



BMT 811GR



BMT 32N



BMT D150B



BMT 20SJ

BEMATO®

STRIVING FOR SERVICE
AND SATISFACTION

SINCE 1976

BENIGN ENTERPRISE Co., LTD.

SUITE 4, 5F., NO. 20, TA-LONG ROAD, TAICHUNG, TAIWAN R.O.C.

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BEMATO 2019.01 002

BEMATO

GRINDING MACHINE

GRINDING MACHINE



BMT 150J-CNC



BMT 2550AH



BMT 650UH

BEMATO®



STRIVING FOR SERVICE
AND SATISFACTION

COMPANY PROFILE

COMPANY NAME	: BENIGN ENTERPRISE CO., LTD.
ADDRESS	: SUITE 4, 5F., NO.20, TA-LONG ROAD, TAICHUNG, TAIWAN
TEL	: +886-4-23233016
FAX	: +886-4-23232826, 23238341
E-MAIL	: service@e-bemato.com
WEBSITE:	: www.e-bemato.com
REGISTERED TRADEMARK	: BEMATO
COMPANY ESTABLISHED	: 1976
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	: <u>A) MACHINE TOOLS</u> 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.) <u>B) MACHINE TOOLS ACCESSORIES & INDUSTRIAL TOOLS & SUPPLIES</u> <u>C) PNEUMATIC TOOLS</u>

SURFACE GRINDER

- SURFACE GRINDER P.1~18
- PLC SURFACE GRINDER P.19~26
- ROTARY SURFACE GRINDER P.27~28

CYLINDRICAL GRINDER

- UNIVERSAL CYLINDRICAL GRINDER P.29~34
- NC UNIVERSAL CYLINDRICAL GRINDER P.35~36
- CNC UNIVERSAL CYLINDRICAL GRINDER P.37~38

INTERNAL GRINDER

- NC INTERNAL GRINDER P.39~40
- CNC INTERNAL GRINDER P.41~42

CENTERLESS GRINDER

- CENTERLESS GRINDER P.43~50

OTHER GRINDING MACHINES

- HYDRAULIC CRANKSHAFT GRINDER P.51
- HEAVY DUTY PLAIN ROLL GRINDER P.52
- CNC INTERNAL EXTERNAL TURNING GRINDING COMPLEX MACHINE P.53~54

TOOL GRINDER

- UNIVERSAL CUTTER GRINDER P.55~56
- UNIVERSAL DRILL & TAP GRINDER P.57~58
- UNIVERSAL TOOL GRINDER P.59~60
- GUN DRILL GRINDER P.61
- HOLE SAW & METAL BORER GRINDER P.61
- SLITTING CUTTER GRINDER P.62
- DIAMOND WHEEL DRESSING GRINDER P.62
- DRILL, TAP, END MILL GRINDER P.63~64
- UNIVERSAL CUTTER & TOOL GRINDER P.65~66
- UNIVERSAL DRILL & TOOL GRINDER P.67~68
- MONASET TOOL GRINDER P.69~70
- DIAMOND GRINDER P.71
- DIAMOND & PCBN TOOL GRINDER P.71
- PRECISION SPINDLE GRINDING MACHINE P.72
- HOLDER MAINTENANCE & POLISH MACHINE P.72
- HOB SHARPENING MACHINE P.73
- PRECISION ROD CUT-OFF & END SURFACE GRINDING MACHINE P.74

BENCH GRINDER & BELT GRINDER

- BENCH GRINDER P.75~76
- BENCH GRINDER & WIRE BRUSHER P.77
- BENCH GRINDER & SANDER P.78
- BELT SANDER P.79
- ACCESSORIES FOR BENCH & BELT GRINDER P.80~81

▼ BMT 612B



*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 rpm
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. Inclined 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)



▼ BMT 618B / BMT 818B (Roller Guide)



*Machine shown with optional accessories

FEATURES:

- 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.

SPECIFICATION:

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	150 x 450 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	60Hz: 3600 rpm; 50Hz: 3000 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 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 mm

*Specifications are subject to change without prior notice.

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. Inclined 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 618A / BMT 820A (Hydraulic Table)



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

*Machine shown with optional accessories

SPECIFICATION:

MODEL	BMT 618A	BMT 820A
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 / 460 mm (Opt.)	
Longitudinal Table Speed	3~25 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	0.15~7.5 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 (Opt.)	
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	25W (Opt.)	
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

*Specifications are subject to change without prior notice.

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 & eye bolts
8. Tools & tool box

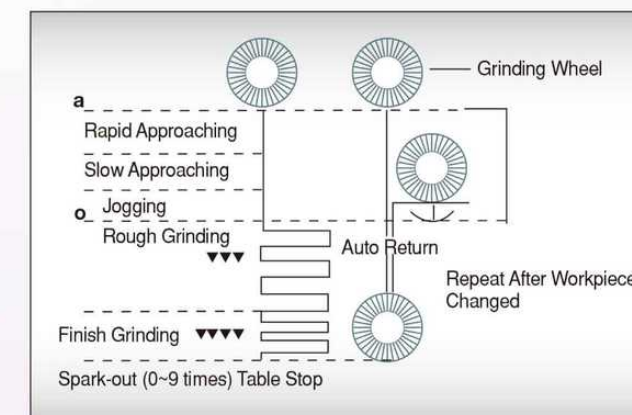
OPTIONAL ACCESSORIES FOR BMT 618A / 820A / BMT 618AD / 820AD:

1. Permanent/electromagnetic chuck
2. Parallel dresser
3. Inclined 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:

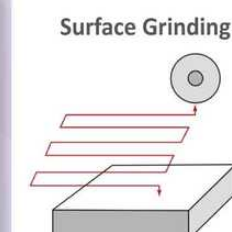
*Machine shown with optional accessories

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 / 460 mm (Opt.)	
Longitudinal Table Speed	3~25 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	0.15~7.5 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 (Opt.)	
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	0.001 mm	
Auto Downfeed Spark Out	0~9 passes	
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

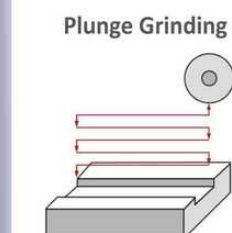
*Specifications are subject to change without prior notice.



Operation Panel



Surface Grinding



Plunge Grinding

SURFACE GRINDER SADDLE TYPE

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BEMATO®



BMT 1545H / BMT 2045H
(Longitudinal by hydraulic,
Cross/Vertical feed manual)

*Machine shown with
optional accessories



*Machine shown with
optional accessories

- 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:

- Grinding wheel
- Wheel flange
- Flange extractor
- Wheel balancing arbor
- Wheel balancing base
- Diamond wheel dresser
- Levelling screw and plates
- Working lamp
- Tools & tool box

OPTIONAL ACCESSORIES:

- Electro/Permanent magnetic chuck
- Automatic demagnetizer for electromagnetic chuck
- Micro feed for cross/vertical feed
- Power rapid up/down system
- NC auto down feed (AD5)
- Parallel dresser
- NC auto parallel dressing & compensating system
- Coolant system
- Dust suction system (1/2HP)
- Dust suction w/ coolant system
- Magnetic separator w/ coolant system
- Auto paper strip filter w/ coolant system
- Auto paper strip filter & magnetic separator w/ coolant system
- Automatic crossing stroke adjustment by control panel
- Back water splash shield for BMT 2550H/AH
- Enclosed splash shield for BMT 2550H/AH
- Spindle motor inverter
- Tool makers vise
- Auto balancing device
- Digital readout unit
- Crisscross grinding function

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
(manual)



7. NC auto parallel dressing &
compensating system



11. Magnetic separator
w/ coolant system



12. Auto paper strip filter
w/ coolant system



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

SPECIFICATION:

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 mm		500 mm / 600 mm (Opt.)
Total Max. Safety Table Load	144 kgs	150 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 60Hz: 1100 mm/min 50Hz: 900 mm/min for AH	Manual for H 60Hz: 1100 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 for 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 (L x W x 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.

BENIGN ENTERPRISE Co., LTD.

SURFACE GRINDER SADDLE TYPE

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▼ BMT CS3060AH / BMT DS3060AH BMT CL3060AH / BMT DL3060AH



*Machine shown with optional accessories

Model	BMT CS3060AH	BMT CL3060AH	BMT DS3060AH	BMT DL3060AH
Grinding Wheel	7"	14"	7"	14"
Cross Feed	Auto Cross Feed			
Auto Cross Stroke Adjustment	Option		Standard	
Longitudinal	Hydraulic		Sensor & solenoid valve	
Lubrication	15 min/time		Continuous	
Back Water Splash Shield	Option		Standard	



▶ BMT 4080AH (Longitudinal by hydraulic, Auto cross feed, Vertical feed manual, Continuous lubrication)

*Machine shown with optional accessories

- 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.

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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. 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 & magnetic 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



3. Micro feed for cross/vertical feed



4. Power rapid up/down system



5. NC auto down feed (AD5)



6. Parallel dresser (manual type)



7. NC auto parallel dressing & compensating system



11. Magnetic separator w/ coolant system



12. Auto paper strip filter w/ coolant system



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

SPECIFICATION:

MODEL	BMT CS3060AH BMT DS3060AH	BMT CL3060AH BMT DL3060AH	BMT 4080AH
Grinding Surface of Table	300 x 600 mm		400 x 800 mm
Max. Grinding Surface	300 x 600 mm		400 x 800 mm
Max. Distance from Spindle Center to Table	500 mm / 600 mm (Opt.)		550 mm / 650 mm (Opt.)
Total Max. Safety Table Load	300 kgs		400 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	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	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	5 HP	
Hydraulic Pump	1 HP		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.

BENIGN ENTERPRISE Co., LTD.

SURFACE GRINDER COLUMN TYPE

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BEMATO®

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
2. Vertical travel operated manual by MPG
3. Max distance from center of spindle to table: 600mm



▼ BMT 50100AHR

*Machine shown with optional accessories



▼ BMT 60150AHR

*Machine shown with optional accessories

- 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
11. Auto paper strip filter w/ coolant system
12. Auto paper strip filter & magnetic 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
20. Crisscross grinding function

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 (manual)



6. NC auto parallel dressing & compensating system



8. Dust suction w/ coolant system



11. Magnetic separator w/ coolant system



12. Auto paper strip filter w/ coolant system



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

SPECIFICATION:

MODEL	BMT 50100AHR / 50150AHR / 50200AHR			BMT 60100AHR / 60150AHR / 60200AHR			BMT 70100AHR / 70150AHR / 70200AHR		
Grinding Surface of Table	500 x 1000 / 1500 / 2000 mm			600 x 1000 / 1500 / 2000 mm			700 x 1000 / 1500 / 2000 mm		
Max. Grinding Surface	500 x 1000 / 1500 / 2000 mm			600 x 1000 / 1500 / 2000 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	405 x 50 x 127 mm								
Spindle Motor	10 HP / 15 HP (Opt.)								
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	1KW AC Servo Motor								
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)	4600 x 2300 x 2040 mm	4800 x 2300 x 2040 mm	6000 x 2300 x 2040 mm	4600 x 2450 x 2040 mm	4800 x 2450 x 2040 mm	6000 x 2450 x 2040 mm	4600 x 2550 x 2040 mm	4800 x 2550 x 2040 mm	6000 x 2550 x 2040 mm
Packing Dimension (L x W x H)	3760 x 2300 x 2280 mm	3910 x 2300 x 2280 mm	4770 x 2300 x 2280 mm	3760 x 2300 x 2280 mm	3910 x 2300 x 2280 mm	4770 x 2300 x 2280 mm	3760 x 2300 x 2280 mm	3910 x 2300 x 2280 mm	4770 x 2300 x 2280 mm

*Specifications are subject to change without prior notice.

BENIGN ENTERPRISE Co., LTD.

▼ **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)



*Machine shown with optional accessories

- 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-free performance.
- The structural parts such as base and table are of a double wall construction, combined and scientifically rib reinforced 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
11. Auto paper strip filter & magnetic 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
19. Crisscross grinding function

STANDARD ACCESSORIES: OPTIONAL ACCESSORIES:



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	800 mm (Std.) / 1000 mm (Opt.)			700 mm (Std.) / 900 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	(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	60Hz: 1750 rpm, 50Hz: 1450 rpm			
Wheel Dimension	405 x 50 x 127 mm / Max. 405 x 75 x 127 mm (Opt.)			405 x 50 x 203 mm
Spindle Motor	10 HP / 15 HP (Opt.)			
Hydraulic Pump	7.5 HP	10 HP		15 HP
Auto Cross Feed Motor	1/5 HP			
Rapid Head Elevation Motor	1KW AC Servo Motor			
Coolant Pump	1/2 HP (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.

▼ **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)



*Machine shown with optional accessories

- 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-free performance.
- The structural parts such as base and table are of a double wall construction, combined and scientifically rib reinforced 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.

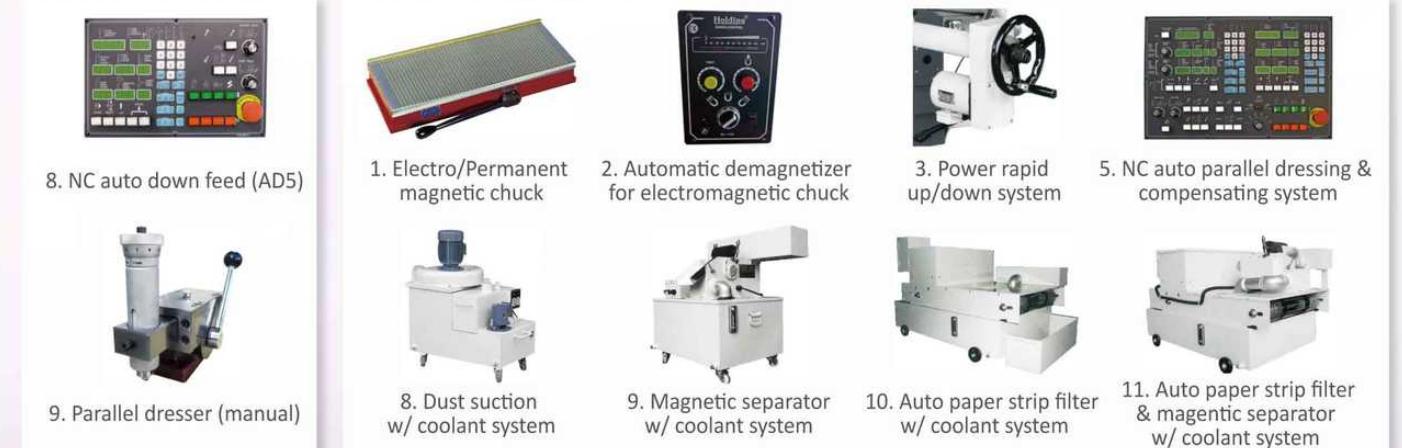
STANDARD ACCESSORIES:

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
11. Auto paper strip filter & magnetic 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
19. Crisscross grinding function

STANDARD ACCESSORIES: OPTIONAL ACCESSORIES:



SPECIFICATION:

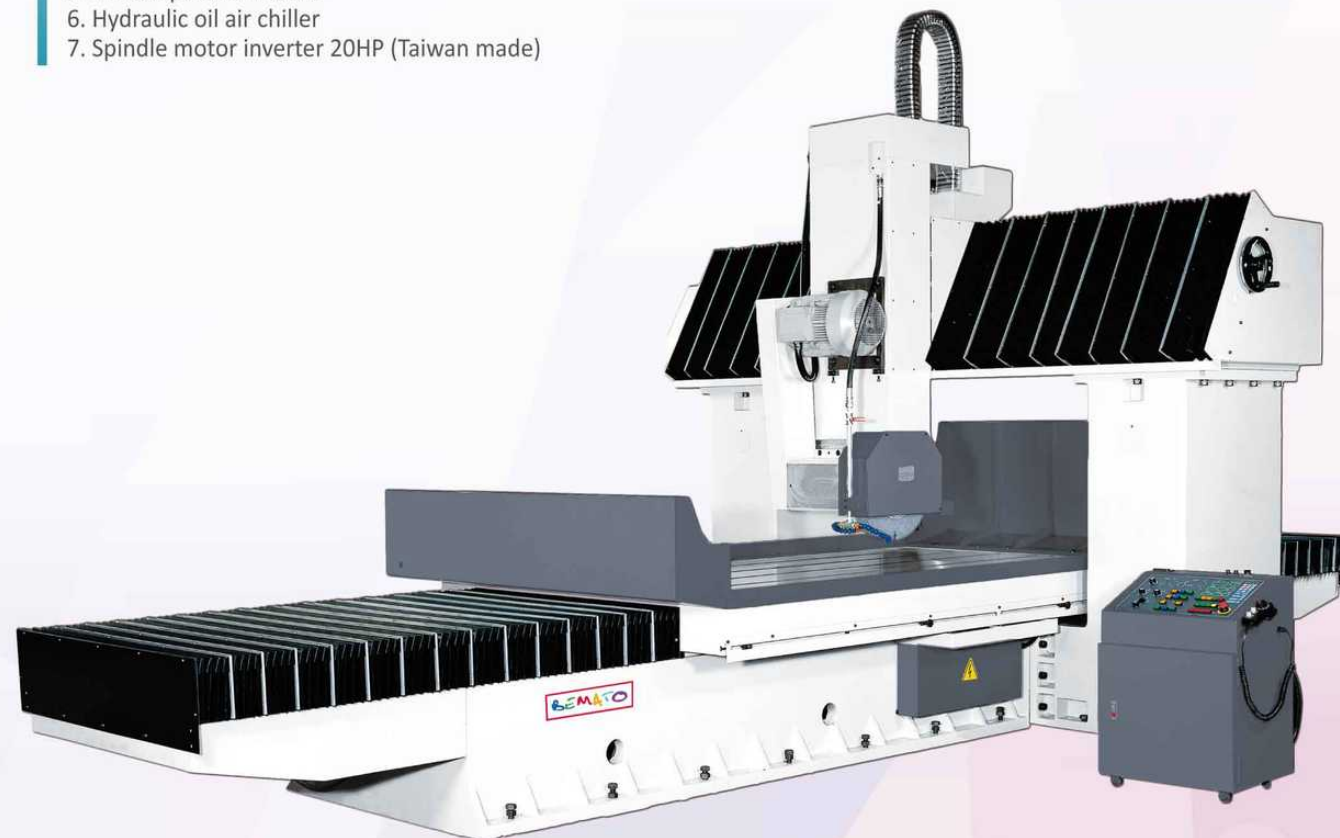
MODEL	BMT 100150AHD	BMT 100200AHD	BMT 100300AHD	BMT 100400AHD
Grinding Surface of Table	1000 x 1500 mm	1000 x 2000 mm	1000 x 3000 mm	1000 x 4000 mm
Max. Grinding Surface	1000 x 1500 mm	1000 x 2000 mm	1000 x 3000 mm	1000 x 4000 mm
Max. Distance from Spindle Center to Table	800 mm (Std.) / 1000 mm (Opt.)			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	60Hz: 1750 rpm, 50Hz: 1450 rpm			
Wheel Dimension	405 x 50 x 127 mm / Max. 405 x 75 x 127 mm (Opt.)			405 x 50 x 203 mm
Spindle Motor	10 HP / 15 HP (Opt.)			
Hydraulic Pump	7.5 HP	10 HP		15 HP
Auto Cross Feed Motor	1/5 HP			
Rapid Head Elevation Motor	1KW AC Servo Motor			
Coolant Pump	1/2 HP (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.

▼ BMT 120200AHD / BMT 120300AHD / BMT 120400AHD / BMT 120500AHD / BMT 120600AHD (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
7. Spindle motor inverter 20HP (Taiwan made)



*Machine shown with optional accessories

- 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 vertical 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.

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 & magnetic 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



8. Dust suction w/ coolant system



2. Automatic demagnetizer for electromagnetic chuck



9. Magnetic separator w/ coolant system



3. Power rapid up/down system



10. Auto paper strip filter w/ coolant system



5. NC auto parallel dressing & compensating system



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

SPECIFICATION:

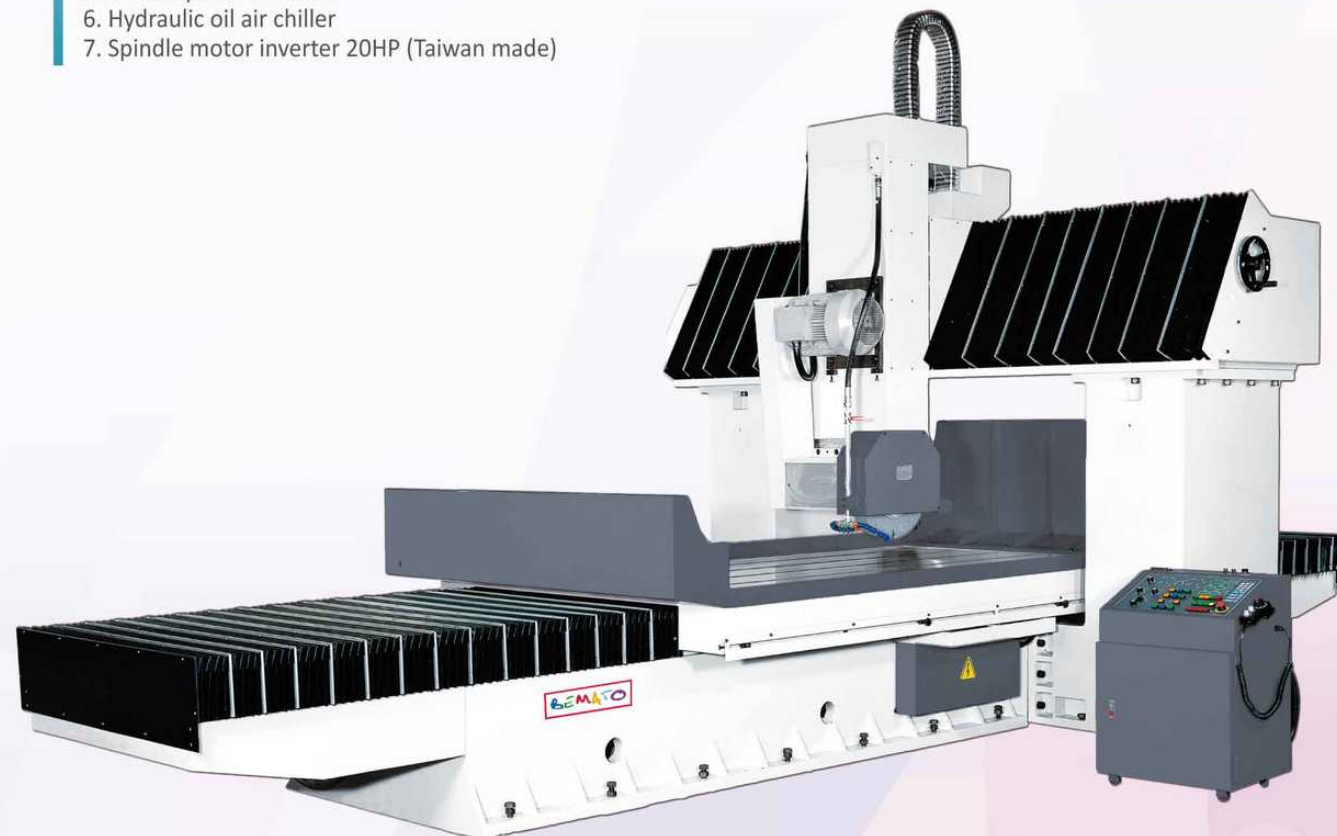
MODEL	BMT 120200AHD	BMT 120300AHD	BMT 120400AHD	BMT 120500AHD	BMT 120600AHD
Grinding Surface of Table	1200 x 2000 mm	1200 x 3000 mm	1200 x 4000 mm	1200 x 5000 mm	1200 x 6000 mm
Max. Grinding Surface	1200 x 2000 mm	1200 x 3000 mm	1200 x 4000 mm	1200 x 5000 mm	1200 x 6000 mm
Max. Distance from Spindle Center to Table	1000 mm / 1200 mm (Opt.)		900 mm / 1100 mm (Opt.)		
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 mm; (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 mm; (x 5) 0.5 mm; (x 10) 1 mm				
Auto Down Feed	0.001~0.999 mm/time				
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	1KW AC Servo Motor				
Rapid Head Elevation Motor	1KW AC Servo Motor				
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.

**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
7. Spindle motor inverter 20HP (Taiwan made)



*Machine shown with optional accessories

- 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 vertical 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.

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 & magnetic 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



8. Dust suction w/ coolant system



2. Automatic demagnetizer for electromagnetic chuck



9. Magnetic separator w/ coolant system



3. Power rapid up/down system



10. Auto paper strip filter w/ coolant system



5. NC auto parallel dressing & compensating system



11. Auto paper strip filter & magnetic 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 / 1200 mm (Opt.)		900 mm / 1100 mm (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 mm; (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 mm; (x 5) 0.5 mm; (x 10) 1 mm				
Auto Down Feed	0.001~0.999 mm/time				
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	1KW AC Servo Motor				
Rapid Head Elevation Motor	1KW AC Servo Motor				
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.

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



*Machine shown with optional accessories

- 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.

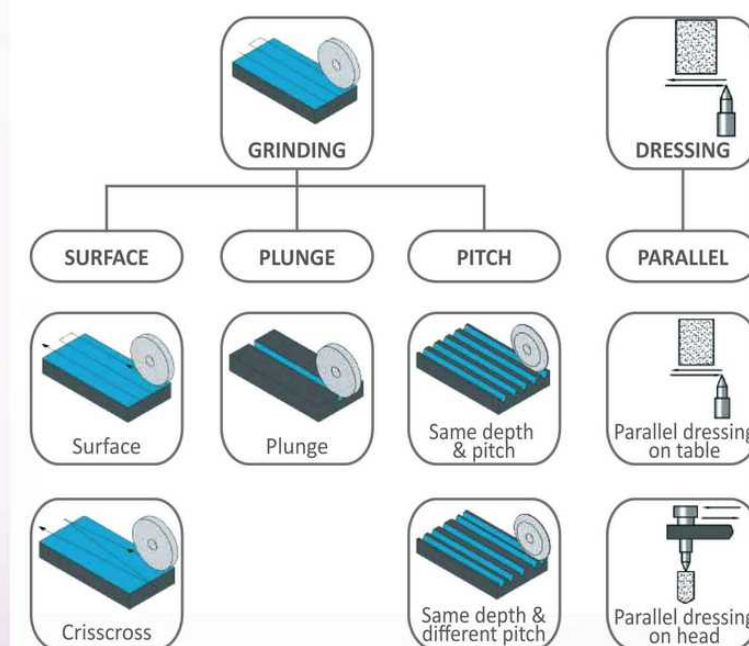
STANDARD ACCESSORIES:

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 & magnetic separator w/ coolant system
5. Auto balancing device

MAIN FUNCTION SELECTION:



FEATURES:



PLC controller



Cross stroke adjustment for X & Z axes

OPTIONAL ACCESSORIES:



1. Electro magnetic chuck



2. Automatic demagnetizer for electromagnetic chuck



3. NC auto parallel dressing & compensating system



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

SPECIFICATION:

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 mm		550 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	(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	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.

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)

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



*Machine shown with optional accessories

- 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.

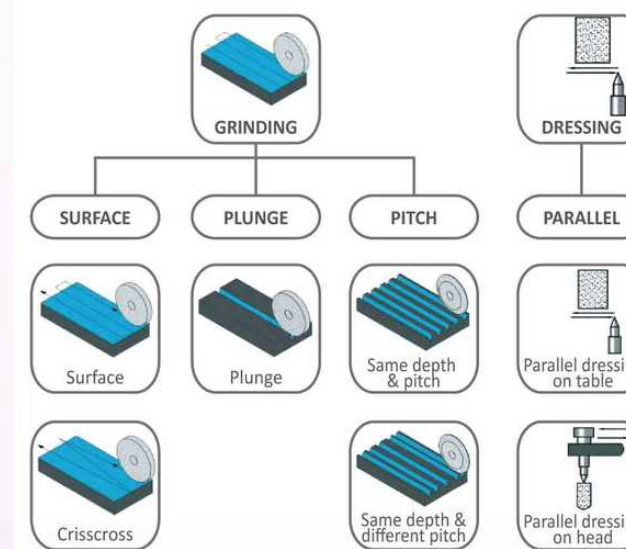
STANDARD ACCESSORIES:

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 & magnetic separator w/ coolant system
5. Auto balancing device

MAIN FUNCTION SELECTION:



FEATURES:



PLC controller



Cross stroke adjustment for X & Z axes

OPTIONAL ACCESSORIES:



1. Electro magnetic chuck



2. Automatic demagnetizer for electromagnetic chuck



3. NC auto parallel dressing & compensating system



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

SPECIFICATION:

MODEL	BMT 50100ADP BMT 60100ADP BMT 70100ADP	BMT 50150ADP BMT 60150ADP BMT 70150ADP	BMT 50200ADP BMT 60200ADP BMT 70200ADP
Grinding Surface of Table	500 x 1000 mm 600 x 1000 mm 700 x 1000 mm	500 x 1500 mm 600 x 1500 mm 700 x 1500 mm	500 x 2000 mm 600 x 2000 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, Machine + Semi-enclosed Splash Guard)	6870 kgs / 6800 + 830 kgs 7170 kgs / 7100 + 830 kgs 7470 kgs / 7400 + 830 kgs	7870 kgs / 8100 + 850 kgs 8170 kgs / 8400 + 850 kgs 8470 kgs / 8700 + 850 kgs	9070 kgs / 9400 + 900 kgs 9370 kgs / 9700 + 900 kgs 9670 kgs / 10000 + 900 kgs
Machine Dimension (L x W x H)	4800 x 2500 x 2040 mm 4800 x 2600 x 2040 mm 4800 x 2700 x 2040 mm	5000 x 2500 x 2040 mm 5000 x 2600 x 2040 mm 5000 x 2700 x 2040 mm	6200 x 2500 x 2040 mm 6200 x 2600 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.

**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



*Machine shown with optional accessories

- 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.

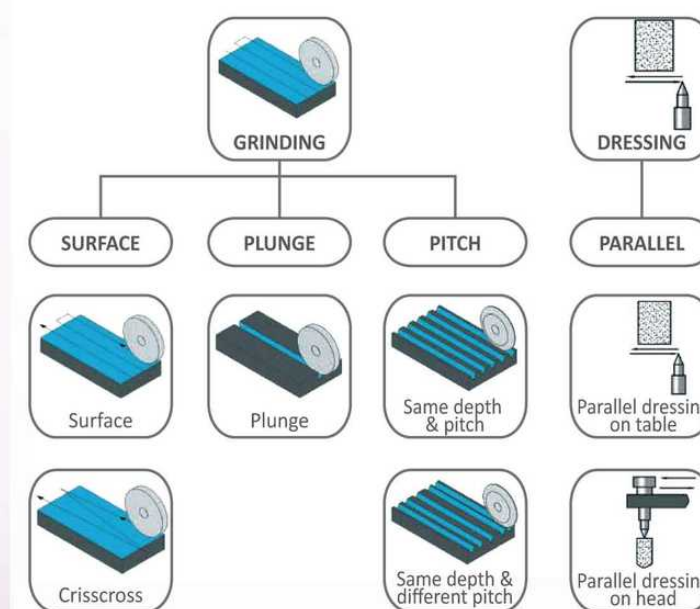
STANDARD ACCESSORIES:

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. 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 & magnetic separator w/ coolant system
5. Auto balancing device

MAIN FUNCTION SELECTION:



FEATURES:



PLC controller



Cross stroke adjustment for X & Z axes

OPTIONAL ACCESSORIES:



1. Electro magnetic chuck



2. Automatic demagnetizer for electromagnetic chuck



3. NC auto parallel dressing & compensating system



4. Auto paper strip filter & magnetic 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 mm/min			
Rapid Power Hand Elevation	225 mm/min			
Auto Cross Feed Motor	750W AC Servo Motor			
Rapid Head Elevation Motor	1KW AC Servo Motor			
Cross & Vertical Feed on Handwheel	(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 (Max. 405 x 75 x 127 mm)			
Wheel Speed	1450 rpm			
Spindle Motor	10 HP / 15 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	6260 x 2400 x 2555 mm 6260 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.

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
5. Micro feed for cross feed
6. Auto down feed



*Machine shown with optional accessories

Excellent Operation

- Self-induced graphically-controlled interface with intuitively 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.

Modular Design

- 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.

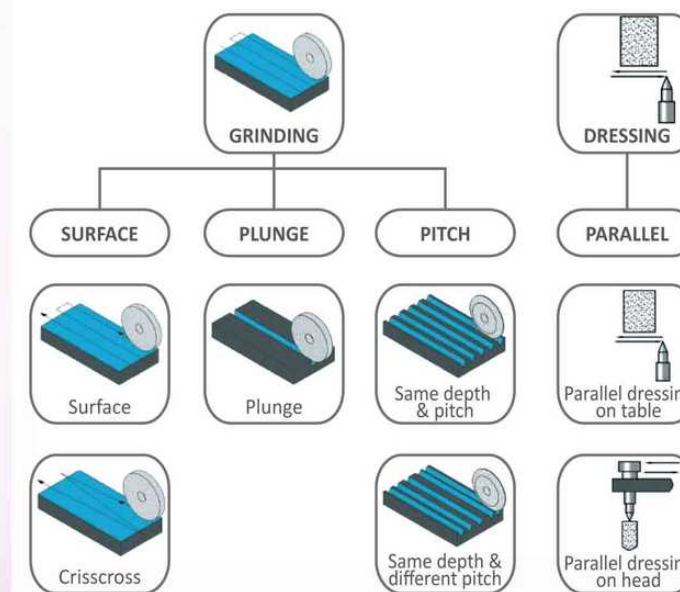
STANDARD ACCESSORIES:

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 & magnetic separator w/ coolant system
5. Auto balancing device

MAIN FUNCTION SELECTION:



FEATURES:



PLC controller



Cross stroke adjustment for X & Z axes

OPTIONAL ACCESSORIES:



1. Electro magnetic chuck



2. Automatic demagnetizer for electromagnetic chuck



3. NC auto parallel dressing & compensating system



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

SPECIFICATION:

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 mm/min	
Rapid Power Cross Feed	1100 mm/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 Servo Motor	
Vertical Feed Motor	750W AC Servo 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



*Machine shown with optional accessories

- 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
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
9. Auto paper strip filter w/ coolant system
10. Auto paper strip filter & magnetic separator w/ coolant system
11. Spindle motor inverter
12. Digital readout unit

OPTIONAL ACCESSORIES:



SPECIFICATION:

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	20~110 rpm			
Rapid Power Cross Feed	1000 mm/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/min (Opt.)			
Auto Down Feed	0.001~0.999 mm/time; 2 mm/rev, 0.005 mm/gra. (Opt.)			
Spindle Motor	2 HP		5 HP	
Cross Feed Motor	1/5 HP AC Motor		400W AC Servo Motor	
Spindle Motor for Rotary Table	120W		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 x 2050 mm		2280 x 1790 x 2100 mm	

*Specifications are subject to change without prior notice.

BMT 2706H / BMT 2710H / BMT 2715H / BMT 2720H
BMT 3506H / BMT 3510H / BMT 3515H / BMT 3520H
(Manual grinding feed, Z axis hydraulic movement / manual movement)

▼ BMT 2706H (with internal grinding attachment)



*Machine shown with optional accessories

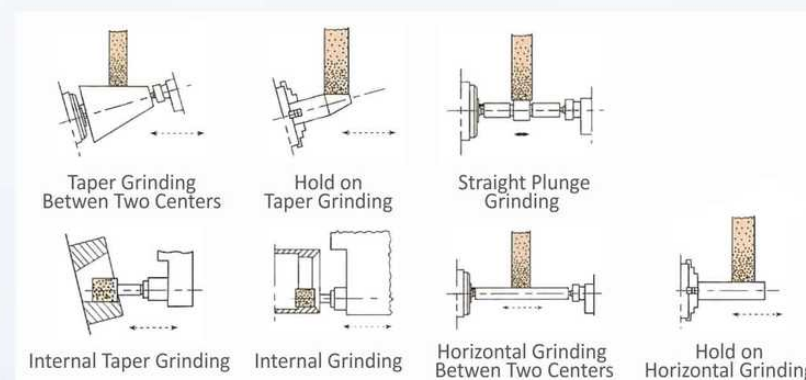
SPECIFICATION:

MODEL		BMT 2706H	BMT 2710H	BMT 2715H	BMT 2720H
CAPACITY	Max. Swing Diameter	270 mm			
	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		
WORK HEAD	Spindle Speed	Vari. Speeds, 60Hz: 11~500 rpm; 50Hz: 9~420 rpm			
	Swivel Angle	120° (CCW: 90°; CW: 30°)			
	Center Taper	MT 4			
	Spindle Rotation	Setting, Normal and Reverse Rotation			
TABLE	Horizontal Travel Speed	50~4000 mm/min	50~3000 mm/min		
	Handwheel Feed	20 mm/rev			
	Swivel Angle CCW / CW	11° / 6°	9° / 5°	7° / 4°	5° / 3°
	Min. Travel	8 mm			
WHEEL HEAD	Wheel Size	405 x 25~50 x 152.4 mm / 455 x 50 x 152.4 mm (Opt.)			
	Max. Peripheral	2000 m/min			
	Wheel Speed	2 Steps, 60Hz: 1499 / 1600 rpm; 50Hz: 1508 / 1603 rpm			
	Total Front & Rear Travel	Grinding Wheel 175 mm			
	Speedy Feed Travel	H type 40 mm / NC1 Type Adjustable Setting			
	Total Feed Travel	Grinding Wheel 135 mm			
	Handwheel Feed	1 mm			
TAILSTOCK	Center Travel	30 mm			
	Center Taper	MT 4			
	Wheel Motor	5 HP / 4P; 7.5 HP (Opt.)			
MOTOR	Workhead Motor	1/2 HP / 6P			
	Hydraulic Pump, Tank	2 HP / 4P, 60 L			
	Lubrication Pump, Tank	1 HP / 4P, 30 L			
	Coolant Pump, Tank	1/4 HP / 2P, 100 L			
	Magnetic Separator	1/25 HP / 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 kgs
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 mm
	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 mm

*Specifications are subject to change without prior notice.

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
CAPACITY	Max. Swing Diameter	350 mm			
	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	130 kgs		
WORK HEAD	Spindle Speed	Vari. Speeds, 60Hz: 11~500 rpm; 50Hz: 9~420 rpm			
	Swivel Angle	120° (CCW: 90°; CW: 30°)			
	Center Taper	MT 4			
	Spindle Rotation	Setting, Normal and Reverse Rotation			
TABLE	Horizontal Travel Speed	50~4000 mm/min	50~3000 mm/min		
	Handwheel Feed	20 mm/rev			
	Swivel Angle CCW / CW	11° / 6°	9° / 5°	7° / 4°	5° / 3°
	Min. Travel	8 mm			
WHEEL HEAD	Wheel Size	405 x 25~50 x 152.4 mm / 455 x 50 x 152.4 mm (Opt.)			
	Max. Peripheral	2000 m/min			
	Wheel Speed	2 Steps, 60Hz: 1499 / 1600 rpm; 50Hz: 1508 / 1603 rpm			
	Total Front & Rear Travel	Grinding Wheel 192 mm			
	Speedy Feed Travel	H type 40 mm / NC1 Type Adjustable Setting			
	Total Feed Travel	Grinding Wheel 152 mm			
	Handwheel Feed	1 mm			
TAILSTOCK	Center Travel	30 mm			
	Center Taper	MT 4			
	Wheel Motor	5 HP / 4P; 7.5 HP (Opt.)			
MOTOR	Workhead Motor	1/2 HP / 6P			
	Hydraulic Pump, Tank	2 HP / 4P, 60 L			
	Lubrication Pump, Tank	1 HP / 4P, 30 L			
	Coolant Pump, Tank	1/4 HP / 2P, 100 L			
	Magnetic Separator	1/25 HP / 4P			
	Internal Grinding Motor	2 HP / 2P			
OTHERS	N.W. / G.W.	2950 kgs / 3350 kgs	3870 kgs / 4300 kgs	4700 kgs / 5350 kgs	5200 kgs / 6100 kgs
	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 mm
	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 mm

*Specifications are subject to change without prior notice.

UNIVERSAL CYLINDRICAL 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 800UH1
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 mm			
Wheel Total Amount of Handfeed	160 mm			
Wheel One Revolution of Handwheel	1 mm			
Wheel Feed per Graduation	0.0025 mm			
Workhead Swivel Angle	0~90°			
Workhead Spindle Speed	Vari. Speeds, 15~100 rpm; 30~200 rpm			
Workhead Center Taper	MT 4			
Tailstock Center Taper	MT 4			
Tailstock Spindle Stroke	40 mm			
Table Traverse Speed	40~4000 mm/min			
Table Swivel Angle	0~10°		0~9°	
Table Traverse on Handwheel	14 mm/rev			
Grinding Wheel Motor	5 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 / 2700 kgs	
Machine Dimension (L x W x H)	3490 x 1270 x 1520 mm		3890 x 1270 x 1520 mm	
Packing Dimension (L x W x H)	2300 x 1650 x 1820 mm			

*Specifications are subject to change without prior notice.

BEMATO®

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



*Machine shown with optional accessories

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.

SPECIFICATION:

MODEL	BMT 1000UH	BMT 1000UH1	BMT 1200UH	BMT 1200UH1	BMT 1500UH	BMT 1500UH1
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 mm					
Wheel Feed per Graduation	0.0025 mm					
Workhead Swivel Angle	0~90°					
Workhead Spindle Speed	Vari. Speeds, 15~100 rpm; 30~200 rpm					
Workhead Center Taper	MT 4					
Tailstock Center Taper	MT 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 Handhwheel	14 mm/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	
Machine Dimension (L x W x H)	4090 x 1400 x 1545 mm		4290 x 1400 x 1545 mm		5990 x 1400 x 1545 mm	
Packing Dimension (L x W x H)	3300 x 1850 x 1920 mm		3500 x 1850 x 1920 mm		4300 x 1850 x 1920 mm	

*Specifications are subject to change without prior notice.

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



*Machine shown with optional accessories

- 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 quick 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.
- 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 mm		
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/min		
Table Swivel Angle	7°	6.5°	6°
Table Traverse on Handwheel	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

*Specifications are subject to change without prior notice.

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 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 substantially 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 for both directions.
- 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.

SPECIFICATION:

MODEL	BMT 3000UH	BMT 4000UH	BMT 3000UH1	BMT 4000UH1
Max. Swing Diameter	500 mm		600 mm	
Distance Between Center	3000 mm	4000 mm	3000 mm	4000 mm
Weight on Center	1000~1500 kgs			
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 on Hanfwheel	1 mm			
Wheel Feed per Graduation	0.0025 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°			
Table Traverse on Handwheel	4.5 mm/rev			
Workrest Capacity Type 500 mm	80~152 mm			
Grinding Wheel Motor	15 HP			
Workhead Spindle Motor	3 HP			
Hydraulic Pump	3 HP			
Lubrication Pump	1/4 HP			
Coolant Pump	1/4 HP			
N.W. / G.W.	8500 kgs / 9200 kgs	10500 kgs / 11500 kgs	11000 kgs / 13000 kgs	13500 kgs / 15500 kgs
Machine Dimension (L x W x H)	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 (L x W x H)	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.

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. 3-Jaw self-centering chuck
6. 4-Jaw self-centering chuck
7. Frequency converters for grinding wheels
8. Light-emitting diodes

BMT 2706J-NC1 / BMT 2710J-NC1 / BMT 2715J-NC1 / BMT 2720J-NC1
BMT 3506J-NC1 / BMT 3510J-NC1 / BMT 3515J-NC1 / BMT 3520J-NC1
(X axis servo motor, Z axis hydraulic movement, Automatic grinding)

BMT 2706J-NC1



*Machine shown with optional accessories

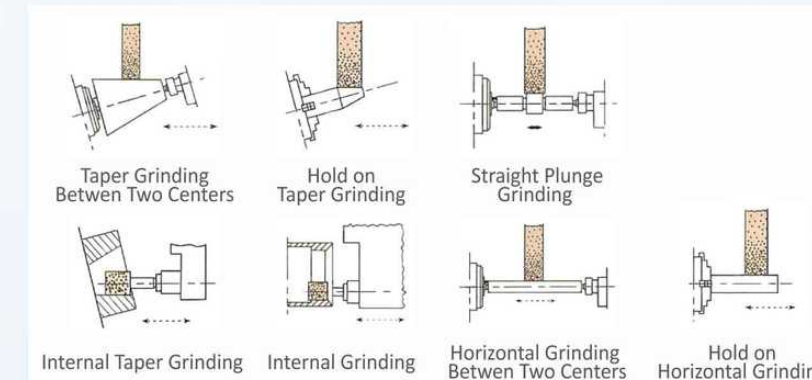
SPECIFICATION:

MODEL		BMT 2706J-NC1	BMT 2710J-NC1	BMT 2715J-NC1	BMT 2720J-NC1
CAPACITY	Max. Swing Diameter	270 mm			
	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		
WORK HEAD	Spindle Speed	Vari. Speeds, 60Hz: 11~500 rpm; 50Hz: 9~420 rpm			
	Swivel Angle	120° (CCW: 90°; CW: 30°)			
	Center Taper	MT 4			
	Spindle Rotation	Setting, Normal and Reverse Rotation			
TABLE	Horizontal Travel Speed	50~4000 mm/min	50~3000 mm/min		
	Handwheel Feed	20 mm/rev			
	Swivel Angle CCW / CW	11° / 6°	9° / 5°	7° / 4°	5° / 3°
	Min. Travel	8 mm			
WHEEL HEAD	Wheel Size	405 x 25~50 x 152.4 mm / 455 x 50 x 152.4 mm (Opt.)			
	Max. Peripheral	2000 m/min			
	Wheel Speed	2 Steps, 60Hz: 1499 / 1600 rpm; 50Hz: 1508 / 1603 rpm			
	Total Front & Rear Travel	Grinding Wheel 175 mm			
	Speedy Feed Travel	H type 40 mm / NC1 Type Adjustable Setting			
	Total Feed Travel	Grinding Wheel 135 mm			
	Handwheel Feed	1 mm			
TAILSTOCK	Center Travel	30 mm			
	Center Taper	MT 4			
MOTOR	Wheel Motor	5 HP / 4P; 7.5 HP (Opt.)			
	Workhead Motor	1/2 HP / 6P			
	Hydraulic Pump, Tank	2 HP / 4P, 60 L			
	Lubrication Pump, Tank	1 HP / 4P, 30 L			
	Coolant Pump, Tank	1/4 HP / 2P, 100 L			
	Magnetic Separator	1/25 HP / 4P			
	Internal Grinding Motor	2 HP / 2P			
	X Servo Motor	2 HP			
OTHERS	N.W. / G.W.	2850 kgs / 3250 kgs	3770 kgs / 4200 kgs	4600 kgs / 5250 kgs	5100 kgs / 6000 kgs
	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 mm
	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 mm

*Specifications are subject to change without prior notice.

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:

- Grinding wheel
- Wheel flange
- Wheel dresser
- 2-point steady rest
- Coolant pump
- Tools and tool box

OPTIONAL ACCESSORIES FOR BMT 27 / 35 Series:

- Internal grinding attachment
- Magnetic separator
- Balancing arbor
- Balancing base
- 3-Jaw chuck
- 3-point steady rest
- High speed spindle
- Center ring and jaw plate
- Paper filter

SPECIFICATION:

MODEL		BMT 3506J-NC1	BMT 3510J-NC1	BMT 3515J-NC1	BMT 3520J-NC1
CAPACITY	Max. Swing Diameter	350 mm			
	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	130 kgs		
WORK HEAD	Spindle Speed	Vari. Speeds, 60Hz: 11~500 rpm; 50Hz: 9~420 rpm			
	Swivel Angle	120° (CCW: 90°; CW: 30°)			
	Center Taper	MT 4			
	Spindle Rotation	Setting, Normal and Reverse Rotation			
TABLE	Horizontal Travel Speed	50~4000 mm/min	50~3000 mm/min		
	Handwheel Feed	20 mm/rev			
	Swivel Angle CCW / CW	11° / 6°	9° / 5°	7° / 4°	5° / 3°
	Min. Travel	8 mm			
WHEEL HEAD	Wheel Size	405 x 25~50 x 152.4 mm / 455 x 50 x 152.4 mm (Opt.)			
	Max. Peripheral	2000 m/min			
	Wheel Speed	2 Steps, 60Hz: 1499 / 1600 rpm; 50Hz: 1508 / 1603 rpm			
	Total Front & Rear Travel	Grinding Wheel 192 mm			
	Speedy Feed Travel	H type 40 mm / NC1 Type Adjustable Setting			
	Total Feed Travel	Grinding Wheel 152 mm			
	Handwheel Feed	1 mm			
TAILSTOCK	Center Travel	30 mm			
	Center Taper	MT 4			
	Wheel Motor	5 HP / 4P; 7.5 HP (Opt.)			
MOTOR	Workhead Motor	1/2 HP / 6P			
	Hydraulic Pump, Tank	2 HP / 4P, 60 L			
	Lubrication Pump, Tank	1 HP / 4P, 30 L			
	Coolant Pump, Tank	1/4 HP / 2P, 100 L			
	Magnetic Separator	1/25 HP / 4P			
	Internal Grinding Motor	2 HP / 2P			
	X Servo Motor	2 HP			
OTHERS	N.W. / G.W.	2950 kgs / 3350 kgs	3870 kgs / 4300 kgs	4700 kgs / 5350 kgs	5200 kgs / 6100 kgs
	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 mm
	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 mm

*Specifications are subject to change without prior notice.

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)

BMT 2706J-CNC



BMT 2710J-CNC



FEATURES FOR BMT 27 / 35 series:

- 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.

*Machine shown with optional accessories

SPECIFICATION:

MODEL		BMT 2706J-CNC	BMT 2710J-CNC	BMT 2715J-CNC	BMT 2720J-CNC
CAPACITY	Max. Swing Diameter	270 mm			
	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		
WORK HEAD	Spindle Speed	Vari. Speeds, 60Hz: 11~500 rpm; 50Hz: 9~420 rpm			
	Swivel Angle	120° (CCW: 90°; CW: 30°)			
	Center Taper	MT 4			
	Spindle Rotation	Setting, Normal and Reverse Rotation			
TABLE	Swivel Angle CCW / CW	11° / 6°	9° / 5°	7° / 4°	5° / 3°
	Max. Feed Rate	8 m/min			
	Min. Setting Unit	0.0001 mm			
WHEEL HEAD	Wheel Size	405 x 25~50 x 152.4 mm / 455 x 50 x 152.4 mm (Opt.)			
	Max. Peripheral	32 m/sec			
	Wheel Speed	2 Steps, 60Hz: 1499 / 1600 rpm; 50Hz: 1508 / 1603 rpm			
	Max. Feed Rate	6 m/min			
	Max. Stroke	Grinding Wheel 175 mm			
	Max. Setting Unit	0.0001 mm			
TAILSTOCK	Center Travel	30 mm			
	Center Taper	MT 4			
	Wheel Motor	5 HP / 4P; 7.5 HP (Opt.)			
MOTOR	Workhead Motor	2.4 HP			
	Hydraulic Pump, Tank	1 HP / 4P, 60 L			
	Lubrication Pump, Tank	1 HP / 4P, 30 L			
	Coolant Pump, Tank	1/4 HP / 2P, 80 L / 150 L (Opt.)			
	Magnetic Separator	1/25 HP / 4P			
	Servo Motor (X)	1.6 HP			
	Servo Motor (Y)	2.4 HP		3.35 HP	
	OTHERS	N.W. / G.W.	4250 kgs / 4850 kgs	5370 kgs / 6000 kgs	6500 kgs / 7400 kgs
	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 mm
	Packing Dimension (L x W x H)	4000 x 2280 x 2300 mm	5000 x 2280 x 2300 mm	6600 x 2280 x 2300 mm	7000 x 2280 x 2300 mm

*Specifications are subject to change without prior notice.

BMT 3506J-CNC / BMT 3510J-CNC / BMT 3515J-CNC / BMT 3520J-CNC
(X axis servo motor, Z axis hydraulic movement, Automatic grinding)

GRINDING CYCLES:

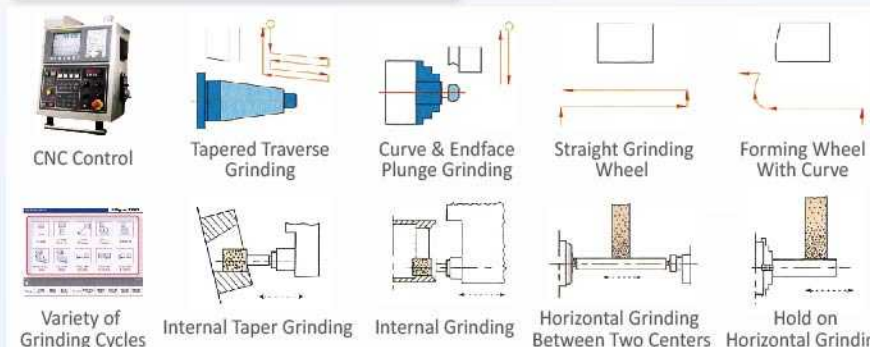
1. Plunge without oscillation
2. Plunge with oscillation
3. Angle plunge grinding
4. Multi-plunge grinding
5. Traverse grinding
6. Multi-plunge taper grinding
7. Traverse taper grinding
8. Shoulder plunge without oscillation
9. Shoulder traverse grinding
10. Shoulder plunge with oscillation

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. FANUC CNC controller
7. 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
10. Mitsubishi CNC controller
11. Thickness measuring gauge
12. Touch probe gauge
13. Z axis linear scale
14. Auto in-process gauge
15. Automatic grinding wheel balancing system
16. Wheel crash control device



SPECIFICATION:

MODEL		BMT 3506J-CNC	BMT 3510J-CNC	BMT 3515J-CNC	BMT 3520J-CNC
CAPACITY	Max. Swing Diameter	350 mm			
	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	130 kgs		
WORKHEAD	Spindle Speed	Vari. Speeds, 60Hz: 11~500 rpm; 50Hz: 9~420 rpm			
	Swivel Angle	120° (CCW: 90°; CW: 30°)			
	Center Taper	MT 4			
	Spindle Rotation	Setting, Normal and Reverse Rotation			
TABLE	Swivel Angle CCW / CW	11° / 6°	9° / 5°	7° / 4°	5° / 3°
	Max. Feed Rate	8 m/min			
	Min. Setting Unit	0.0001 mm			
WHEEL HEAD	Wheel Size	405 x 25~50 x 152.4 mm / 455 x 50 x 152.4 mm (Opt.)			
	Max. Peripheral	32 m / sec			
	Wheel Speed	2 Steps, 60Hz: 1499 / 1600 rpm; 50Hz: 1508 / 1603 rpm			
	Max. Feed Rate	6 m/min			
	Max. Stroke	Grinding Wheel 175 mm			
	Max. Setting Unit	0.0001 mm			
TAILSTOCK	Center Travel	30 mm			
	Center Taper	MT 4			
	Wheel Motor	5 HP / 4P; 7.5 HP (Opt.)			
MOTOR	Workhead Motor	2.4 HP			
	Hydraulic Pump, Tank	1 HP / 4P, 60 L			
	Lubrication Pump, Tank	1 HP / 4P, 30 L			
	Coolant Pump, Tank	1/4 HP / 2P, 80 L / 100 L (Opt.)			
	Magnetic Separator	1/25 HP / 4P			
	Servo Motor (X)	1.6 HP			
	Servo Motor (Y)	2.4 HP		3.35 HP	
OTHERS	N.W. / G.W.	4350 kgs / 4950 kgs	5470 kgs / 6100 kgs	6600 kgs / 7500 kgs	7500 kgs / 8500 kgs
	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 mm
	Packing Dimension (L x W x H)	4000 x 2280 x 2300 mm	5000 x 2280 x 2300 mm	6600 x 2280 x 2300 mm	7000 x 2280 x 2300 mm

*Specifications are subject to change without prior notice.

BMT 150J-NC



BMT 3006J-NC / BMT 3012J-NC

*Machine shown with optional accessories



FEATURES:

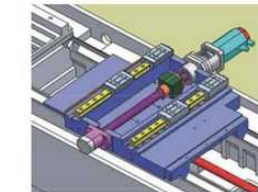
- Self-developed conversational operational interface for maximum operational convenience, and is easy to learn and understand.
- Automatic operation and multiple settings. This allows for selecting coarse grinding, fine grinding, non-sparkle grinding and dressing.
- High precision NC control provides 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 heat dissipation.
- **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.



End Face Grinding Attachment (Optional) Swiveling Spindle Head



Hydraulic Power / Lubrication Unit



Precision Feed Positioning



Spindle Head Driven by Servo Motor



Automatic Belt Tension Control



Motor Fixing Bar



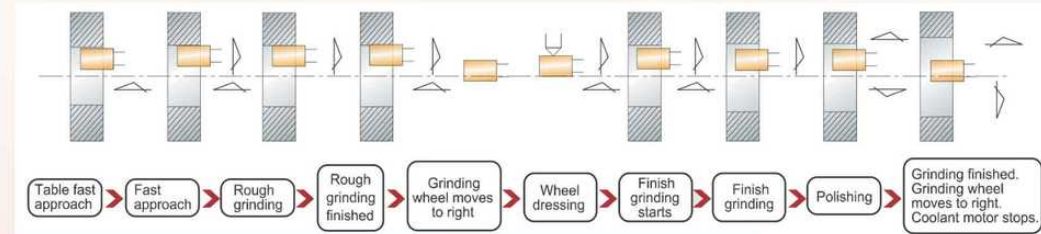
NC Mitsubishi Control

STANDARD ACCESSORIES:

1. Grinding wheel
2. 3-Jaw chuck
3. Levelling plate
4. Coolant pump
5. NC Mitsubishi control
6. Tools and tool box

OPTIONAL ACCESSORIES:

1. Paper filter
2. Magnetic separator
3. End face grinding attachment
4. Hydraulic 3-jaw chuck
5. Hydraulic rotary cylinder
6. Oil mist lubricator for grinding wheel
7. Oil skimmer



SPECIFICATION:

MODEL		BMT 150J-NC	BMT 3006J-NC	BMT 3012J-NC
CAPACITY	Range of I.D. Grinding	6~150 mm	20~300 mm	
	Max. Grinding Depth	150 mm	300 mm	
	Max. Holding Length	200 mm	600 mm	1200 mm
	Swing Over Bed	500 mm	480 mm	
	Swing in Chung Guard	280 mm	350 mm	
WHEEL FEEDING	Rapid Feed Speed	5 m/min		
	Max. Stroke	100 mm	200 mm	
X-AXIS	Min. Setting Unit	0.001 mm		
WHEEL FEEDING	Rapid Feed Speed	8 m/min		
	Max. Stroke	450 mm	600 mm	800 mm
Z-AXIS	Min. Setting Unit	0.001 mm		
WORKHEAD	Spindle Speed	10~1000 rpm		
	Spindle Taper	A2-5	Cylindrical Type	
	Swivel Angle	±8°	(-3°+15° (f))	(-3°+12° (f))
MOTOR	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	
	X-axis Servo Motor	1/2 HP	1.3 HP	
	Coolant Pump	1/4 HP / 2P		
	Hydraulic Lubrication	1/4 HP / 2P		
	Hydraulic Pump	1 HP / 4P		
	Rotary Table	-		
OTHERS	N.W. / G.W.	2500 kgs / 2700 kgs	5000 kgs / 5500 kgs	6300 kgs / 6700 kgs
	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-CNC BMT 150J-CNC/B (B Axis)

BMT 150J-CNC

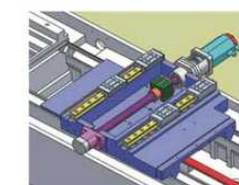


B Axis for BMT 150J-CNC/B

*Machine shown with optional accessories

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 extra high precision.
- Versatile cyclic grinding motions include fully automatic grinding, coarse grinding trimming, fine 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, end 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 strength, ensuring maximum stability.
- 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 heat dissipation.
- 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.

End Face Grinding Attachment
(Optional)
Swiveling Spindle HeadHydraulic Power /
Lubrication Unit

Precision Feed Positioning

Spindle Head Driven
by Servo MotorAutomatic Belt
Tension Control

Motor Fixing Bar



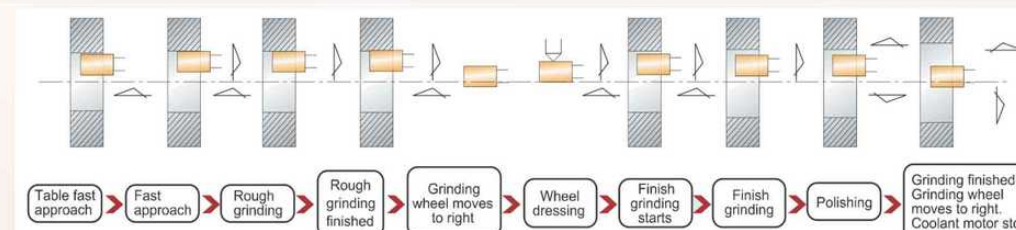
FANUC Controller

STANDARD ACCESSORIES:

- Grinding wheel
- 3-Jaw chuck
- Levelling plate
- Coolant pump
- FANUC controller
- Tools and tool box

OPTIONAL ACCESSORIES:

- Paper filter
- Magnetic separator
- End face grinding attachment
- Hydraulic 3-jaw chuck
- Hydraulic rotary cylinder
- Oil mist lubricator for grinding wheel
- Oil skimmer



SPECIFICATION:

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

*Specifications are subject to change without prior notice.

BMT 12BNJ

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

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

BMT 12BNJ



*Machine shown with optional accessories

FEATURES:

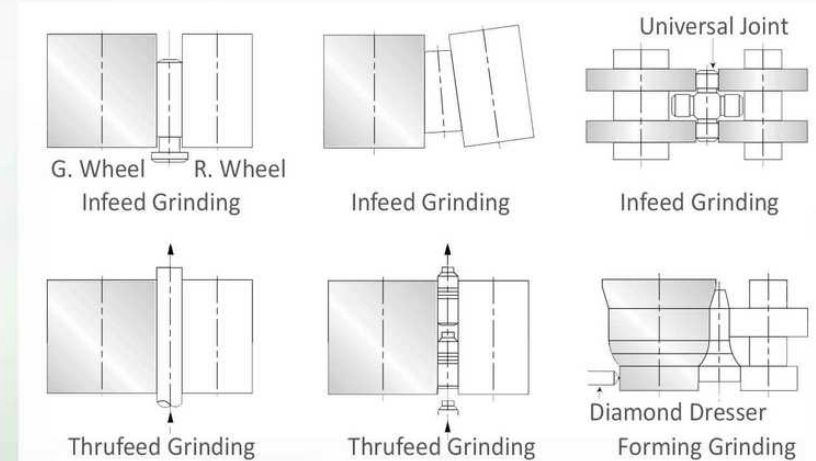
- **Main structure of the machine** - They are cast of high grade FC-30 iron, melted by advanced induction furnace, then cast in resin cores. In order to ensure stability and rigidity, they are heat-treated with normalizing procedure prior to machining.
- **Spindle precision ground hydrostatic bearing** - 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 - hydrodynamic (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 12SJ)** - 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 coneiform 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
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-contact O.D. measuring system
16. Grinding wheel automatic balancing system
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 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 150 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, 0.01 mm/gra.	
Regulating Wheel Tilt 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 1400 x 1400 mm	
Packing Dimension (L x W x H)	2300 x 1100 x 1800 mm	

*Specifications are subject to change without prior notice.

BMT 18J / BMT 18AJ / BMT 18BJ

BMT 18HJ / BMT 18AHJ / BMT 18BHJ (Hydrostatic, with servo motor, variable speeds)

BMT 18SJ / BMT 18ASJ / BMT 18BSJ (Hydrodynamic, with servo motor, variable speeds)

BMT 18J



*Machine shown with optional accessories

FEATURES:

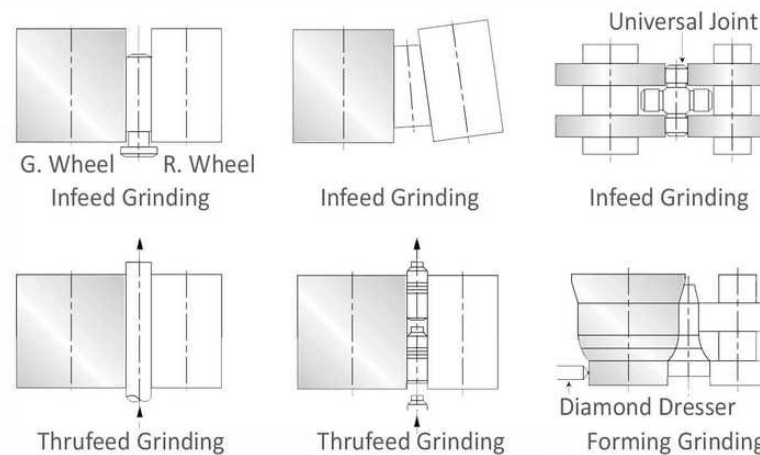
- Main structure of the machine** - They are cast of high grade FC-30 iron, melted by advanced induction furnace, then cast in resin cores. In order to ensure stability and rigidity, they are heat-treated with normalizing procedure prior to machining.
- Spindle precision ground hydrostatic bearing** - 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 - hydrodynamic (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 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
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-contact O.D. measuring system
16. Grinding wheel automatic balancing system
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



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 mm					
Special Work Rest Diameter	40~100 mm					
Grinding Wheel Size	455 x 205 x 228.6 mm		455 x 255 x 228.6 mm		455 x 305 x 228.6 mm	
Regulating Wheel Size	255 x 205 x 111.2 mm		255 x 255 x 111.2 mm		255 x 305 x 111.2 mm	
Grinding Wheel Speed	1500 rpm					
Regulating Wheel Speed	10 Steps, 13~316 rpm	Vari. Speeds, 10~250 rpm	10 Steps, 13~316 rpm	Vari. Speeds, 10~250 rpm	10 Steps, 13~316 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, 0.05 mm/gra.					
Table Micro Feed on Handwheel	0.2 mm/rev, 0.001 mm/gra.					
Dressing Handwheel	2 mm/rev, 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 20J

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

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

BMT 20SJ



*Machine shown with optional accessories

FEATURES:

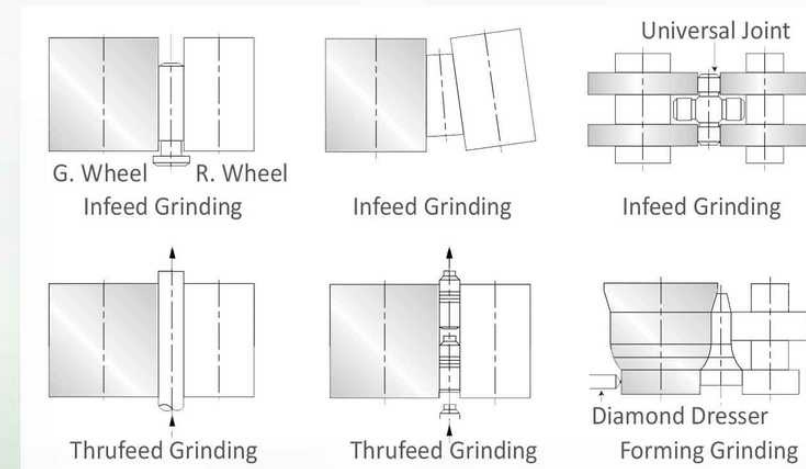
- **Main structure of the machine** - They are cast of high grade FC-30 iron, melted by advanced induction furnace, then cast in resin cores. In order to ensure stability and rigidity, they are heat-treated with normalizing procedure prior to machining.
- **Spindle precision ground hydrostatic bearing** - 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 - hydrodynamic (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.

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
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-contact O.D. measuring system
16. Grinding wheel automatic balancing system
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 20J	BMT 20HJ / BMT 20SJ
Standard Work Rest Diameter	1~50 mm	
Special Work Rest Diameter	40~100 mm	
Grinding Wheel Size	510 x 205 x 254 mm	
Grinding Wheel Speed	1350 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, 0.01 mm/gra.	
Regulating Wheel Tilt Angle	(±5°~3°)	
Regulating Wheel Swivel Angle	±5°	
Hydraulic Pump	1 HP	
Coolant Pump	1/2 HP	
N.W. / G.W.	3200 kgs / 3500 kgs	
Machine Dimension (L x W x H)	2400 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 2408HJ / BMT 2410HJ / BMT 2412HJ
(Hydrostatic, with servo motor, variable speeds)



*Machine shown with optional accessories

FEATURES:

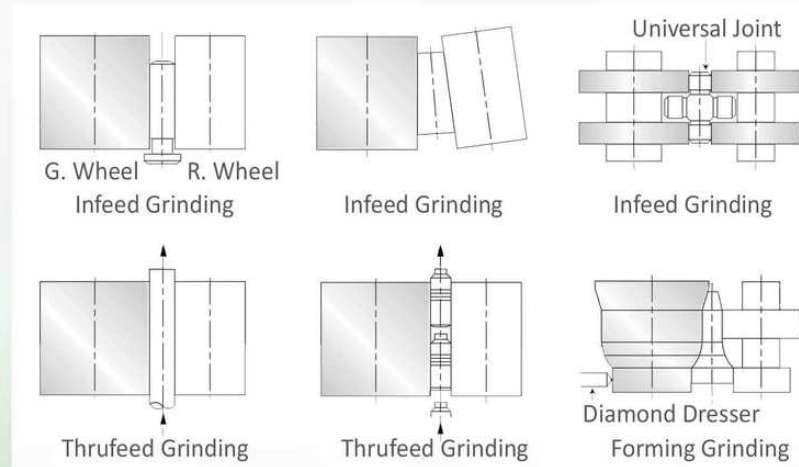
- **Main structure of the machine** - They are cast of high grade FC-30 iron, melted by advanced induction furnace, then cast in resin cores. In order to ensure stability and rigidity, they are heat-treated with normalizing procedure prior to machining.
- **Spindle precision ground hydrostatic bearing** - 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 - hydrodynamic** - 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 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
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-contact O.D. measuring system
16. Grinding wheel automatic balancing system
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	30 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 Servo 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/gra.			
Table Micro Feed on Handwheel	0.02 mm/rev, 0.001 mm/gra.			
Dressing Handwheel	2 mm/rev, 0.01 mm/gra.			
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 mm			
Packing Dimension (L x W x H)	3000 x 1800 x 1950 mm (Machine) + 2600 x 1400 x 1300 mm (Accessories)			

*Specifications are subject to change without prior notice.

HYDRAULIC CRANKSHAFT GRINDER

www.e-bemato.com

▼ BMT 1600SG / BMT 2100SG



*Machine shown with optional accessories

▼ BMT 2500SG / BMT 3000SG



*Machine shown with optional accessories

FEATURES:

- Electric rapid traverse for table.
- Quick setting-up throwheads permits the work easy for operation.
- Hydraulic wheelhead control with quick approach and return.
- Hydraulic control of indexing pins for the locking of face plate.
- Air bearing provides convenient means of moving the work head and tailstock.
- Heavy bed provides a rigid base to carry all units and possesses great stiffness, and sufficient sideway length to support the table in all positions.

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		10~100 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 22~38 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.

HEAVY DUTY PLAIN ROLL GRINDER

BEMATO®

▼ 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 Handwheel		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.

BENIGN ENTERPRISE Co., LTD.

▼ 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 accessories

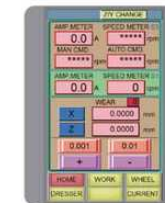
▼ BMT D150B
CNC Internal External End Face
Grinding Complex Machine

FEATURES:

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



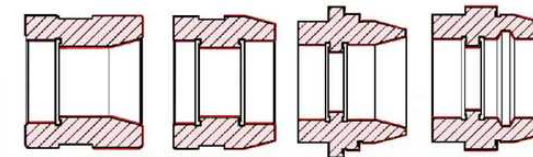
FANUC Controller



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▼ 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



*Machine shown with optional accessories

FEATURES:

- **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.

SPECIFICATION:

MODEL		BMT D150B	BMT D150A	BMT D320GT
CAPACITY	Grinding Diameter	4~200 mm	4~240 mm	4~320 mm
	Max. Grinding Depth	150 mm		200 mm
	Swing Over Table	380 mm		350 mm
	Swing Over Splash Guard	200 mm	320 mm	
CONTROL	Control System	FANUC / SYNTEC		FANUC
	Spindle Speed	0~1000 rpm		
WORK HEAD	X-axis Feed Rate	10 M/min		
	X-axis Travel	300 mm		390 mm
	Min. Unit of X-axis Movement	0.001 mm		0.0001 mm
	Swivel Angle	(-5° ~ +15°)		(-5° ~ +30°)
TABLE	Max. Feed Rate of Y / Z-axis	Z-axis only: 10 M/min		10 M/min
	Y / Z-axis Travel	Z-axis only: 400+100 mm		350+200 mm
	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		
	Coolant Pump, Tank	1/4 HP, 150 L		1/4 HP, 200 L
DRIVE MOTOR	X / Y / Z Axis Servo Motor	X & Z-axis only: 1.6 HP		2.15 HP
	Grinding Wheel Motor (B1 / B2)	B1: 3 HP / 2P; B2: 6 HP / 4P	B1 only: 3 HP / 2P	3 HP / 2P
	Workhead Motor	3 HP / 4P		
	Automatic Lubricator	2 L		4 L
OTHERS	N.W.	3000 kgs		4750 kgs
	Machine Dimension (L x W x H)	2200 x 2300 x 1700 mm		2500 x 2100 x 1950 mm

*Specifications are subject to change without prior notice.

BMT U2



*Machine shown with optional accessories

FEATURES:

- For grinding HSS and carbide engraving cutter as well as single lip or multiple lip 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 | 1. Twist drill grinding attachment |
| 2. Wheel flange mounted | 2. End mill grinding attachment |
| 3. Grinding wheel | 3. Lathe tool grinding attachment |
| 4. Collets x 5pcs (4,6,8,10,12mm) | 4. Grinding wheel balancing stand |
| 5. Aligning finger | 5. Collet |
| 6. Drive belt | 6. Diamond grinding wheel |
| 7. Lock pin | 7. 20, 25mm cutter |
| 8. Tools | 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.

BMT 25PP



*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:

- | | |
|--------------------------------------|-------------------------------------|
| 1. Grinding wheel (Type: 11A) | 1. SDC electroplated grinding wheel |
| 2. Grinding wheel flange | 2. CBN electroplated grinding wheel |
| 3. Flange wrench | 3. 5C collet (Min. 3 mm~Max. 25 mm) |
| 4. 5C collet (6,8,10,12,16,20,25 mm) | 4. Work cabinet |
| 5. Work light | |
| 6. Tools for general use | |

SPECIFICATION:

MODEL	BMT 25PP
Grinding Capacity	3~25 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	2900 rpm @ 50 Hz 3500 rpm @ 60 Hz
Motor	1/2 HP
N.W. / G.W.	50 kgs / 82 kgs
Packing Dimension (L x W x H)	800 x 650 x 680 mm

*Specifications are subject to change without prior notice.

BMT 32N



*Machine shown with optional accessories

FEATURES:

- The wheel heads can be rotated 360° and be installed two wheels. Just rotate the wheel head, when need to grind the tool of different materials. It can increase the safety & save the time for changing & repairing the grinding wheel.
- Adopts the precision 4" 6-jaw awl type chuck. It can clip stably. At the same time, it can grind the cutting edge and web thickness of drills in one set-up. The both sides of drill angle and the edge length are equal. It could keep the accuracy of the center of drill without offset.
- Easy operation, grind fast and precisely.

SPECIFICATION:

MODEL	BMT 32N
Grinding Capacity	2~32 mm
Longitudinal Travel of Table	115 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	2900 rpm @ 50 Hz 3500 rpm @ 60 Hz
Motor	3/4 HP
N.W. / G.W.	90 kgs / 122 kgs
Packing Dimension (L x W x H)	950 x 550 x 680 mm

*Specifications are subject to change without prior notice.

STANDARD ACCESSORIES:

- 4" 6-jaw awl type chuck
- Chuck handle
- Grinding wheel (Type: 6A)
- Grinding wheel (Type: 11A)
- Grinding wheel flange
- Flange wrench
- Morse taper sleeve
- Screw pin
- Work light
- Tools for general use

OPTIONAL ACCESSORIES:

- SDC electroplated grinding wheel
- CBN electroplated grinding wheel
- Morse taper sleeve (No. 2)
- Work cabinet



Unique & patented cam-replacement-free Patent no. 75717.

BMT 60N



*Machine shown with optional accessories



Double cams
Patent No. 135236
It can grind tool of
1/2/3/4/6 Flutes.

STANDARD ACCESSORIES

1. 6" 6-jaw awl type chuck
2. Chuck handle
3. Grinding wheel (Type: 5A)
4. Grinding wheel (Type: 12A)
5. Grinding wheel flange
6. Flange wrench
7. Morse taper sleeve (No. 3,4,5)
8. Cam (No. 4,6,8,9,A2)
9. Work light
10. Tools for general use
11. Work cabinet

OPTIONAL ACCESSORIES

1. SDC electroplated grinding wheel
2. CBN electroplated grinding wheel
3. Cooling system
4. Auto cycle motor

FEATURES:

- There are two types of grinding wheels (5A & 12A) on wheel head of BMT 60N. The end & chisel edge can be ground without changing the grinding wheel.
- For dressing grinding wheel, set the diamond dresser on the chuck and adjust the chuck grinding angle. The wheel motor can be adjusted 160 mm vertically, 180 mm horizontally and rotate 180°. It can increase the function of machinery.
- Adopts the precision awl type chuck. It can clip stably. At the same time, it can grind the cutting edge and web thickness of drills in one set-up. The both sides of drill angle and the edge length are equal. It could keep the accuracy of the center of drill without offset.
- Easy operation, grind fast and precisely.

SPECIFICATION:

MODEL	BMT 60N
Grinding Capacity	2~60 mm
Longitudinal Travel of Table	240 mm
Cross Travel of Saddle	180 mm
Vertical Adjustment of Wheelhead	160 mm
Rotary Angle of Wheelhead	360°
Clearance Angle	0~18°
Point Angle	40~180°
Wheel Size	180 x 19 x 31.75 mm, 180 x 32 x 31.75 mm
Power	220V / 380V
Speed	2800 rpm @ 50 Hz 3360 rpm @ 60 Hz
Motor	1 HP
N.W. / G.W.	240 kgs / 310 kgs
Packing Dimension (L x W x H)	1000 x 950 x 1560 mm

*Specifications are subject to change without prior notice.

BMT 80N / BMT 100N



*Machine shown with optional accessories



Double cams
Patent No. 135236
It can grind tool of
1/2/3/4/6 Flutes.

STANDARD ACCESSORIES

1. 7" 6-jaw awl type chuck (For BMT 80N)
9" 8-jaw awl type chuck (For BMT 100N)
2. Chuck handle
3. Grinding wheel (Type: 7A)
4. Grinding wheel flange
5. Flange wrench
6. Morse taper sleeve (No. 3,4,5,6)
7. Cam (No. 4,6,8,9,A2)
8. Auto cycle motor
9. Cooling system
10. Work light
11. Tools for general use
12. Work cabinet

OPTIONAL ACCESSORIES

1. SDC electroplated grinding wheel
2. CBN electroplated grinding wheel

FEATURES:

- For dressing grinding wheel, set the diamond dresser on the chuck and adjust the chuck grinding angle. The wheel motor can be adjusted 160 mm vertically, 180 mm horizontally and rotate 180°. It can increase the function of machinery.
- Adopts the precision awl type chuck. It can clip stably. At the same time, it can grind the cutting edge and web thickness of drills in one set-up. The both sides of drill angle and the edge length are equal. It could keep the accuracy of the center of drill without offset.
- Easy operation, grind fast and precisely.

SPECIFICATION:

MODEL	BMT 80N	BMT 100N
Grinding Capacity	4~80 mm	5~100 mm
Longitudinal Travel of Table	240 mm	
Cross Travel of Saddle	180 mm	
Vertical Adjustment of Wheelhead	160 mm	
Rotary Angle of Wheelhead	360°	
Clearance Angle	0~18°	
Point Angle	40~180°	
Wheel Size	180 x 50 x 31.75 mm	
Power	220V / 380V	
Speed	2800 rpm @ 50 Hz 3360 rpm @ 60 Hz	
Motor	2 HP	
N.W. / G.W.	309 kgs / 379 kgs	316 kgs / 386 kgs
Packing Dimension (L x W x H)	1130 x 1000 x 1550 mm	

*Specifications are subject to change without prior notice.

BMT 600



*Machine shown with optional accessories

OPTIONAL ACCESSORIES FOR BMT 600 ONLY:

1. Table
2. Diamond grinding wheel

OPTIONAL ACCESSORIES FOR BMT 600 & BMT 50PP:



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.	130 kgs / 165 kgs
Packing Dimension (L x W x H)	800 x 750 x 820 mm

*Specifications are subject to change without prior notice.

BMT 50PP



*Machine shown with optional accessories

FEATURES FOR BMT 600 & BMT 50PP:



Wheelhead rotate 360°
Patent No. 42447

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.

SPECIFICATION:

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 26 x 31.75 mm, 125 x 50 x 31.75 mm
Power	110V / 220V / 380V
Speed	3500 rpm
Motor	3/4 HP
N.W. / G.W.	252 kgs / 318 kgs
Packing Dimension (L x W x H)	1050 x 900 x 1540 mm

*Specifications are subject to change without prior notice.

OPTIONAL ACCESSORIES FOR BMT 50PP ONLY:



Drills & Taps Grinding Attachment
Double cams, Patent No. 135236
(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)

▼ BMT 8PP (Gun Drill Grinder)

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.



▼ BMT 11PP (Hole Saw & Metal Borer Grinder)

FEATURES:

- The max. grinding capacity is 100mm.
- The inner angles and out angles could be ground at the min. angle.
- Simple and safe operation, anybody could quickly learn how to use.
- Adopt special 6 jaw chuck, 2900 rpm @ 50 Hz and quickly. 3500 rpm @ 60 Hz



*Machine shown with optional accessories

SPECIFICATION:

MODEL	BMT 8PP	BMT 11PP
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	3500 rpm	
Motor	1/2 HP	
N.W. / G.W.	150 kgs / 210 kgs	155 kgs / 186 kgs
Packing Dimension (L x W x H)	850 x 830 x 1550 mm	800 x 750 x 820 mm

*Specifications are subject to change without prior notice.

▼ BMT 50SPP (Slitting Cutter Grinder)



*Machine shown with optional accessories

▼ BMT 50WPP (Diamond Wheel Dresser Grinder)



SPECIFICATION:

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	360°	
Rotary Angle of Up-Down Spindle	360°	
Working Table Area	620 x 190 mm	
Wheel Size	180 x 26 x 31.75 mm, 125 x 50 x 31.75 mm	
Power	110V / 220V / 380V	
Speed	3500 rpm	
Motor	3/4 HP	
N.W. / G.W.	295 kgs / 361 kgs	280kgs / 320 kgs
Packing Dimension (L x W x H)	1050 x 900 x 1550 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.



Machine shown with optional C2AH end mill attachment

*Machine shown with optional accessories

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.



*Machine shown with optional accessories

BMT 457

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 simplest 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.



Machine shown with optional CE standard

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, it can take more strength.
- Has low friction between cage and the cylindrical supporter, giving the table smooth movement.



*Machine shown with optional accessories

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



Engraving, radius and end mill grinder



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



Sharpening side milling cutter 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. Saucer 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, sensitive work held B&S taper No.11 (with AK-24 index disc)
3. C2LH Sharpening turning tool work holding fixture
4. C3RG ER collet dividing punch grinding attachment
5. C2SF Sharpening face milling center, sensitive work head NT50 taper with AK-24 index disc
6. C2AH End mill grinder, air bearing fixture 5C, 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
10. C1DG(D) Universal grinder attachment
11. C2D1 Diamond wheel dresser
12. C2R2 Plain tooth rest
13. Saucer wheel
14. Straight wheel
15. 4" & 6" diamond cup wheel
16. 4" 3-jaw chuck
17. Index discs
18. Collet fixtures
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

SPECIFICATION:

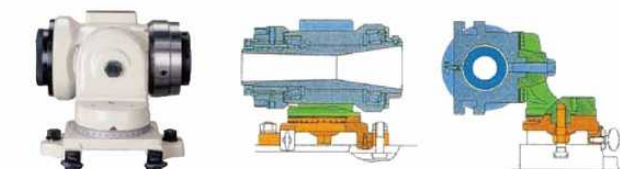
MODEL	BMT 610	BMT 205	BMT 305	BMT 457
Distance Between Center	250 mm	270 mm	380 mm	405 mm
Working Table Area	133 x 470 mm	130 x 550 mm	110 x 675 mm	120 x 700 mm
Longitudinal Travel of Table	250 mm	200 mm	305 mm	420 mm
Swing Over Table	208 mm	280 mm		208 mm
Cross Travel of Saddle	160 mm	150 mm		100 mm
Swivel Adjustment of Table	0°		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°	
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	
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 mm

*Specifications are subject to change without prior notice.

BMT 40UT



Inclination of Wheelhead



Universal Workhead



Two Tailstocks

Centralized Lubrication

BMT 60UT



*Machine shown with optional accessories

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 the 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.

STANDARD ACCESSORIES:

1. Leveling Blocks
2. Workhead
3. Right-hand Tailstock
4. Center Gauge
5. Ejector Rod
6. Center for Workhead Spindle MT5
7. Diamond Dresser Holder
8. Grinding Wheel Washer Set
9. Wheel Guard
10. Wheel Guard Holder
11. 2 Sets Grinding Wheel Flanges
12. 4" Grinding Wheel Flange Extension ($\phi 31.75$ mm)
13. Grinding Wheel
14. Draw-in Bolt for Workhead and Spacer (metric thread)
15. Wheel Spanner
16. Collet Wrench
17. Fixture Rod
18. Open End Wrench (17-19 mm)
19. Combination Wrench (19 mm & 24 mm)
20. Tool Box & Adjusting Tool

OPTIONAL ACCESSORIES:

1. Left-hand Tailstock
2. Tool Holder
3. MT5 to MT2, MT3, MT4 Morse Taper Sleeve
4. 4" Grinding Wheel Flange Extension ($\phi 12.7$ mm)
5. Universal Tooth Rest Plate and Blade Holder Extension
6. Plain Tooth Rest Holder
7. Fine Adjustment Guide Rod
8. Grinding Wheel
9. Frequency Converter
10. T-Wrench
11. Belt for Spindle Drive
12. Touch-Up Paint
13. Radius Grinding Attachment
14. Face Mill Grinding Attachment
15. Helical Grinding Attachment
16. Cylindrical Grinding Attachment
17. Internal Grinding Attachment
18. Workhead Indexing Attachment
19. Extended Grinding Wheel Spindle
20. Surface Grinding Attachment
21. Drill Pointing Attachment
22. Lathe Tool & Planer Tool Grinding Attachment
23. Spring Collet Set
24. Dust Collector
25. Wet Grinding Attachment with Waterproof Equipment
26. 5C Chuck
27. CCD System with Software and IPC
28. Linear Scale (Resolution of X and Y axes is 0.001)
29. Linear Guideway - X axis (M-40)
30. Hydraulic Device - X axis (M-40) Travel:350 mm
31. PLC Controller - X axis (M-40) Travel:300 mm
32. PLC Controller - Y axis
33. Upgrading Grinding Wheel Spindle Motor to 2 HP
34. CE Safety Device
35. Transformer

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	$\pm 60^\circ$	
JOG Adjustment of Table	$\pm 10^\circ$	$\pm 7^\circ$
Inclination of Wheelhead	$\pm 15^\circ$	
Rotative Angle of Wheelhead	360°	
Distance Between Spindle Center to Table	50~300 mm	
Distance Between Spindle Center to T-slot	165~415 mm	
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 mm

*Specifications are subject to change without prior notice.

▼ BMT 32



▼ BMT 50N / BMT 80NFC



*Machine shown with optional accessories



BMT 32



BMT 50N / BMT 80NFC

SPECIFICATION:

MODEL	BMT 32	BMT 50N	BMT 80NFC
Drilling Capacity	1.5~32 mm	2~51 mm	4~80 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	-	
Wheel Size - Recessed Type	-	180 x 32 x 31.75 mm	
Wheel Size - Dish Type	-	165 x 21 x 31.75 mm	
Infeed Shaft of Grinding Wheel - Left / Right Stroke	150 mm	240 mm	
Infeed Shaft of Grinding Wheel - Front / Back Stroke	140 mm	180 mm	200 mm
Infeed Shaft of Grinding Wheel - Up / Down Stroke	-	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 mm	800 x 1000 x 1380 mm

*Specifications are subject to change without prior notice.

▼ BMT 160U



*Machine shown with optional accessories



SPECIFICATION:

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.

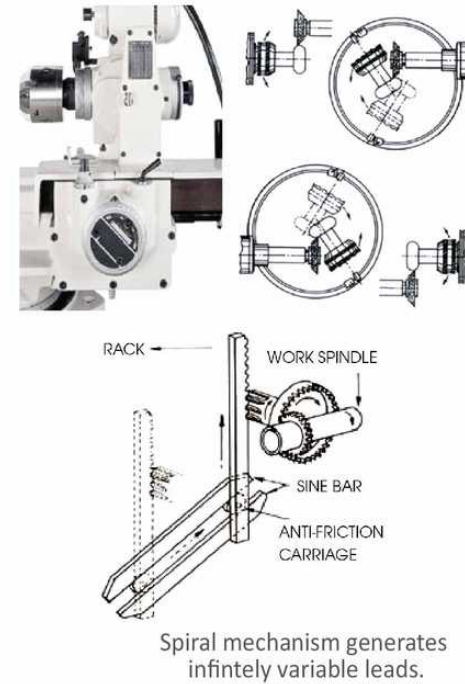
BMT 304CM (8 Axis)

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



BMT 304CMA (10 Axis)

FEATURES FOR BMT 304CMA:

- Our CM series sharpen and recondition complex tool shapes and parts.
- Turntable and guide bar allows workpieces grinding from different directions.
- Turntable and workhead set can rotate horizontally for 210° angle.
- Equipped with linear scale device on the X, Y and A axis.
- High precision camera device (C.C.D) provides convenient operation, accurate positioning, and increased quality control efficiency. C.C.D system 20~180 times variable focus change.
- It is ideal for precision grinding for angles, arc and re-sharpening, especially for smaller cutter.



*Machine shown with optional accessories



GRINDING FUNCTIONS:



Screw Slot Surface Grinding



Milling Cutter End Grinding



Grinding Outer Diameter



Side Milling Cutter Grinding



Formed Milling Cutter Grinding



Centering Device



ARC Grinding



Vertical Milling Cutter Grinding

STANDARD ACCESSORIES:

1. Wheelhead toothrest assembly with extension bar
2. Grinding wheel guards with extension bar
3. Frank stock support
4. Straight cylindrical collets
5. Grinding wheel flanges
6. Diamond holder bracket
7. Toothrest centering gauge
8. Adjustable 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

SPECIFICATION:

MODEL	BMT 304CM	BMT 304CMA
Max. Swing Diameter		304 mm
Max. Collet Work Diameter		32 mm
Min. Collect Work Diameter		5 mm
Max. Spiral Angle		60°
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		±105°
Rotation of Vertical Plane of Workhead		±40°
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 rpm
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 notice.

DIAMOND GRINDER & PCBN TOOL GRINDER

www.e-bemato.com

▼ BMT 125PP (Diamond Grinder)



*Machine shown with optional accessories

SPECIFICATION:

MODEL	BMT 125PP
Power	110V / 220V
Speed	3420 rpm
Motor	1/3 HP
N.W. / G.W.	33 kgs / 35 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

BEMATO®

▼ 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.	11 kgs / 12 kgs
Packing Dimension (L x W x H)	360 x 270 x 450 mm

*Specifications are subject to change without prior notice.

HOLDER MAINTENANCE & POLISH MACHINE

▼ 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.



SPECIFICATION:

MODEL	BMT A2
Spindle Grinding Specification	BT
Power	110V / 220V
Machine Dimension (L x W x H)	400 x 400 x 480 mm

*Specifications are subject to change without prior notice.

BENIGN ENTERPRISE Co., LTD.

HOB SHARPENING MACHINE

www.e-bemato.com

▼ BMT 16HS



*Machine shown with optional accessories

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 intrusion 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



Index Head

*Specifications are subject to change without prior notice.

PRECISION ROD CUT-OFF & END SURFACE GRINDING MACHINE

BEMATO®

▼ BMT 300LY / BMT 500LY / BMT 600LY



*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 tighter 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.

SPECIFICATION:

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		

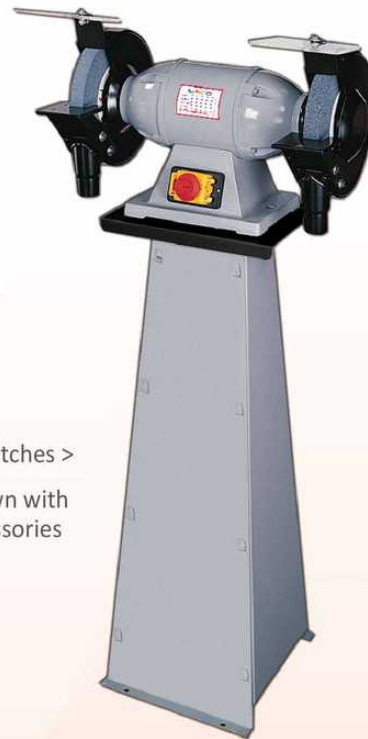
*Specifications are subject to change without prior notice.

▼ BMT 611GR



< Shown with
NVR+EMS Switches >

*Machine shown with
optional accessories

▼ 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	BMT 833AGR
Output	150W	300W		420W	300W		520W
Guard Type	BS: 165 x 40 x 2.0 mm	2B: 225 x 55 x 2.0 mm					
Guard Extractor / Chip Outlet	-	34 mm					
Guard Thickness	2.0 mm						
Wheel Speed	50HZ, 2P: 2850 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 19 x 15.8 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	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	YES		NO	YES	
OPTIONAL ACCESSORIES							
Stand	Stand A / Stand S						
Dust Collector Without Power	DCWP-B						
Powered Dust Collector	-	DCP2501			DCP2503		

*Specifications are subject to change without prior notice.

▼ BMT 1001GR / BMT 1003GR
BMT 1031GR / BMT 1033GR

< Shown with
NVR+EMS Switches

Shown with
Independent
Stop Switch >

*Machine shown with optional accessories

▼ BMT 1203GR / BMT 1223GR



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	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	50HZ, 4P: 1420 rpm 60HZ, 4P: 1720 rpm				50HZ, 2P: 2850 rpm 60HZ, 2P: 3450 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 / 1PH		4P / 3PH		2P / 1PH	2P / 3PH	4P / 3PH	
Eye Shield (L x M x H)	140 x 110 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	Adjustable							
Switch	Button	NVR + EMS + OLP	Button	NVR + EMS + OLP			NVR + Button	NVR + Button + OLP
CE standard	NO	YES	NO	YES			NO	YES
OPTIONAL ACCESSORIES								
Stand	Stand B / Stand L						Stand L1	
Dust Collector Without Power	DCWP-B							
Powered Dust Collector	DCP2501		DCP2503		DCP2501	DCP2503		

*Specifications are subject to change without prior notice.

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



*Machine shown with optional accessories

▼ 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	750W	
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 mm	
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: 3450 rpm					
Wheel Type	A60				A36	
Wheel Size	200 x 25 x 20 mm				250 x 38 x 25.4 mm	
Wire Brush	200 x 19 x 16 mm				250 x 25 x 25.4 mm	
Pole / Phase	2P / 1PH		2P / 3PH		2P / 1PH	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				795 x 355 x 420 mm	
Net Weight	20.5 kgs				46 kgs	
Toolrest	Adjustable					
Switch	NVR + EMS				NVR + EMS + OLP	
CE standard	YES					
OPTIONAL ACCESSORIES						
Stand	Stand A / Stand S				Stand B / Stand L	
Dust Collector Without Power	DCWP-C					
Powered Dust Collector	DCP2501		DCP2503		DCP2501	DCP2503

*Specifications are subject to change without prior notice.

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



^ Possible attachments:
Polish & Wire Brush

*Machine shown with optional accessories

▼ BMT 843GSA / BMT 1043GS



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

SPECIFICATION:

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			3B: 280 x 85 x 2.5 mm
Guard Extractor / Chip Outlet	34 mm x 2				34 mm + 100 mm
Guard Thickness	2.0 mm				2.5 mm
Wheel Speed	50HZ, 2P: 2850 rpm / 60HZ, 2P: 3450 rpm				
Wheel Type	A60				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 / 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			630 x 360 x 680 mm
Packing Dimension (Carton)	555 x 375 x 260 mm	610 x 490 x 295 mm			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 ACCESSORIES					
Stand	Stand A / Stand S				Stand B / Stand L
Dust Collector Without Power	DCWP-C				
Powered Dust Collector	DCP2501		DCP2503		

*Specifications are subject to change without prior notice.

BELT SANDER

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▼ BMT 4481GS / BMT 4483GS



*Machine shown with optional accessories

▼ BMT 4591GS / BMT 4593GS



STANDARD ACCESSORIES:

1. Guards & toolrests
2. Switches
3. Stands for BMT 4591GS & BMT 4593GS
4. Sanding attachment
5. Eye shield
6. CE standard

OPTIONAL ACCESSORIES:

1. Stands
2. Dust collector
3. High efficiency mop
4. 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		1500W	
Drive Wheel	126 x 105 mm		170 x 106 mm	
Wheel Speed	50HZ, 2P: 2850 rpm / 60HZ, 2P: 3420 rpm			
Guard Extractor / Chip Outlet	100 mm			
Belt Size	100 x 1220 mm		100 x 1500 mm	
Belt Speed	19 m/sec		25 m/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	Adjustable			
Switch	NVR + OLP (IP54)			
CE standard	YES			
OPTIONAL ACCESSORIES				
Stand	Stand B1		Standard machine already has stand.	
Dust Collector Without Power	DCWP-D			
Powered Dust Collector	DCP2501	DCP2503	DCP2501	DCP2503

*Specifications are subject to change without prior notice.

ACCESSORIES FOR BENCH / BELT GRINDER

BEMATO®

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



Wire Brush



Wheel



High Efficiency Mop



Polish



Polish Compound



NVR+EMS



Independent Emergency Stop



NVR+EMS+OLP



Diamond Wheel Dresser

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



POWERED DUST COLLECTOR:

MODEL	DCP2501	DCP2503
Capacity	750 CFM (21.2 m³/min)	
Hose Diameter	5" or 4" x 2	
Air Speed	28 M/S	
Static Pressure	5.5" H₂O (140 kg/m²)	
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 Capacity 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.

MEMO



STANDS:

MODEL	STAND S	STAND L	STAND L1	STAND A	STAND B	STAND B1
Top Plate	None		400 x 325 mm	295 x 220 mm	370 x 285 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.