAND L1	STAND A	STAND B	STAND B1
Top Plate	None	е	400 x 325 mm	295 x 220 mm	370 x 2	85 mm
Base	450 x 420 mm	650 x	450 mm	None		
Water Cup	160 x	160 x 100 mm (2.5L)		None		
Dimension	450 x 420 x 810 mm	650 x 450 x 810 mm		295 x 280 x 830 mm	380 x 395 x 810 mm	
Net Weight	21 kgs	25 kgs 26 kgs		13 kgs	19	kgs

^{*}Specifications are subject to change without prior notice.

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