

B&D Manufacturing

PORTABLE ALIGNBORING MACHINES

DEPENDABLE, DURABLE AND EASY TO OPERATE!











B&D Manufacturing's Portable Align Boring Machines will significantly help reduce downtime on your heavy equipment and result in lower production costs.

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A truly portable and complete service tool for on-site or in-shop precision machining applications, B&D Portable Align Boring Machines are rugged, modular in design, and operate effectively with as little as 110V of power. Fixed, totally variable speed hydraulic power sources and fully electric drives are available for all models.

B&D Manufacturing's complete machine packages include everything that is needed to safely and efficiently handle a variety of applications and set-ups. Our machines can be readily modified and customized to meet your specific job and budget requirements.

All B&D Maufacturing boring bars are chrome plated for longer life and straightened for precise alignment.

B&D Portable Align Boring Machines – Dependable, Durable and Easy to Operate!

Outside Canada and U.S.A.: +1-705-855-2363

AM-1424 SERIES

AM-1424, AM-1424-S, AM-1424-DD





- Rugged, reliable and heavy-duty
- · Flow through bar design allows for set-ups between bores
- On-site or in-shop operation
- · Choice of variable speed or guick-change fixed speed power
- Adjustable mounting system for ease of operation
- Remote pendant control
- All B&D Maufacturing boring bars are chrome plated for longer life and straightened for precise alignment
- · Self centering mount straight plates
- Bar support-offset
- · Clamps for mounts

- Centering cone set with tightening feature
- Sharpened tool bit
- Sturdy aluminum storage box
- · Instructional video
- Operations manual
- Direction in all models: forward, neutral and reverse
- · All models are mechanical feed

FEATURE	AM-1424	AM-1424-S	AM-1424-DD
Boring Range (Standard)	2 ¼ in - 16 in (57 mm - 406 mm)	1 ½ in - 16 in (38 mm - 406 mm)	2 ¼ in - 16 in (57 mm - 406 mm)
Boring Bar Diam.	2 in (51 mm)	2 in (51 mm) 1 ¼ in (32 mm)	2 in (51 mm)
Tool Ports	½ in (13 mm)	½ in (13 mm) % in (10 mm)	½ in (13 mm)
Power Choices	Hydraulic Fixed at 35 rpm or 75 rpm Optional power choices: 20 rpm or 120 rpm Model AM1424V: 1.5 hp110/220V variable	Hydraulic Fixed 35 rpm or 75 rpm Optional power choices: 20 rpm or 120 rpm Model AM1424-S-V: 1.5 hp 110/220V variable	Hydraulic Variable speed 5 hp



TM-8X SERIES

TM-8X, TM-8X-E, TM-8XS, TM-8XS-E





- Flow through bar design
 - » a smaller and lighter bar; ideal for heavy equipment repair work; allows for set-ups between bores
- Rugged, reliable and heavy-duty
- Choice of variable speed or quick change fixed speed power
- Adjustable mounting system for operator ease
- · Remote pendant control
- All B&D Maufacturing boring bars are chrome plated for longer life and straightened for precise alignment

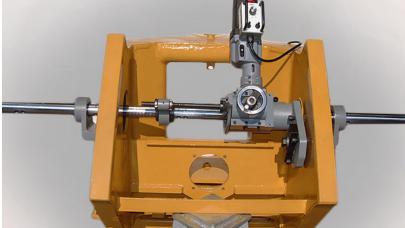
- Machine mount 90°
- Bar support-offset
- Clamps for mounts
- · Centering cone set with tightening feature
- Sharpened tool bit
- Sturdy aluminum storage box
- Instructional video and operations manual
- · Direction in all models: forward, neutral and reverse
- · All models are mechanical feed

FEATURE	TM-8X	TM-8X-E	TM-8X-S	TM-8X-S-E
Boring Range (Standard)	2 in - 10 in (51 mm - 254 mm)	2 in - 10 in (51 mm - 254 mm)	1 ½ in - 10 in (38 mm - 254 mm)	1 ½ in - 10 in (38 mm - 254 mm)
Boring Bar Diam.	1 ¾ in (44 mm)	1 ¾ in (44 mm)	1 ¾ in (44 mm) 1 ¼ in (32 mm)	1 ¾ in (44 mm) 1 ¼ in (32 mm)
Tool Ports	½ in (13 mm)	½ in (13 mm)	½ in (13 mm) ¾ in (10 mm)	½ in (13 mm) ¾ in (10 mm)
Power Choices	Hydraulic 1.5 hp 110/220 V fixed, 35 rpm, 75 rpm	Electric 15-115 rpm high torque	Hydraulic 1.5 hp 110/220V fixed, 35 rpm, 75 rpm	Electric 15-115 rpm high torque
	Optional power choices: Fixed speed 20 rpm or 120 rpm		Optional power choices: Fixed speed 20 rpm or 120 rpm	
	Model TM-8X-V: 1.5 hp 110/220V variable		Model TM-8XS-V: 1.5 hp 110/220V variable	
	Model TM-8X-DD-xx: 5 hp variable		Model TM-8XS-DD: 5 hp	

EV-2500 SERIES

EV-2500, EV-2500-S, EV-2500-125





- Electric drive (110/220V 50/60Hz)
- · Portable and easy to store
- Flow through bar design allows for set-ups between bores
- Ideal for heavy equipment repair
- Infinite speed range (15 rpm to 170 rpm)
- Confined set-up, as little as 10" clearance required between bores
- Expandable from 1" to 10" diameter
- Machine mount 90°
- Bar support-offset
- · Clamps for mounts
- · Centering cone set with tightening feature
- · Sharpened tool bit
- Sturdy aluminum storage box
- All B&D Maufacturing boring bars are chrome plated for longer life and straightened for precise alignment

- Instructional video
- · Operations manual
- Direction in all models; forward, neutral and reverse
- · All models are mechanical feed

FEATURE	EV-2500	EV-2500-S	EV-2500-S-E
Boring range (Standard)	2 in - 6 in (51 mm - 152 mm)	1 ½ in - 6 in (38 mm - 152 mm)	1 ½ in - 4 in (38 mm - 102 mm)
Optional Boring Head to 10 in	Yes	Yes	No
Boring Bar Diam.	1 ¾ in (44 mm)	1 ¾ in (44 mm) 1 ¼ in (32 mm)	1 ¼ in (32 mm)
Tool Ports	½ in (13 mm)	½ in (13 mm) ¾ in (10 mm)	% in (10 mm)
Power Choices	Electric Infinitely variable 15-170 rpm	Electric Infinitely variable 15-170 rpm	Electric Infinitely variable 15-170 rpm



ALIGN BORING OPTIONS

Optional accessories for all models which B&D Manufacturing offers include many accessories and options for B&D Portable Align Boring Machines. Depending on the application, consider these additional features:

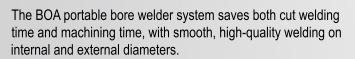
OPTIONAL ACCESSORIES		PART NUMBER	DESCRIPTION
Variable Feed Gear Box		VF-2800	The variable feed gear box can be adapted to any hydraulic unit. The feed rate of the gear box is .002, .004 and .006 per revolution. The variable feed will decrease the cutting time for each cut pass.
7/8" Boring Bar Kit		SE-Kit	The SE Kit reduces the align boring machine to receive a 7/8" boring bar. Available in various packages depending on bar length required . The Boring range for SE-Kit is from 1" to 2 112". Complete with adapters, setup cones and chromed boring bar.
Centering Cone Extension		LACC-685	Cones are used to centre the boring bar to the bores. The LACC-685 extends the cone range from 6" to 8 1/2" diameter.
Cone Tightener		LACC-2900 & TCC-2900	The cone tightener consists of 3 parts, locking collar, threaded ring and lock nut. To tighten the cones to the bore, place the threaded ring which has the lock nut on it and a locking collar, on each side of the cones. Tighten the locking collars in place. Using the supplied spanner wrench, tighten the lock nut onto the cone which in tum tightens the comes into the bores.
Spider 4 1/2" to 25"	M Qu	IBS-4625	The spider is used when it is impossible to use a bar support, for example, where the bore you are machining is 3' to 4' long. Some type of support is needed, so insert a spider into the bore to support the bar.
Follower Rest		FR-2600	The follower rest is used when a spider cannot be used because the bore is too small, or when you need a continuous cut for an extended length and you cannot put a support along the bore.
Grooving Tool		K96.12	The grooving tool is used to make snap ring grooves in bores. The groove diameter ranges from 2 1/4" to 5 1/4" with a 1 3/4" boring bar. The minimum groove width dimension is 3/32".

ALIGN BORING OPTIONS

OPTIONAL ACCESSORIES	PART NUMBER	DESCRIPTION
Boring Bar Couplers	LAC-200 I TC- 175 I XC-125	boring bar couplers couple 2 bars together when one bar is not long enough to fit between bores, thus eliminating a longer, heavier boring bar.
Large Boring Head to 24"	AM-24	For bores up to 24" in diameter. Complete with two tool bit extensions and inserts for ½" tool bits and fitted storage case. Note: 20 rpm motor is recommended for larger bores.
Easy Align Self Centering Attachment	EA-SC	Provides fast X-Y axis adjustment of the boring bar at the machine mount end and at the boring bar support end.

BORE WELDING SYSTEMS







- All bore welder packages feature the exclusive pass-through drive system with reversible telescoping and pivoting torch assembly
- All bore welder packages can be ordered with the Automatic-Weld-Skip option and/or Long-stroke option
- Diameter ranges from 0.8" to 48"



ALIGN BORING FACING HEADS

The facing heads are used to machine the outer surface 90 degrees to the bore. Using the same cutting tools for cutting the bores, place them in the tool holder of the saddle. To advance the tool bit along the work face, use the star wheel and the striker ring shown at the bottom of the chart. Each time the star wheel hits the striker, the tool bit advances approximately .003 thousands of an inch.

OPTIONAL ACCESSORIES	PART NUMBER	DESCRIPTION
Special Facing Attachment	TM-F-SP AM-F-SP	Facing range from 2" to 10" (50 mm to 250 mm). The swing diameter is approximately 11".
Facing Attachment	AM-F TM-F	Facing range from 4" to 12" (l00 mm to 305 mm). The swing diameter is approximately 14 1/4".
22" Facing Attachment	AM-F-422 TM-F-422	Facing range from 4" to 22" (l00 mm to 559 mm). The swing diameter is approximately 22 1/2".
Striker Ring	TM-SP-30	The striker ring is used with the star wheel to advance the tool bit automatically. To advance the tool bit you must secure the striker ring in one position. This is done by placing a rod into the striker ring and securing it to the work piece. Once the machining is complete, remove the rod and the striker ring will rotate with the facing head and the tool bit will not advance.

ALIGN BORING MEASURING TOOLS

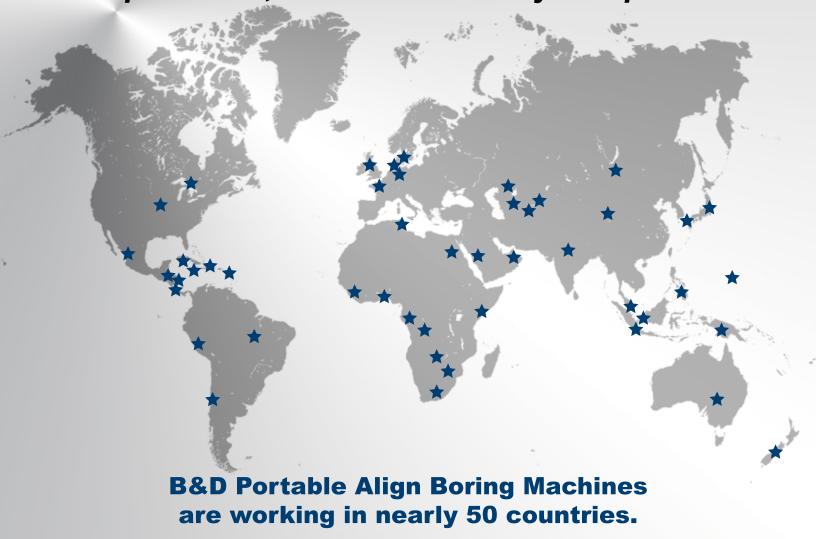
OPTIONAL ACCESSORIES		PART NUMBER	DESCRIPTION
Over The Bar Micrometer Range 4.25" to 11.5"	11/11	OBM-4510	A simple solution to large bore measurement, eliminating the need to remove the boring bar to accurately measure the ID of the bore. Accuracy to one thousands of an inch.
Over The Bar Micrometer Range 8.5" to 29"		OBM-8529	B&D Over The Bar Micrometer eliminates the boring bar from the measuring equation. Our model measures the ID of the bore-wall to wall which is a direct measurement that increases accuracy.
Micro Tool Insert		MTI	The model MTT Micro Tool Insert fits right in the boring bar or in the boring heads and is designed to facilitate accurate micrometer adjustment of the insert for the finishing cut. The triangular carbide insert is clamped in the valenite E-Z set unit. Using the wrench to adjust the vernier dial provides one tenth of the adjustment with a total range of approximately .040".
Bore Measuring Telescoping Gauge Range 1 3/4" to 6"	Mo	TBMT-2300	The telescoping gauge measures the ID of the bore through an open tool port in the boring bar. It is spring loaded so the operator can get an exact measurement (within .001 per inch) without having to remove the boring bar from the bore.
Bore Measuring Telescoping Gauge		TBMT-2500	Range I I /4 to 5" Designed with hardened measuring tips for rugged durability and consistent accuracy. Superior quality translates into a long lasting tool and more savings.
Bore Measuring Telescoping Gauge		TBMT-2300-10	Range 1 3/4" to 10" fits through all makes of boring bars with 1/2" and 3/8" tool ports. Variety of range packages to suit your needs.
Dial Tool Adjuster		DTA-2700	The unique B&D Dial Tool Adjuster enables you to re-adjust the tool bit length to within one thousands of an inch. Using the DTA is easy. Just slip it over the tool bit and rest it against the boring bar. Clamp the tool bit to the DTA by tightening the setscrew. Zero the dial gauge and release the tool bit from the boring bar. Tum the knurled brass nut to pull the tool bit to the desired length. Relock the tool bit to the boring bar, release the DTA, and you are done.



ALIGN BORING MOUNTING SYSTEMS

OPTIONAL ACCESSORIES		PART NUMBER	DESCRIPTION
Offset Mount		SCM-2300	Has a bronze ball spherical for easy alignment.
Double Bearing Adjustable Mount		DBM-2600	The machine mount has 3 legs to secure the mount to the workpiece. The mount has 2 ball bearings which increase the rigidity of the boring bar. It also has an x & y adjustment.
3 Leg Spherical Mount		SCM-2900	The machine mount has 3 legs to secure the mount to the work piece. It also has a spherical bronze ball which makes the line-up of the boring bar simpler.
Double Bearing Adjustable Support		DBSM-2600	The support mount has 3 legs to secure the mount to the work piece. It has 2 ball bearings which increase the rigidity of the boring bar. It also has an x & y adjustment.
3 Leg Double Bearing Mount		DBM-2800	The support mount has 3 legs to secure the mount to the work piece. It also has 2 ball bearings which increase the rigidity of the boring bar. This support has no x & y movement.
3 Leg Spherical Bearing Support	0	TLSM-2900	The support mount has 3 legs to secure the mount to the work piece. It also has a spherical bearing to help the alignment of the support.
3 Leg Adjustable Spherical Bearing Support		TLASM-2900	The support mount has 3 legs to secure the mount to the work piece. It also has a spherical bearing to help the alignment of the support and has an x & y axis movement for easier bar adjustment.

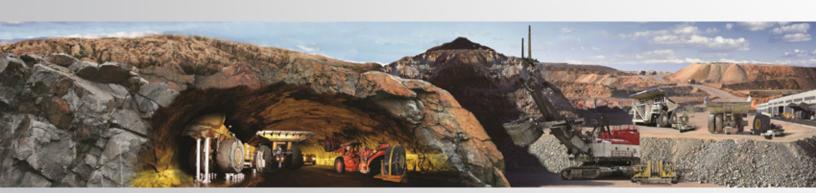
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B&D Maintenance Support Equipment Package

B&D Manufacturing can increase availability to your stationary and mobile equipment by minimizing maintenance downtime. Our unique package includes:

- B&D Portable Align Boring Machines
- B&D Super Jack
- B&D Multi Handler
- B&D Tire Handler Station
- B&D Swing Shaft Changer
- Spreader Bar
- Work Platforms
- Steps and Stairs
- Wheel Chocks
- Safety Stands
- Effluent Tanks



Your local distributor:



Improving safety while increasing production.

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