

High-End Features of ATRA ACE Drilling Machines

High-End Features of ATRA ACE Drilling Machines Enhance Your Productivity and Safety

Ref. No.	Features	QA-4000	QA-6500	WA-3500	WA-5000	WOJ-3200	AO-5575A	LO-3550	CLA-2720	ARA-100A
1	Auto-feed	●	●	●	●	—	—	—	—	—
2	Slow Start Mechanism	●	●	●	●	—	—	—	—	—
3	Step Feed	●	●	—	—	—	—	—	—	—
4	Variable Automatic Feed	●	●	●	●	—	—	—	—	—
5	Load Sensor	●	●	●	●	—	—	—	—	—
6	Magnet Open-circuit Sensor	●	●	●	●	●	●	●	●	●
7	Fail-safe Restart	●	●	●	●	●	●	●	●	●
8	Built-in Motion Sensor	●	●	●	●	—	●	—	●	●
9	Overload Stop	●	●	●	●	●	●	●	●	●
10	Cycle Stop	●	●	●	●	—	—	—	—	—
11	Unique Battery Conservation	—	—	—	—	—	—	—	●	—
12	One-touch Cutter Replacement	●	●	●	●	●	●	●	●	●

1. Automatic control & feed are activated by simply pushing the feed handle to engage the clutch.

2. The feed speed is reduced for the first few seconds after boring begins to ensure a smooth cut through the mill scale.

3. When the cutter has become dull or it cuts through difficult materials, the load sensor will automatically activate the Step Feed Program to help penetrate material. When working on deep holes or large diameter holes, the Step Program will also help to reduce swarf build up around the cutter as the waste material will break off with each Step cycle.

4. The feed speed is continuously monitored and updated proportionally to the load on the cutter.

5. **QA-4000/QA-6500:** The sensing system responds to drilling forces on the cutter for the optimum cutting condition.

WA-3500/WA-5000: The dual sensing system responds to both drilling and feeding forces on the cutter for the optimum cutting condition.

6. The drill will not start until the magnetic field is active.

7. **QA-4000/QA-6500/WA-3500/WA-5000/WOJ-3200/AO-5575A/LO-3550/ARA-100A:** The drill will not re-start even if power is re-supplied after accidental shutdown. Drilling can only be continued after turning on the drill switch.

CLA-2720: If the battery pack is replaced/removed whilst both the magnet and the drill motor switch are in the on position, the drill will not operate until both switches are reset.

8. **QA-4000/QA-6500/WA-3500/WA-5000:** If any lateral movement or excess vibration is detected, both the drill and the feed motor stop.

AO-5575A/CLA-2720/ARA-100A: If any lateral movement or excess vibration is detected, the drill motor stops.

9. **QA-4000/QA-6500/WA-3500/WA-5000:** When an excessive load is applied to the cutter, both the drill and the feed motor will stop automatically.

WOJ-3200/AO-5575A/LO-3550/CLA-2720/ARA-100A: When an excessive load is applied to the cutter, the drill motor will stop automatically.

10. **QA-4000/QA-6500:** After the cut has finished, a detector responds to the reduction in load, the drill retracts quickly and then both the drill and feed motor automatically stop.

WA-3500/WA-5000: After the cut has finished, a detector responds to the reduction in load and both the drill and the feed motor automatically stop.

11. While the drill motor is running, if no load is applied within 10 seconds, the drill will stop automatically to save the battery.

12. Replacement is quick and easy with our unique push fit self-centering cutter system.

ARA-100A: Optional one-touch type Holder required.

ATRA ACE Specifications



CLA-2720



LO-3550



WA-3500



WA-5000

Specifications

Model		CLA-2720	LO-3550	WA-3500		WA-5000					
Electric Drill	Power Source (Single Phase)	Battery (18 V DC)	220 - 240 V AC, 50/60 Hz	110 - 120 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz	110 - 120 V AC, 50/60 Hz		220 - 240 V AC, 50/60 Hz			
	Rated Power Consumption W	-	800	1100		1150					
	Rated Current A	-	3.3	10.2	5.1	10.8		5.4			
	No-load Speed min ⁻¹ (rpm)	430	950	950		350 / 650					
Magnet Power Consumption W		18	35	34		75					
Max. Hole Diameter mm		27	35	35		50					
Max. Plate Thickness mm		20	50	50		75					
Hole Capacity	One-touch Type JETBROACH	Hole Diameter mm	12 to 17	17.5 to 27	12 to 35	17.5 to 35		12 to 17	17.5 to 40	12 to 50	17.5 to 50
		Plate Thickness mm	6 to 12	6 to 20	6 to 50	9 to 50		9 to 25	9 to 35	9 to 50	9 to 75
	Side-lock Type JETBROACH	Hole Diameter mm	-	-	-		-				
		Plate Thickness mm	-	-	-		-				
	One-touch Type HI-BROACH	Hole Diameter mm	12 to 15	16 to 27	-		14 to 35		14 to 50		
		Plate Thickness mm	6 to 12	6 to 20	-		9 to 25		9 to 50		
Twist Drill	Hole Diameter mm	-	-	-		-					
Max. Stroke mm		60	80	83		107					
Magnet Holding Power N(kgf)		5500 (561)	5500 (561)	7056 (720)		9800 (1000)					
Magnet Dimensions mm		65 x 126	65 x 145	92 x 213		101 x 201					
Overall dimensions * (length) x (width) x (height) mm		199 x 151 x 290	339 x 112 x 316	409 x 237 x 530		425 x 237 x 604					
Power Cord Length m		-	3	3		3					
Mass (Weight) kg		7	8.7	20		23					
Feeding		Manual	Manual	Automatic		Automatic					
Page		7	9	11		11					

*The height is the dimension from the surface of the workpiece to the highest part of the machine when the tip of the Pilot Pin is touching the workpiece with the cutter of the machine's maximum capacity attached.

ATRA ACE Specifications



WOJ-3200



AO-5575A



QA-4000



QA-6500



ARA-100A

WOJ-3200		AO-5575A		QA-4000		QA-6500	ARA-100A
110 - 120 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz		110 - 120 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz		220 - 240 V AC, 50/60 Hz
950		950		680		1010	1800
8.6	4.3	4.3		6.1	3.0		4.5
870		520		750		400/750	110 - 210 / 330 - 660
38	30	50		50		75	80
32		55		40		65	100
50		75		35		50	75
12 to 32	12 to 17	17.5 to 55	17.5 to 40		17.5 to 65		17.5 to 50
9 to 50	9 to 50	9 to 75	9 to 35		9 to 50		13 to 75
-	-	-	-		-		50 to 100
-	-	-	-		-		13 to 75
-	12 to 50	14 to 15	16 to 18	18 to 35		17.5 to 35	
-	9 to 50	9 to 12	9 to 25	9 to 25		13 to 50	
Max. 13	-	-	-	-		Max. 32	
130	105	75		88		296	
9000 (918)	10000 (1020)	6664 (680)		9800 (1000)		17000 (1733)	
99 x 177	86 x 170	82 x 172		100 x 200		110 x 220	
318 x 196 x 420	432 x 197 x 493	407 x 215 x 424		455 x 215 x 534		570 x 274 x 623	
3	3	4	5		5	5	
13	17.5	18.5		26		30	
Manual	Manual	Automatic		Automatic		Manual	
13	13	15		15		5	

BORING

Portable Magnetic Base Drilling Machine

ATRA ACE manual feed

Model **ARA-100A** 

• Max. 100 mm dia. x 75 mm deep



The versatile drilling machine with top-class power

- Accepts various cutters for diverse drilling
- Advanced electronic control for efficient drilling and operator safety

Specifications

Model		ARA-100A		
Power Source (Single Phase)		220 - 240 V AC, 50/60 Hz		
Electric Drill	Rated Power Consumption	W	1800	
	Rated Current	A	8.2	
	No-load Speed	min ⁻¹ (rpm)	110 - 210 / 330 - 660	
	Morse Taper No.		MT3	
	Rated Duty	min	30	
Magnet Power Consumption		W	80	
Hole Capacity	mm	Cutter	Hole Diameter	Plate Thickness
		One-touch Type JETBROACH 35L	17.5 to 40	13 to 35
		One-touch Type JETBROACH 50L	17.5 to 50	13 to 50
		One-touch Type JETBROACH 75L	17.5 to 50	13 to 75
		JETBROACH 75L	50 to 100	13 to 75
		One-touch Type HI-BROACH 25L	17.5 to 35	13 to 25
One-touch Type HI-BROACH 50L	18 to 35	13 to 50		
Twist Drill		Max. 32 mm dia.		
Max. Stroke		mm	296	
Magnet Holding Power		N(kgf)	17000 (1733)	
Magnet Dimensions		mm	110 x 220	
Cutter Position Adjustment	Straight Front to Back	mm	20	
	Swivel angle		30°	
Power Cord Length		m	5	
Mass (Weight)		kg	30	

Accessories Included

- Pilot Pin 12075
- Side Handle
- 2.5 mm Hex. Socket Screw Key
- 5 mm Hex. Socket Screw Key
- 6 mm Hex. Socket Screw Key
- 8 mm Hex. Socket Screw Key
- Drill Drift
- 7 x 8 mm Spanner
- Safety Chain
- Guard
- Oil Tank
- Oil Tank Bracket
- 3 pieces of Rod Handle
- Holder MT03075 Side Lock

Optional Accessories

Ref. No.	PN	Description	Sales Unit
1	TB01507	Cutting Oil 2L	1 piece
2	TB04374	Supporting Magnet Ass'y	
3	TB09727	Holder MT03075 One-touch	

Slow Starting Function

Slow speed at the beginning of boring will securely set a hole cutting position.



1

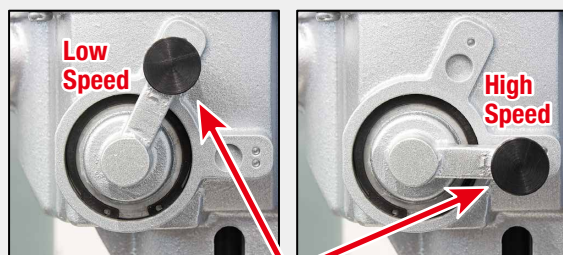
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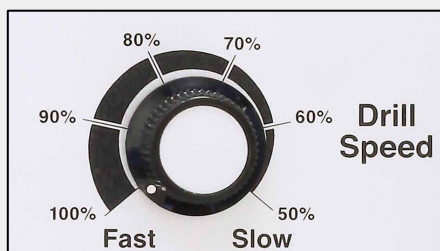


Two speed electric drill with speed adjustment

Optimum drill speed adjustment can be made to bore a hole on difficult-to-cut materials or to securely set a hole cutting position at initial cutting stage.



Shift Lever



Load Indication and LED Condition

Load Indication

The load indicator (LED) indicates the condition of the load with different color of LED light.

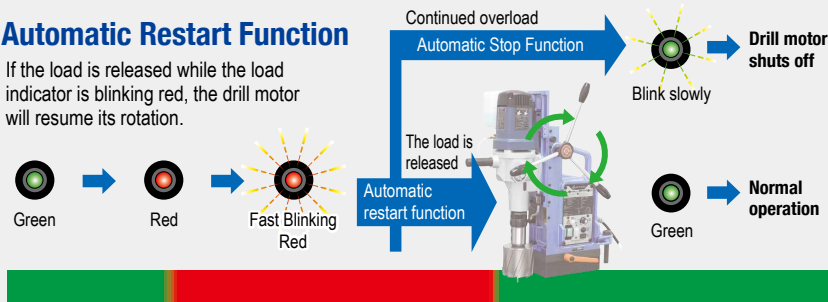
- The LED lights up in green. → The load on the drill motor is normal.
- The LED lights up in red. → The load on the drill motor is close to overload.
- The LED blinks in red. → The drill motor is overloaded.

Automatic Stop Function

As the drilling load increases, the load indicator will change in color from green to red. In addition, if excessive feeding force is applied, the load indicator will rapidly blink red and the rotation of the drill motor will slow down and stop. After the drill motor has come to a complete stop, the load indicator will slowly blink in green. To resume the rotation of the drill motor release the load and turn off the switch of the drill motor, and then turn it on.

Automatic Restart Function

If the load is released while the load indicator is blinking red, the drill motor will resume its rotation.



Built-in Motion Sensor

If any lateral movement or excess vibration is detected during drilling a hole, the drill motor stop instantly and the LED blink red. To resume operation, turn the magnet switch off and on.



Fail-safe Restart

The magnetic field will become active, but the drill will not re-start even if power is re-supplied after accidental shutdown. The LED will blink green at this stage. Drilling can only be continued after turning on the drill switch.

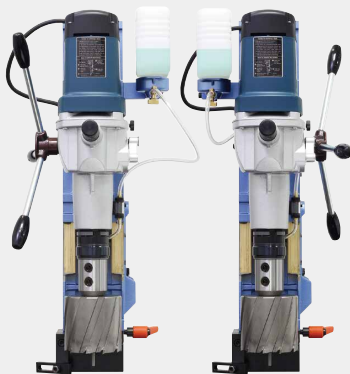
Magnet Open-circuit Sensor

The drill will not start until the magnetic field is active. If malfunction occurs on the magnet, the LED will blink red slowly and the drill motor will not revolve.



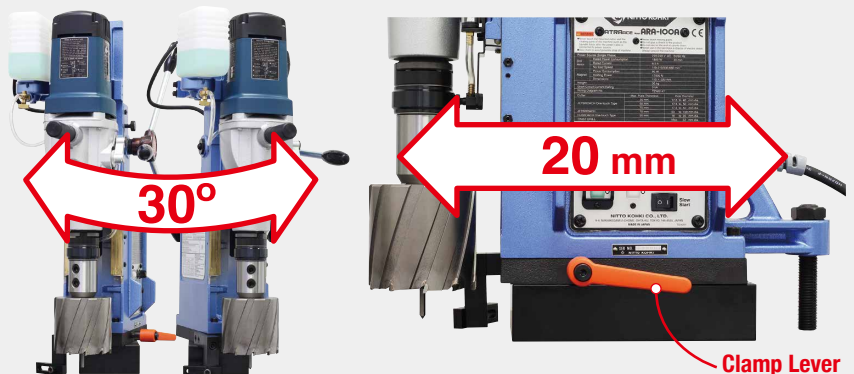
Features

Reversible Feed Handles



Feed handles can be positioned on the right or left hand side for ease of drilling. When changing the feed handle position, oil tank is required to be positioned opposite to the feed handles.

Drilling Position Adjustment



When the clamp lever is loosened, the drill position can be adjusted back and forth by 20 mm and pivoted 15 degrees to the left or right. The clamp lever can be positioned for left hand or right hand operation.

One-Touch Cutter Replacement (Holder MT03075 One-Touch)



Mounting the cutter

Align the depression in the cutter shank with the white line on the sleeve, and then insert the cutter.



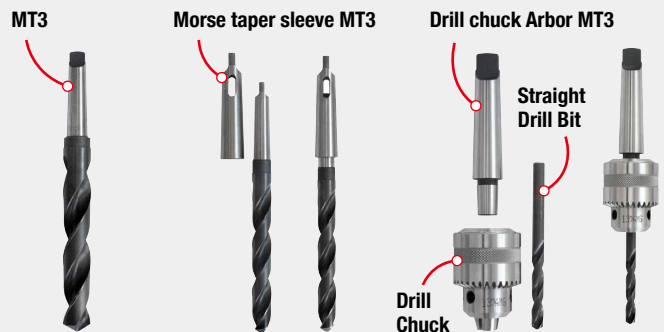
Removing the cutter

Turn the sleeve counterclockwise. The cutter will come off.



Available in the market

Twist Drill Bit



MT3 Morse taper shank drill bit can be directly installed.

Use Morse taper sleeve MT3 for other sizes than MT3

A drill chuck is required to install a straight drill bit.

BORING

Portable Magnetic Base Drilling Machine

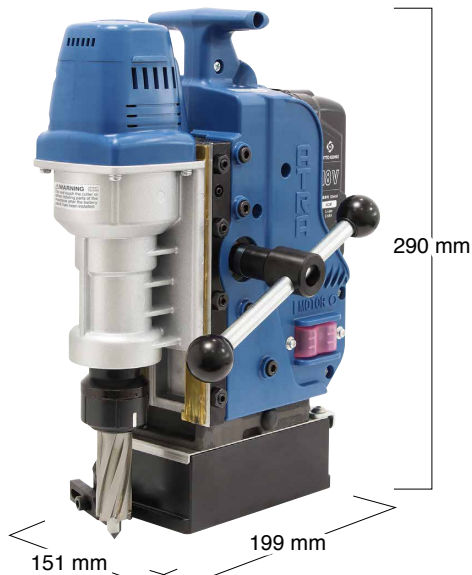
ATRA ACE manual feed

Model **CLA-2720** 

• Max. 27 mm dia. x 20 mm deep



 YouTube



**Compact and cordless operation,
powered by a rechargeable lithium-ion battery.**

- Weighs only 7 kg with battery installed
- Compact size allows drilling in tight spots

Specifications

Model		CLA-2720	
Voltage		18 V DC	
Battery Pack (Lithium-ion Battery)		NBL18006 (18V 4.0 Ah)	
No-load Speed min ⁻¹ (rpm)		430	
Hole Capacity mm	Cutter	Hole Diameter	Plate Thickness
	One-touch Type JETBROACH 25L	12 to 17	6 to 12
	One-touch Type JETBROACH 35L	17.5 to 27	6 to 20
	One-touch Type HI-BROACH 25L	12 to 15	6 to 12
		16 to 27	6 to 20
Magnet Holding Power N(kgf)		5500 (561)	
Magnet Dimensions mm		65 x 126	
Cutter Position Pivot Side to Side mm		10	
Adjustment Straight Front to Back mm		10	
Mass (Weight) kg		7*	

*Including Battery Pack and Feed Handle

Battery Charger	NC14435
Power Source	220 - 240 V AC
Charging Time	90 min*
Chargeable Battery Pack	NBL18006 (18 V 4.0 Ah)

*In case of a full charge from an empty battery. However, it can be charged up to 95% in 45 min.

Accessories Included

- Carry Case
- Cutting Oil 0.5L
- Oiler No.3013
- Tube 4 x 7 mm, 1 m Long
- Handle
- Battery Charger
- 2 pieces of Battery Pack 18V NBL18006
- Blade
- 3 mm Hex. Socket Screw Key
- 4 mm Hex. Socket Screw Key
- Hex. Socket Head Cap Screw 5 x 12
- Hex. Socket Head Set Screw 8 x 28
- Spanner 8 x 10
- Guard
- Safety Strap

TOP-LEVEL SAFETY

Highly Sensitive Sensor Equipped

Side slip and inclination detected by a built-in sensor

Self-check Function

The machine checks for faults itself

Highly Advanced Energy-Saving

Magnetic Force Control Function

The magnet force is automatically reduced when the drill is not running.

Soft Start Function

The large electric current on start-up is prevented by starting the electric drill gently.

Automatic Drill Stop and Warning Function

Unnecessary operations are eliminated.



Li-ion

Lithium-ion batteries are required to be recycled; never discard a lithium-ion battery in the waste. Please contact your local sales office or community recycling program for information on properly disposing of lithium-ion batteries.

Optional Accessories

Ref. No.	PN	Description	Sales Unit
1	TB01507	Cutting Oil 2L	1 piece
2	TB09657	Oil Tank Ass'y	
3	TB04374	Supporting Magnet Ass'y	
4	TB07696	Pipe Attachment Ass'y	
5	TB09824	Battery Pack 18 V	
6	TB09825	Battery Charger	
7	TQ14333	Guard	
		One-touch Type JETBROACH 25L, 35L	
		One-touch Type HI-BROACH 25L	



Reversible Feed Handle

Feed handles can be positioned on the right or left side for ease of drilling and mounting in confined spaces.



CLA-2720 LED Indication Light Safety Features

LED INDICATION – Battery level and Motor load can be monitored while drilling

VOLTAGE LEVEL				
BATTERY LEVEL INDICATION				
	GREEN 3 TIMES*	YELLOW 3 TIMES*	RED 3 TIMES*	RED BLINKING CONTINUOUS
MEANING	BATTERY FULL	PARTIALLY CHARGED	REQUIRE CHARGING	BATTERY LEVEL LOW

LED Indication Light



*After turning on the magnet switch the light flashes 3 times with the color according to the battery level, then the light will turn green and the tool is ready for use. If the light flashes red 3 times or continuously, replace the low battery pack with a charged battery pack.

ELECTRIC CURRENT OF THE ELECTRIC DRILL					
MOTOR LOAD INDICATION					
	GREEN	YELLOW	RED	RED BLINKING	WHITE BLINKING
MEANING	LIGHT LOAD	MEDIUM LOAD	OVERLOAD		MOTOR STOPPED BY OVERLOAD

“Caution” If an excessive load is maintained during the cut, the motor will shut-off to prevent damage or injury to the operator.

SLIDE SLIP DETECTION		When a slide slip is detected, the blue light will flash and the Motor will stop automatically.	SAFETY
“NO LOAD” DETECTION		While the electric drill is running, if no load is applied for 7 seconds, the green light will flash. After another 3 seconds without load, the electric drill will be stopped automatically.	ENERGY-SAVING
MOTOR NOT ACTIVATED IN TIME		After the Magnet switch is turned on, if the Motor switch is not turned on within 10 seconds, the green light will flash.	

Chip Breaker

This chip breaker prevents the cutter from becoming jammed with metal shavings.



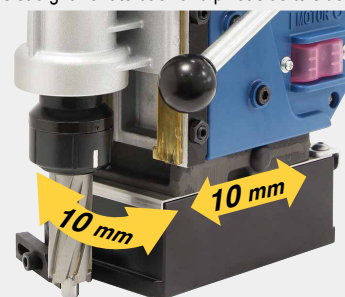
Powered by Lithium-ion Battery

Using the Lithium-ion battery it takes about 90 minutes for a full charge. Sufficient charge (95%) can be achieved in just 45 minutes.



Drilling Position Adjustment

After engaging the magnet, the drill position can be adjusted up to 10 mm travel on each axis straight front to back and pivot side to side.



BORING

Portable Magnetic Base Drilling Machine

ATRA ACE manual feed

Model **LO-3550** 

• Max. 35 mm dia. x 50 mm deep

Compact, light weight, low profile design gives you greater hole making mobility

- Drilling on 100 mm or more width web and flange of wide flange beam
- Designed to improve drilling on walls, confined and elevated locations
- Drill position can be adjusted up to 10 mm travel on each axis straight front to back and pivot side to side



Specifications

Model		LO-3550		
Power Source (Single Phase)		220 - 240 V AC, 50/60 Hz		
Electric	Rated Power Consumption	W		
	Rated Current	A		
	No-load Speed	min ⁻¹ (rpm)		
Hole Capacity	Cutter	Hole Diameter	Plate Thickness	
		One-touch Type JETBROACH 25L	12 to 17	6 to 25
		One-touch Type JETBROACH 35L	17.5 to 35	6 to 35
	One-touch Type JETBROACH 50L	12 to 35	6 to 50	
Magnet Holding Power		N(kgf)	5500 (561)	
Magnet Dimensions		mm	65 x 145	
Cutter Position	Pivot Side to Side	mm	10	
Adjustment	Straight Front to Back	mm	10	
Power Cord Length		m	3	
Mass (Weight)		kg	8.7*	

*Excluding Power Cord and Sub Handle

Accessories Included

- Carry Case
- Cutting Oil 0.5L
- Feed Handle
- Sub Handle
- Pilot Pin 08035
- Spanner 17
- Blade
- Hex. Socket Bolt 5 x 12
- Hex. Socket Head Set Screw 8 x 28
- 4 mm Hex. Socket Screw Key
- 5 mm Hex. Socket Screw Key
- Spanner 7 x 8
- Guard
- Safety Strap

Chip Breaker



Optional Accessories

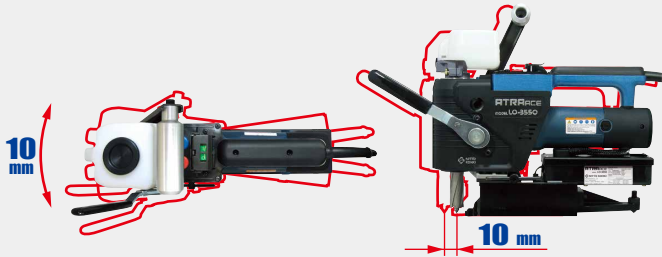
Ref. No.	PN	Description	Sales Unit
1	TB01507	Cutting Oil 2L	1 piece
2	TQ10581	Oiler No.3013	
3	TB01098	Tube 4 x 7 x 3000 Ass'y	
4	TB07306	Lubrication Adapter Ass'y	
5	TB04374	Supporting Magnet Ass'y	
6	TB07696	Pipe Attachment Ass'y	
*50L for stacked plates		One-touch Type JETBROACH 25L, 35L, 50L	



BORING

Easy Drilling Position Adjustment

After engaging the magnet, the drill position can be adjusted up to 10 mm travel on each axis straight front to back and pivot side to side.



Adjustable Feed Handle

The feed handle can be locked at varying angles to enhance productivity.

Pull the feed handle to adjust the angle.



Light Handle Operation

Fast revolution of Jetbroach cutter makes less cutting resistance and smooth handling.

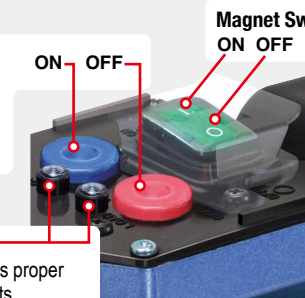


Easy-to-use Switch Panel

On / off buttons of the magnet and the drill motor are on the front panel and can be operated by one hand. Drilling conditions can be checked by lamp colors.

Motor Switch
The motor switch can be activated after the magnet switch is turned on.

LED Load Indicator
The LED load display allows proper cutting pressure adjustments.



Reversible Feed Handle

The feed handle can be positioned on the right or left hand side for ease of drilling and mounting in confined spaces.



A Carrying Case Is Provided

The carrying case is a rugged accessory that provides a convenient way to transport and store the LO-3550.



Optional Accessories for ATRA ACE

Pipe Attachment Ass'y

The Pipe Attachment Ass'y is an optional base to securely fasten ATRA ACE on pipe for drilling. The chain can easily and securely fit around pipes having an outside diameter of 48.6 to 318.5 mm.

Example of installation on a pipe



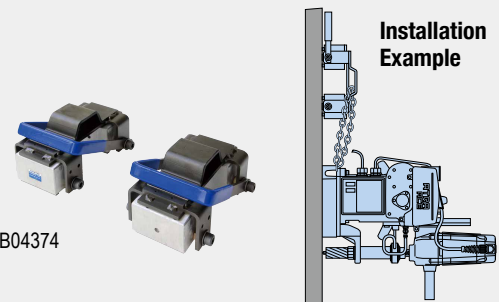
Applicable Pipe Size:
48.6 to 318.5 mm

PN : TB07696

Applicable Models when a 35 mm or 50 mm length one touch type JETBROACH CUTTER is used:
CLA-2720, WOJ-3200, LO-3550, WA-3500, and QA-4000

Supporting Magnet Ass'y

If the accessory safety strap or chain is unable to be properly secured to prevent ATRA ACE from falling off the workpiece, the supporting magnet ass'y is recommended. It employs a permanent magnet and can secure ATRA ACE even if power is interrupted.



PN : TB04374

Applicable Models:
CLA-2720, LO-3550, WA-3500, WOJ-3200, AO-5575A, QA-4000, and QA-6500

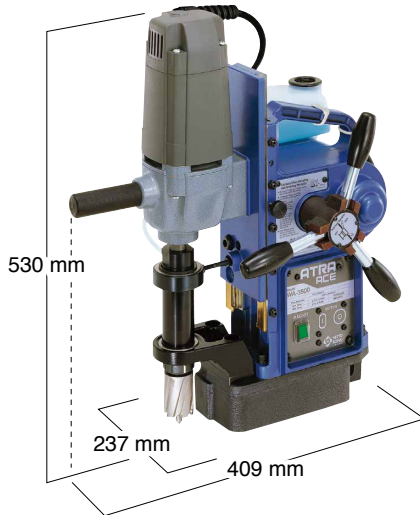
BORING

Portable Magnetic Base Drilling Machine

ATRA ACE auto

Model **WA-3500** 

• Max. 35 mm dia. x 50 mm deep



High-performance feed system & high-tech components

• Drilling time and cutting performance are enhanced by the automatic feed function.

Model **WA-5000** 

• Max. 50 mm dia. x 75 mm deep



 YouTube



Specifications

Model		WA-3500		WA-5000	
Power Source (Single Phase)		110 - 120 V AC, 50/60 HZ	220 - 240 V AC, 50/60 Hz	110 - 120 V AC, 50/60 HZ	220 - 240 V AC, 50/60 Hz
Electric Drill	Rated Power Consumption	W		1100	
	Rated Current	A	10.2	5.1	
	No-load Speed	min ⁻¹ (rpm)	950		350 / 650
Magnet Power Consumption		W		34	
Hole Capacity mm	Cutter	Hole Diameter	Plate Thickness	Hole Diameter	Plate Thickness
	One-touch Type JETBROACH 25L	-	-	12 to 17	9 to 25
	One-touch Type JETBROACH 35L	17.5 to 35	9 to 35	17.5 to 40	9 to 35
	One-touch Type JETBROACH 50L	17.5 to 35	9 to 50	12 to 50	9 to 50
	One-touch Type JETBROACH 75L	-	-	17.5 to 50	9 to 75
	One-touch Type HI-BROACH 25L	14 to 35	9 to 25	14 to 50	9 to 25
One-touch Type HI-BROACH 50L	-	-	14 to 50	9 to 50	
Max. Stroke	mm	83		107	
Magnet Holding Power	N(kgf)	7056 (720)		9800 (1000)	
Magnet Dimensions	mm	92 x 213		101 x 201	
Power Cord Length	m	3		3	
Mass (Weight)	kg	20		23	
Accessories Included		<ul style="list-style-type: none"> • Carry Case • Cutting Oil 0.5L • Pilot Pin 08035 • Side Handle 		<ul style="list-style-type: none"> • 3 mm Hex. Socket Screw Key • 8 x 10 mm Spanner • Guard • Chain 	
		<ul style="list-style-type: none"> • 3 mm Hex. Socket Screw Key • 4 mm Hex. Socket Screw Key • 8 x 10 mm Spanner • Guard • Chain • Chip Breaker 			

Optional Accessories

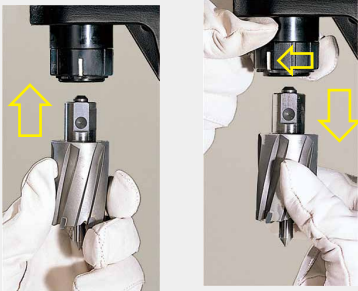
Ref. No.	PN	Description	Sales Unit	Applicable Model	
				WA-3500	WA-5000
1	TB05186	Chip Breaker Ass'y	1 piece	●	●
2	TB01507	Cutting Oil 2L	1 piece	●	●
3	TB04374	Supporting Magnet Ass'y	1 piece	●	●
4	TB02536	Sleeve 6.5 for Triangle Shank Drill Bit	1 piece	●	●
5	TB07696	Pipe Attachment Ass'y	1 piece	●	●
		One-touch Type JETBROACH 25L	1 piece	●	●
		One-touch Type JETBROACH 35L	1 piece	●	●
		One-touch Type JETBROACH 50L	1 piece	●	●
		One-touch Type JETBROACH 75L	1 piece	●	●
		One-touch Type HI-BROACH 25L	1 piece	●	●
		One-touch Type HI-BROACH 50L	1 piece	●	●



BORING

One-touch Cutter Replacement

Replacement is quick and easy with our unique push fit self-centering cutter system.



Mounting the cutter

Removing the cutter

Coolant into the Heart of the Cut

Coolant is fed directly to the inside of the cut. The coolant system also features an auto shut-off.



Improved Bearing Bracket

Our precision bearing bracket aligns cutters precisely, which increases cutter life.



Fail-Safe Protection

Built-in Motion Sensor

If any lateral movement or excess vibration is detected, both the drill and the feed motor stop. Nitto Kohki is the first company to incorporate this feature into magnetic base drills.

Fail-safe Restart

The drill will not re-start even if power is re-supplied after accidental shutdown. Drilling can only be continued after turning on the drill switch.

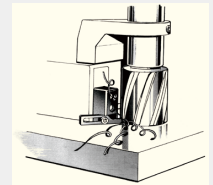
Magnet Open-circuit Sensor

The drill will not start until the magnetic field is active.

Chip Breaker

This chip breaker prevents the cutter from becoming jammed with metal shavings.

- Standard accessory for the WA-5000
- Optional accessory for the WA-3500



Two Speed Selection (WA-5000)

Speed can be changed to suit the type and size of the cutter.



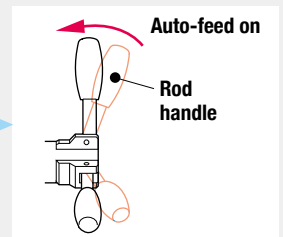
New drill control prevents cutters from breaking

Slow Start Mechanism

The feed speed is reduced for the first few seconds after boring begins to ensure a smooth cut through the mill scale.

Auto-feed

Automatic control & feed are activated by simply pushing the Rod handle to engage the clutch.



Load Sensor

The dual sensing system responds to both drilling and feeding forces on the cutter for the optimum cutting condition.

Variable Automatic Feed

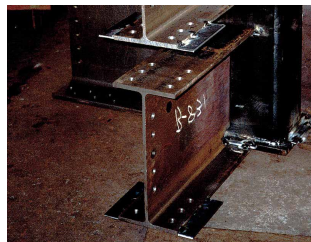
The feed speed is continuously monitored and updated proportionally to the load on the cutter.

Cycle Stop

After the cut has finished, a detector responds to the reduction in load and both the drill and the feed motor automatically stop.

Overload Stop

When an excessive load is applied to the cutter, both the drill and the feed motor will stop automatically.



BORING

Portable Magnetic Base Drilling Machine

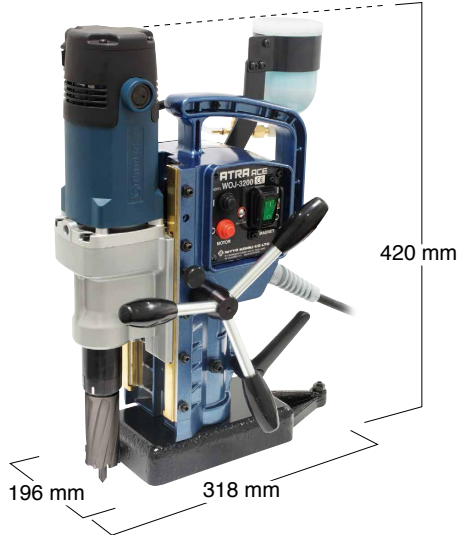
ATRA ACE manual feed

New generation magnetic base drilling machines help meet productivity and safety goals.

- Advanced safety system

Model **WOJ-3200**

- Max. 32 mm dia. x 50 mm deep



Model **AO-5575A**

- Max. 55 mm dia. x 75 mm deep



Specifications		WOJ-3200		AO-5575A	
Model					
Power Source (Single Phase)		110 - 120 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz	
Electric Drill	Rated Power Consumption W	950		950	
	Rated Current A	8.6	4.3	4.3	
	No-load Speed min ⁻¹ (rpm)	870		520	
Magnet Power Consumption W		38	30	50	
Hole Capacity mm	Cutter	Hole Diameter	Plate Thickness	Hole Diameter	Plate Thickness
	One-touch Type JETBROACH 25L	12 to 17	9 to 25	12 to 17	9 to 25
	One-touch Type JETBROACH 35L	17.5 to 32	9 to 35	17.5 to 40	9 to 35
	One-touch Type JETBROACH 50L	12 to 32	9 to 50	12 to 55	9 to 50
	One-touch Type JETBROACH 75L	-	-	17.5 to 55	9 to 75
	One-touch Type HI-BROACH 25L	-	-	12 to 50	9 to 25
	One-touch Type HI-BROACH 50L	-	-	12 to 50	9 to 50
Twist Drill		Max. 13 mm dia.		-	
Max. Stroke	mm	130		105	
Magnet Holding Power	N(kgf)	9000 (918)		10000 (1020)	
Magnet Dimensions	mm	99 x 177		86 x 170	
Power Cord Length	m	3		3	
Mass (Weight)	kg	13		17.5	
Accessories Included		<ul style="list-style-type: none"> • Carry Case • Oil Tank • Pilot Pin 08035 • Sub Handle • 2 pieces of Hex. Socket Head Bolt 5 x 10 mm • 3 pieces of Rod Handle 		<ul style="list-style-type: none"> • 3 mm Hex. Socket Screw Key • 4 mm Hex. Socket Screw Key • 6 mm Hex. Socket Screw Key • 8 x 10 mm Spanner • Guard • Safety Strap 	
		<ul style="list-style-type: none"> • 5 mm Hex. Socket Screw Key • 8 x 10 mm Spanner • Guard • Chain 		<ul style="list-style-type: none"> • Carry Case • Cutting Oil 0.5L • Pilot Pin 08050 • Side Handle • 3 mm Hex. Socket Screw Key 	

Optional Accessories

Ref. No.	PN	Description	Sales Unit	Applicable Model	
				WOJ-3200	AO-5575A
1	TB07691	Chip Breaker Ass'y	1 piece	●	
2	TB07474	Chip Breaker Ass'y	1 piece		●
3	TQ10581	Oiler No.3013	1 piece	●	
4	TB01098	Tube 4 x 7 x 3000 Ass'y	1 piece	●	●
5	TB01507	Cutting Oil 2L	1 piece	●	●
6	TB07696	Pipe Attachment Ass'y	1 piece	●	
7	TB04374	Supporting Magnet Ass'y	1 piece	●	●
8	TB07690	One-touch Drill Adapter	1 piece	●	
9	TB02536	Sleeve 6.5 for Triangle Shank Drill Bit	1 piece		●
		One-touch Type JETBROACH 25L	1 piece	●	●
		One-touch Type JETBROACH 35L	1 piece	●	●
		One-touch Type JETBROACH 50L	1 piece	●	●
		One-touch Type JETBROACH 75L	1 piece		●
		One-touch Type HI-BROACH 25L	1 piece		●
		One-touch Type HI-BROACH 50L	1 piece		●

*50L for stacked plates



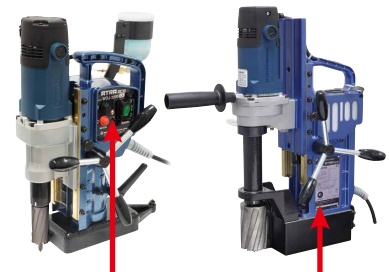
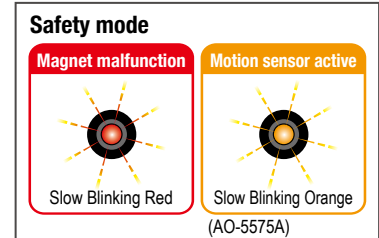
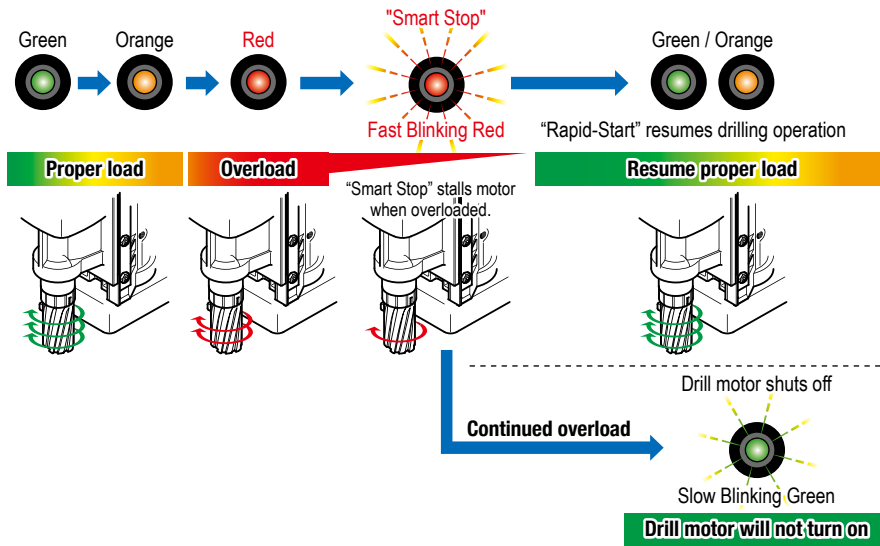
Load Detector with "Smart-Stop/Rapid-Restart" Technology

The innovative feature of manual feed ATRA ACE, "Smart-Stop / Rapid-Restart" technology for WOJ-3200 / AO-5575A

This new feature is a breakthrough in the Manual drill industry. Formerly only found on high end Nitto Kohki Automatic drills, this technology displays the current drill status via the LED Load Indicator. Customers will experience a cutting edge drill management system designed solely around saving time and money in replacement parts and cutters in addition to reducing user fatigue and down time.

As the drilling load increases, the load indicator will change in color from green to orange to red. In addition, if excessive feeding force is applied, the load indicator will rapidly blink red and the rotation of the drill motor will slow down and temporarily stop. If the load is released while the load indicator is blinking red, the drill motor will resume its rotation.

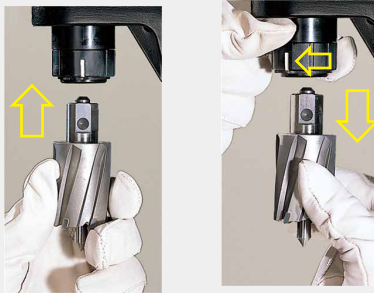
LED load indicator



LED load indicator

One-Touch Cutter Replacement

Replacement is quick and easy with our unique push fit self-centering cutter system.



Mounting the cutter

Removing the cutter

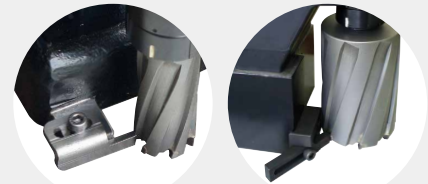
Reversible Feed Handle

Feed handles can be positioned on the right or left side for ease of drilling and mounting in confined spaces.



Chip Breaker (Optional)

This chip breaker prevents the cutter from becoming jammed with metal shavings.

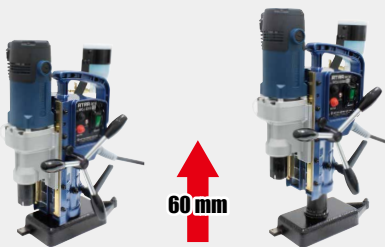


WOJ-3200

AO-5575A

Body Height Adjustment (WOJ-3200)

The use of JETBROACH CUTTERS require the frame to be at the lowest position, while twist bit drilling requires the appropriate amount of elevation to be adjusted for safe operation.



60mm

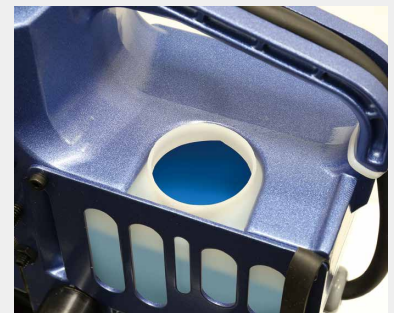
One-Touch Drill Adapter (WOJ-3200)

Optional one-touch drill adapter allows the use of up to 13 mm twist drills to be used in the original arbor.



*Twist drills are not provided with the one-touch drill adapter.

Built-in coolant tank to protect against damage (AO-5575A)



BORING

Portable Magnetic Base Drilling Machine

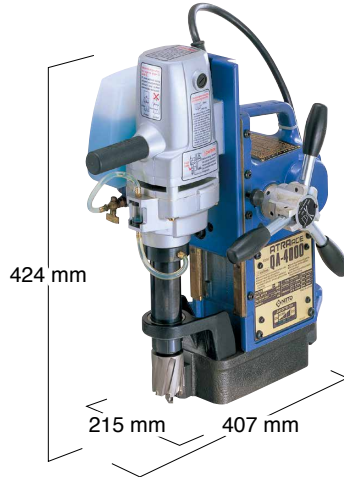
ATRA ACE quick auto

Fully automatic drilling for increased productivity and reduced cost

- Proven Automatic Technology (self feeding, automatic return, load detection for speed and feed regulation)

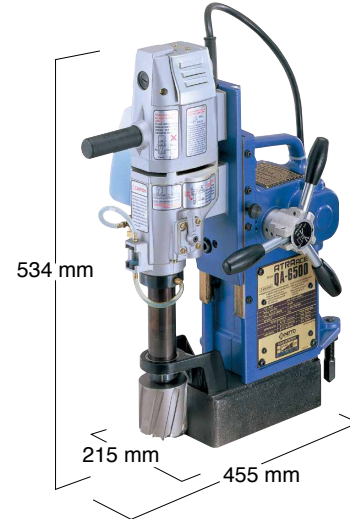
Model QA-4000 Non-CE

- Max. 40 mm dia. x 35 mm deep



Model QA-6500 Non-CE

- Max. 65 mm dia. x 50 mm deep

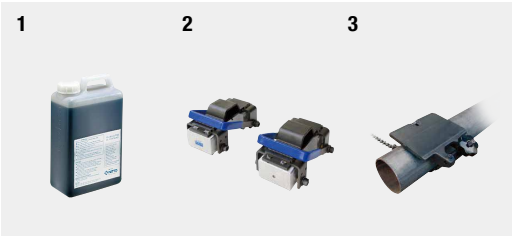


Specifications

Model		QA-4000		QA-6500	
Power Source (Single Phase)		110 - 120 V AC, 50/60 HZ	220 - 240 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz	
Electric Drill	Rated Power Consumption	W	680	1010	
	Rated Current	A	6.1	3.0	
	No-load Speed	min ⁻¹ (rpm)	750	400 / 750	
Magnet Power Consumption		W	50	75	
Hole Capacity mm	Cutter	Hole Diameter	Plate Thickness	Hole Diameter	Plate Thickness
	One-touch Type JETBROACH 35L	17.5 to 40	9 to 35	17.5 to 40	9 to 35
	One-touch Type JETBROACH 50L	-	-	17.5 to 65	9 to 50
	One-touch Type HI-BROACH 25L	14 to 15 16 to 18	9 to 12 9 to 25	18 to 35	9 to 25
Max. Stroke	mm	75		88	
Magnet Holding Power	N(kgf)	6664 (680)		9800 (1000)	
Magnet Dimensions	mm	82 x 172		100 x 200	
Power Cord Length	m	4	5	5	
Mass (Weight)	kg	18.5		26	
Accessories Included		<ul style="list-style-type: none"> • Oil Tank • Cutting Oil 0.5L • Pilot Pin 08035 • Side Handle • 3 mm Hex. Socket Screw Key 		<ul style="list-style-type: none"> • 4 mm Hex. Socket Screw Key • 8 x 10 mm Spanner • Chain • Tool Box 	

Optional Accessories

Ref. No.	PN	Description	Sales Unit	Applicable Model	
				QA-4000	QA-6500
1	TB01507	Cutting Oil 2L	1 piece	●	●
2	TB04374	Supporting Magnet Ass'y	1 piece	●	●
3	TB07696	Pipe Attachment Ass'y	1 piece	●	●
		One-touch Type JETBROACH 35L	1 piece	●	●
		One-touch Type JETBROACH 50L	1 piece	●	●
		One-touch Type HI-BROACH 12L	1 piece	●	●
		One-touch Type HI-BROACH 25L	1 piece	●	●



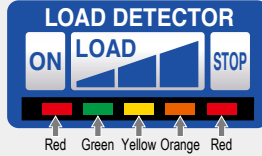
BORING

Automatic Return

Once drilling is completed and the slug is ejected from the hole, the cutting bit is quickly retracted. This quick drill motor retraction allows the user to move onto the next hole more quickly.

Self Feeding & Load Detection

The feeding is controlled by an onboard microcomputer. The feed rate begins slowly and then increases to the appropriate speed for the cutter size and load condition. The load detector clearly shows the amount of resistance on the cutter at anytime.



Built-in Motion Sensor

If any lateral movement or excess vibration is detected, both the drill and the feed motor stop. Nitto Kohki is the first company to incorporate this feature into magnetic base drills.

Step Feed

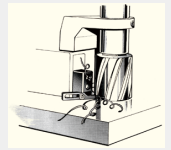
When cutting through difficult materials, the load sensor will automatically activate the Step Feed Program to help penetrate material.

Limit Switch

The automatic drills of ATRAACE utilize a limit switch that resets the machine when it retracts to the starting position after hole completion, also shuts down the motors in the event of an over-travel at the bottom of the stroke.

Chip Breaker

This chip breaker prevents the cutter from becoming jammed with metal shavings.



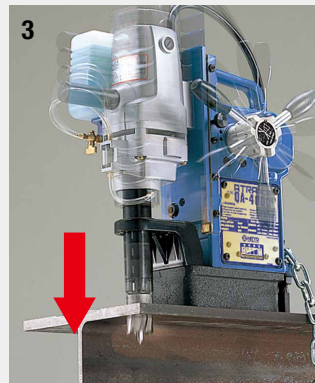
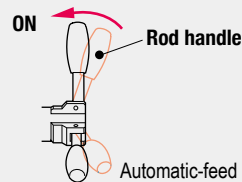
Automatic-feed Hole-cutting Procedure



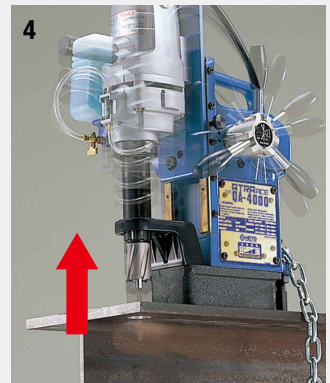
1 Align the pilot pin with the center punch mark of the hole to be drilled. Attach the machine to the beam with the proper safety chain and engage the magnet. Lower the drill down from the top limit switch location to the point of the pilot pin making contact with the material and engage the motor.



2 Engage the clutch by pushing the handles in towards the drill and the motor will begin feeding automatically.



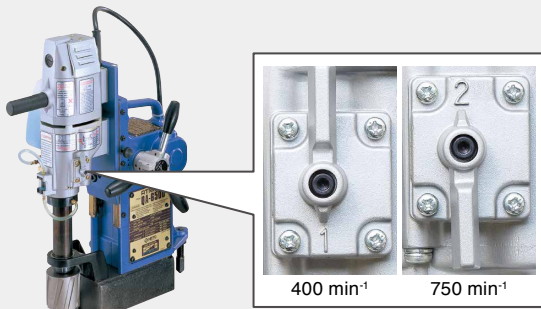
3 Slow start mechanism cuts smoothly through the mill scale. Then, speed and feed rate is controlled by the sensors to achieve efficient drilling.



4 After the hole is completed, the QA Series machines will quickly return and stop at the top of the stroke, ready for the next hole.

Two Speed Selection (QA-6500)

Speed can be changed to suit the type and size of the cutter.



One-touch Cutter Replacement

Replacement is quick and easy with our unique push fit self-centering cutter system.



Mounting the cutter



Removing the cutter

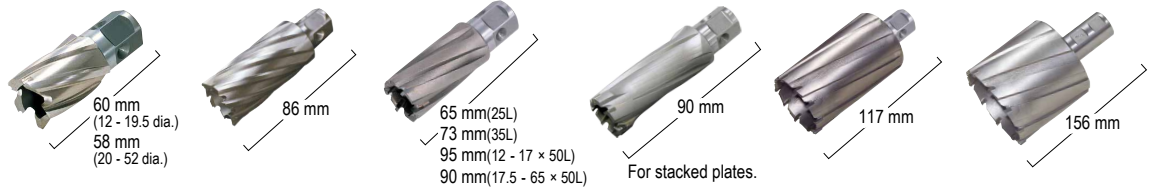
Annular Cutters

JETBROACH CUTTERS & HI-BROACH CUTTERS

BROACH CUTTERS are far better than twist drills

- No dead point
- Peripheral cutting
- Dramatically reduce cutting resistance
- Available diameter size: 12 - 100 mm

Test Drilling is very often the only way to determine the machinability of difficult materials. Use a small size cutter wherever possible in order to minimize trial costs.



Specifications

		HI-BROACH One-touch Type/25L	HI-BROACH One-touch Type/50L	JETBROACH One-touch Type/25,35,50L	JETBROACH One-touch Type/50L(W)	JETBROACH One-touch Type/75L	JETBROACH Side lock Type/75L
Hole Diameter	mm	25L: 12 - 52 dia.	-	25L: 12 - 17 dia.	-	-	-
		-	-	35L: 17.5 - 40 dia.	-	-	-
		-	50L: 12 - 52 dia.	50L: 12 - 65 dia.	50L(W): 18, 22, 24 - 26.5,	-	-
		-	-	-	28, 32, and 35 dia.	75L: 17.5 - 55 dia.	75L: 50 - 100 dia.
Plate Thickness	mm	25L: 25	-	25L: 25	-	-	-
		-	-	35L: 35	-	-	-
		-	50L: 50	50L: 50	50L(W): 50	-	-
		-	-	-	-	75L: 75	75L: 75
Feed Speed	mm/rev			0.02 - 0.1			
Circumferential Speed	m/min			15 - 35 (mild steel) / 35 - 50 (mild steel)			

HI-BROACH One-touch Type		AO-5575A	WA-3500	WA-5000	QA-4000	QA-6500	CLA-2720	ARA-100A	Pilot Pin
Depth	mm dia.	PN							
	mm								
25	12	TK00698	●						06025
	13	TK00699	●						
	14	TK00700	●	●	●	●			
	15	TK00701	●	●	●	●			
	16	TK00702	●	●	●	●			
	17	TK00703	●	●	●	●			
	17.5	TK01391	●	●	●	●	●	●	
	18	TK01392	●	●	●	●	●	●	
	19	TK01393	●	●	●	●	●	●	
	19.5	TK01394	●	●	●	●	●	●	
	20	TK01395	●	●	●	●	●	●	
	21	TK01396	●	●	●	●	●	●	
	21.5	TK01397	●	●	●	●	●	●	
	22	TK01398	●	●	●	●	●	●	
	22.5	TK01399	●	●	●	●	●	●	
	23	TK01400	●	●	●	●	●	●	
	23.5	TK01401	●	●	●	●	●	●	
	24	TK01402	●	●	●	●	●	●	
	24.5	TK01403	●	●	●	●	●	●	
	25	TK01404	●	●	●	●	●	●	
	26	TK01405	●	●	●	●	●	●	
	27	TK01407	●	●	●	●	●	●	
	28	TK01408	●	●	●	●	●	●	
	29	TK01409	●	●	●	●	●	●	
	30	TK01410	●	●	●	●	●	●	
	31	TK01411	●	●	●	●	●	●	
	32	TK01412	●	●	●	●	●	●	
	33	TK01413	●	●	●	●	●	●	
	34	TK01414	●	●	●	●	●	●	
	35	TK01415	●	●	●	●	●	●	
	36	TK01416	●	●	●	●	●	●	
	37	TK01417	●	●	●	●	●	●	
38	TK01418	●	●	●	●	●	●		
39	TK01419	●	●	●	●	●	●		
40	TK01420	●	●	●	●	●	●		
41	TK01421	●	●	●	●	●	●		
42	TK01422	●	●	●	●	●	●		
43	TK01423	●	●	●	●	●	●		
44	TK01424	●	●	●	●	●	●		
45	TK01425	●	●	●	●	●	●		
46	TK01426	●	●	●	●	●	●		
47	TK01427	●	●	●	●	●	●		
48	TK01428	●	●	●	●	●	●		
49	TK01429	●	●	●	●	●	●		
50	TK01430	●	●	●	●	●	●		
51	TK01431	●	●	●	●	●	●		
52	TK01432	●	●	●	●	●	●		

HI-BROACH One-touch Type		AO-5575A	WA-5000	ARA-100A	Pilot Pin
Depth	mm dia.	PN			
	mm				
50	12	TK00721	●		06050
	13	TK00722	●		
	14	TK00723	●	●	
	15	TK00724	●	●	
	16	TK00725	●	●	
	17	TK00726	●	●	
	18	TK00727	●	●	
	19	TK00728	●	●	
	20	TK00729	●	●	
	21	TK00730	●	●	
	22	TK00731	●	●	
	23	TK00732	●	●	
	24	TK00733	●	●	
	25	TK00734	●	●	
	26	TK00735	●	●	
	27	TK00736	●	●	
	28	TK00737	●	●	
	29	TK00738	●	●	
	30	TK00739	●	●	
	31	TK00740	●	●	
	32	TK00741	●	●	
	33	TK00742	●	●	
	34	TK00743	●	●	
	35	TK00744	●	●	
	36	TK00745	●	●	
	37	TK00746	●	●	
	38	TK00747	●	●	
	39	TK00748	●	●	
	40	TK00749	●	●	
	41	TK00750	●	●	
	42	TK00751	●	●	
	43	TK00752	●	●	
44	TK00753	●	●		
45	TK00754	●	●		
46	TK00755	●	●		
47	TK00756	●	●		
48	TK00757	●	●		
49	TK00758	●	●		
50	TK00759	●	●		
51	TK00760	●	●		
52	TK00761	●	●		

JETBROACH One-touch Type		LO-3550	WOJ-3200	AO-5575A	WA-3500	WA-5000	QA-4000	QA-6500	CLA-2720	ARA-100A	Pilot Pin
Depth	mm dia.	PN									
	mm										
25	12	TK01148	●	●	●	●	●	●	●	●	06025
	13	TK01149	●	●	●	●	●	●	●	●	
	14	TK01150	●	●	●	●	●	●	●	●	
	15	TK01151	●	●	●	●	●	●	●	●	
	16	TK01152	●	●	●	●	●	●	●	●	
	17	TK01153	●	●	●	●	●	●	●	●	
	17.5	TK01249	●	●	●	●	●	●	●	●	
	18	TK01250	●	●	●	●	●	●	●	●	
	18.5	TK01251	●	●	●	●	●	●	●	●	
	19	TK01252	●	●	●	●	●	●	●	●	
	19.5	TK01253	●	●	●	●	●	●	●	●	
	20	TK01254	●	●	●	●	●	●	●	●	
	20.5	TK01255	●	●	●	●	●	●	●	●	
	21	TK01256	●	●	●	●	●	●	●	●	
	21.5	TK01257	●	●	●	●	●	●	●	●	
	22	TK01258	●	●	●	●	●	●	●	●	
	22.5	TK01259	●	●	●	●	●	●	●	●	
23	TK01260	●	●	●	●	●	●	●	●		
23.5	TK01261	●	●	●	●	●	●	●	●		
24	TK01262	●	●	●	●	●	●	●	●		
24.5	TK01263	●	●	●	●	●	●	●	●		
25	TK01264	●	●	●	●	●	●	●	●		
25.5	TK01265	●	●	●	●	●	●	●	●		
26	TK01266	●	●	●	●	●	●	●	●		
26.5	TK01267	●	●	●	●	●	●	●	●		
27	TK01268	●	●	●	●	●	●	●	●		
28	TK01269	●	●	●	●	●	●	●	●		
29	TK01270	●	●	●	●	●	●	●	●		
30	TK01271	●	●	●	●	●	●	●	●		
31	TK01272	●	●	●	●	●	●	●	●		
32	TK01273	●	●	●	●	●	●	●	●		
33	TK01274	●	●	●	●	●	●	●	●		
34	TK01275	●	●	●	●	●	●	●	●		
35	TK01276	●	●	●	●	●	●	●	●		
36	TK01277	●	●	●	●	●	●	●	●		
37	TK01278	●	●	●	●	●	●	●	●		
38	TK01279	●	●	●	●	●	●	●	●		
39	TK01280	●	●	●	●	●	●	●	●		
40	TK01281	●	●	●	●	●	●	●	●		

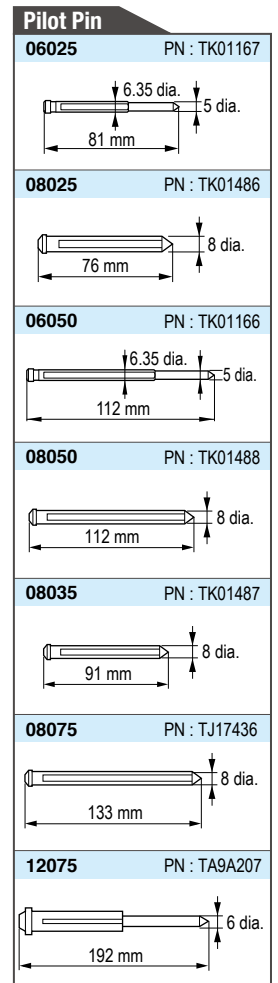
BORING

JETBROACH One-touch Type			LO-3550	WOJ-3200	AO-5575A	WA-3500	WA-5000	QA-6500	ARA-100A	Pilot Pin
Depth	mm dia.	PN								
50 mm	12	TK01154	●	●	●	●	●	●	●	06050
	13	TK01155	●	●	●	●	●	●	●	
	14	TK01156	●	●	●	●	●	●	●	
	15	TK01157	●	●	●	●	●	●	●	
	16	TK01158	●	●	●	●	●	●	●	
	17	TK01159	●	●	●	●	●	●	●	
	17.5	TK01282	●	●	●	●	●	●	●	
	18	TK01283	●	●	●	●	●	●	●	
	19	TK01284	●	●	●	●	●	●	●	
	19.5	TK01285	●	●	●	●	●	●	●	
	20	TK01286	●	●	●	●	●	●	●	
	20.5	TK01287	●	●	●	●	●	●	●	
	21	TK01288	●	●	●	●	●	●	●	
	21.5	TK01289	●	●	●	●	●	●	●	
	22	TK01290	●	●	●	●	●	●	●	
	22.5	TK01291	●	●	●	●	●	●	●	
	23	TK01292	●	●	●	●	●	●	●	
	23.5	TK01293	●	●	●	●	●	●	●	
	24	TK01294	●	●	●	●	●	●	●	
	24.5	TK01295	●	●	●	●	●	●	●	
	25	TK01296	●	●	●	●	●	●	●	
	25.5	TK01297	●	●	●	●	●	●	●	
	26	TK01298	●	●	●	●	●	●	●	
	26.5	TK01299	●	●	●	●	●	●	●	
	27	TK01300	●	●	●	●	●	●	●	
	28	TK01301	●	●	●	●	●	●	●	
	29	TK01302	●	●	●	●	●	●	●	
	30	TK01303	●	●	●	●	●	●	●	
	31	TK01304	●	●	●	●	●	●	●	
	32	TK01305	●	●	●	●	●	●	●	
	33	TK01306	●	●	●	●	●	●	●	
	34	TK01307	●	●	●	●	●	●	●	
	35	TK01308	●	●	●	●	●	●	●	
	36	TK01309	●	●	●	●	●	●	●	
	37	TK01310	●	●	●	●	●	●	●	
38	TK01311	●	●	●	●	●	●	●		
39	TK01312	●	●	●	●	●	●	●		
40	TK01313	●	●	●	●	●	●	●		
41	TK01314	●	●	●	●	●	●	●		
42	TK01315	●	●	●	●	●	●	●		
43	TK01316	●	●	●	●	●	●	●		
44	TK01317	●	●	●	●	●	●	●		
45	TK01318	●	●	●	●	●	●	●		
46	TK01319	●	●	●	●	●	●	●		
47	TK01320	●	●	●	●	●	●	●		
48	TK01321	●	●	●	●	●	●	●		
49	TK01322	●	●	●	●	●	●	●		
50	TK01323	●	●	●	●	●	●	●		
51	TK01324	●	●	●	●	●	●	●		
52	TK01325	●	●	●	●	●	●	●		
53	TK01326	●	●	●	●	●	●	●		
54	TK01327	●	●	●	●	●	●	●		
55	TK01328	●	●	●	●	●	●	●		
56	TK01329	●	●	●	●	●	●	●		
57	TK01330	●	●	●	●	●	●	●		
58	TK01331	●	●	●	●	●	●	●		
59	TK01332	●	●	●	●	●	●	●		
60	TK01333	●	●	●	●	●	●	●		
61	TK01334	●	●	●	●	●	●	●		
62	TK01335	●	●	●	●	●	●	●		
63	TK01336	●	●	●	●	●	●	●		
64	TK01337	●	●	●	●	●	●	●		
65	TK01338	●	●	●	●	●	●	●		

JETBROACH One-touch Type 50L(W) for stacked plates			LO-3550	WOJ-3200	AO-5575A	ARA-100A	Pilot Pin
Depth	mm dia.	PN					
50 mm	18	TK01068	●	●	●	●	06050
	22	TK00622	●	●	●	●	
	24	TK00623	●	●	●	●	
	24.5	TK00631	●	●	●	●	
	25	TK00624	●	●	●	●	
	26	TK00625	●	●	●	●	
	26.5	TK00632	●	●	●	●	
	28	TK00626	●	●	●	●	
	32	TK00627	●	●	●	●	
	35	TK00628	●	●	●	●	

JETBROACH One-touch Type			AO-5575A	WA-5000	ARA-100A	Pilot Pin
Depth	mm dia.	PN				
75 mm	17.5	TK01350	●	●	●	08075
	18	TK01351	●	●	●	
	19	TK01352	●	●	●	
	20	TK01353	●	●	●	
	21	TK01354	●	●	●	
	22	TK01355	●	●	●	
	23	TK01356	●	●	●	
	24	TK01357	●	●	●	
	24.5	TK01358	●	●	●	
	25	TK01359	●	●	●	
	26	TK01360	●	●	●	
	26.5	TK01361	●	●	●	
	27	TK01362	●	●	●	
	28	TK01363	●	●	●	
	29	TK01364	●	●	●	
	30	TK01365	●	●	●	
	31	TK01366	●	●	●	
	32	TK01367	●	●	●	
	33	TK01368	●	●	●	
	34	TK01369	●	●	●	
	35	TK01370	●	●	●	
	36	TK01371	●	●	●	
	37	TK01372	●	●	●	
	38	TK01373	●	●	●	
	39	TK01374	●	●	●	
	40	TK01375	●	●	●	
	41	TK01376	●	●	●	
	42	TK01377	●	●	●	
	43	TK01378	●	●	●	
	44	TK01379	●	●	●	
	45	TK01380	●	●	●	
	46	TK01381	●	●	●	
	47	TK01382	●	●	●	
	48	TK01383	●	●	●	
	49	TK01384	●	●	●	
50	TK01385	●	●	●		
51	TK01386	●	●	●		
52	TK01387	●	●	●		
53	TK01388	●	●	●		
54	TK01389	●	●	●		
55	TK01390	●	●	●		

JETBROACH Side-lock Type			ARA-100A	Pilot Pin
Depth	mm dia.	PN		
75 mm	50	TK01433	●	12075
	51	TK01434	●	
	52	TK01435	●	
	53	TK01436	●	
	54	TK01437	●	
	55	TK01438	●	
	56	TK01439	●	
	57	TK01440	●	
	58	TK01441	●	
	59	TK01442	●	
	60	TK01443	●	
	61	TK01444	●	
	62	TK01445	●	
	63	TK01446	●	
	64	TK01447	●	
	65	TK01448	●	
	66	TK01449	●	
	67	TK01450	●	
	68	TK01451	●	
	69	TK01452	●	
	70	TK01453	●	
	71	TK01454	●	
	72	TK01455	●	
	73	TK01456	●	
	74	TK01457	●	
	75	TK01458	●	
	76	TK01459	●	
	77	TK01460	●	
	78	TK01461	●	
	79	TK01462	●	
	80	TK01463	●	
	81	TK01464	●	
	82	TK01465	●	
	83	TK01466	●	
	84	TK01467	●	
	85	TK01468	●	
	86	TK01469	●	
	87	TK01470	●	
	88	TK01471	●	
	89	TK01472	●	
	90	TK01473	●	
	91	TK01474	●	
	92	TK01475	●	
	93	TK01476	●	
	94	TK01477	●	
	95	TK01478	●	
	96	TK01479	●	
	97	TK01480	●	
	98	TK01481	●	
	99	TK01482	●	
100	TK01483	●		



Sales Unit: 1 Piece

BROACH HOLDERS

Industrial cutters for faster and better finished holes

- The Spring-loaded pilot pin picks up the hole location quickly, and ejects the slug automatically at the end of cut
- Available with No. 2 to 4 Morse taper shanks
- Oil cup complete Ass'y (PN TB00350) is available as an optional attachment which provides continuous and adjustable cutting oil flow to the cutting area



Specifications		M.T.No.2		M.T.No.3					M.T.No.4		
Morse Taper No.		M.T.No.2		M.T.No.3					M.T.No.4		
Model		BHM-02035		BHM-03050					BHM-13075 BHM-14075		
PN		TB00390		TB00392					TB00352 TB00354		
Cutter		HBO-25L	JBO-35L	HBO-25L	HBO-50L	JBO-35L	JBO-50L	JBO-50L(W)	JBS-75L		
Cutter Diameter		12 - 17 dia.	17.5 - 35 dia.	12 - 17 dia.	17.5 - 52 dia.	12 - 18 dia.	19 - 52 dia.	17.5 - 65 dia.	18 - 35 dia.	50 - 100 dia.	
Pilot Pin		06025	08025	08035	06025	08025	06050	08050	08035	08050	12075
		Optional	Included		Optional			Included	Optional		Included

HBO: HI-BROACH One-touch Type

JBO: JETBROACH One-touch Type

JBS: JETBROACH Side-lock Type