

## Portable Magnetic Base Drilling Machine

### ATRA ACE manual feed

Model **LO-3550** 

• Max. 35 mm dia. x 50 mm deep



YouTube



#### Chip Breaker



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

### 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 Drill                           | Rated Power Consumption      | W                        |                 |
|  | Rated Current                | A                        |                 |
|  | No-load Speed                | min <sup>-1</sup> (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         |
| Min. Plate Thickness for Magnet Adhesion |                              | mm                       |                 |
| Magnet Holding Power                     |                              | N(kgf)                   |                 |
| Magnet Dimensions                        |                              | mm                       |                 |
| Cutter Position Adjustment               | Pivot Side to Side           | mm                       |                 |
|  | Straight Front to Back       | mm                       |                 |
| Power Cord Length                        |                              | m                        |                 |
| Mass (Weight)                            |                              | kg                       |                 |

\*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

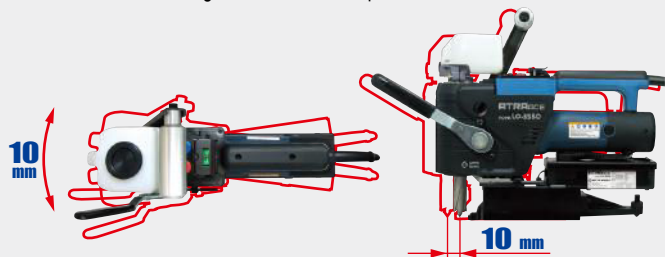
#### Optional Accessories

| 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                | 1 set      |
| 4                       | TB07306 | Lubrication Adapter Ass'y              |            |
| 5                       | TB04374 | Supporting Magnet Ass'y                |            |
| 6                       | TB07696 | Pipe Attachment Ass'y                  |            |
| 7                       | TB11527 | Guard                                  | 1 piece    |
| *50L for stacked plates |         | One-touch Type JETBROACH 25L, 35L, 50L |            |



## 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.



## Light Handle Operation

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



## 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.



## Adjustable Feed Handle

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



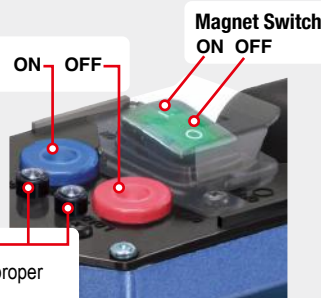
Pull the feed handle to adjust the angle.

## 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.

## 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 pipes 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



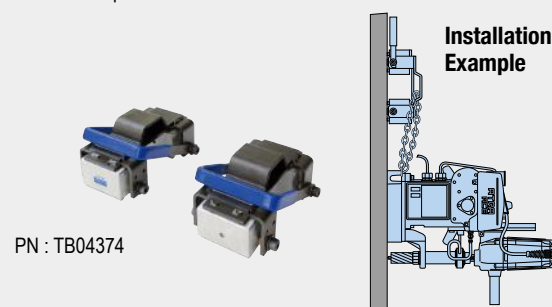
Applicable Pipe Size:  
48.6 to 318.5 mm

PN : TB07696

Applicable Models when a 35 mm or 50 mm length one touch type JETBROACH CUTTER is used:  
**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:  
**LO-3550, WA-3500, WOJ-3200, AO-5575A, QA-4000, and QA-6500**

## ATRA ACE manual feed

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

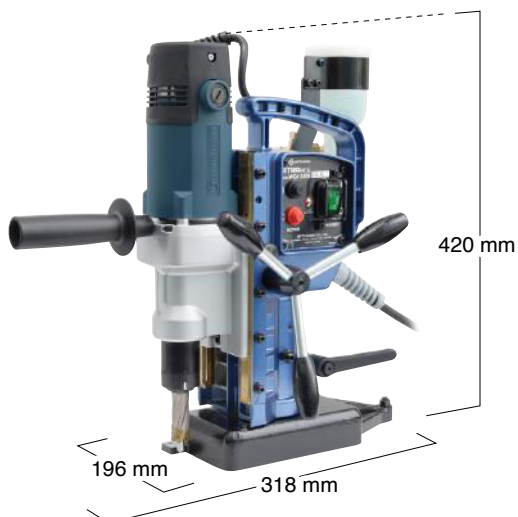
- Advanced safety system

### Model WOJ-3200

- Max. 32 mm dia. x 50 mm deep

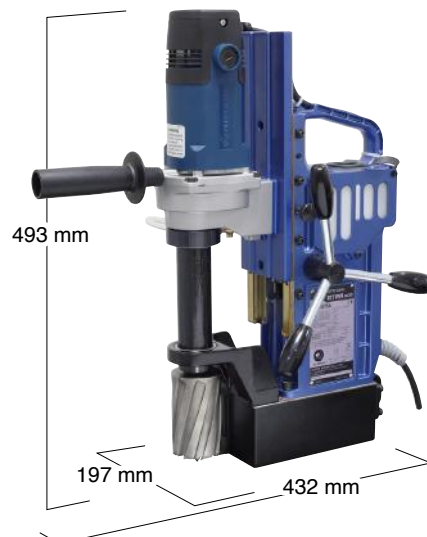


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### Model AO-5575A

- Max. 55 mm dia. x 75 mm deep



### Specifications

| Model                                    |                              | WOJ-3200   |                          | AO-5575A  |                 |
|--|------------------------------|--|--------------------------|---|-----------------|
| 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      | 950  |                          | 950   |                 |
|  | Rated Current                | 8.6  | 4.3                      | 4.3   |                 |
|  | No-load Speed                | 870  |                          | 520   |                 |
| Magnet Power Consumption                 |                              | 38   | 30                       | 50  |                 |
| Hole Capacity<br>mm                      | Cutter                       | Hole Diameter  |                          | Hole Diameter   | Plate Thickness |
|  | One-touch Type JETBROACH 25L | 12 to 17   |                          | 12 to 17  | 9 to 25         |
|  | One-touch Type JETBROACH 35L | 17.5 to 32   |                          | 17.5 to 40  | 9 to 35         |
|  | One-touch Type JETBROACH 50L | 12 to 32   |                          | 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.  |                          | -   |                 |
| Min. Plate Thickness for Magnet Adhesion |                              | 9  |                          | 9   |                 |
| Max. Stroke                              |                              | 130  |                          | 105   |                 |
| Magnet Holding Power                     |                              | 9000 (918)   |                          | 10000 (1020)  |                 |
| Magnet Dimensions                        |                              | 99 (W) x 177 (L)   |                          | 86 (W) x 170 (L)  |                 |
| Power Cord Length                        |                              | 3  |                          | 3   |                 |
| Mass (Weight)                            |                              | 13   |                          | 17.5  |                 |
| Accessories Included                     |                              | <ul style="list-style-type: none"> <li>• Carry Case</li> <li>• Oil Tank</li> <li>• Pilot Pin 08035</li> <li>• Sub Handle</li> <li>• 2 pieces of Hex. Socket Head Bolt 5 x 10 mm</li> <li>• 3 pieces of Rod Handle</li> </ul> |                          | <ul style="list-style-type: none"> <li>• Carry Case</li> <li>• Cutting Oil 0.5L</li> <li>• Pilot Pin 08050</li> <li>• Side Handle</li> <li>• 3 mm Hex. Socket Screw Key</li> <li>• 5 mm Hex. Socket Screw Key</li> <li>• 8 x 10 mm Spanner</li> <li>• Guard</li> <li>• Chain</li> </ul> |                 |

### Optional Accessories

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



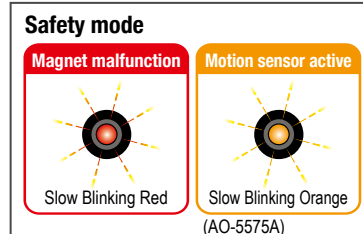
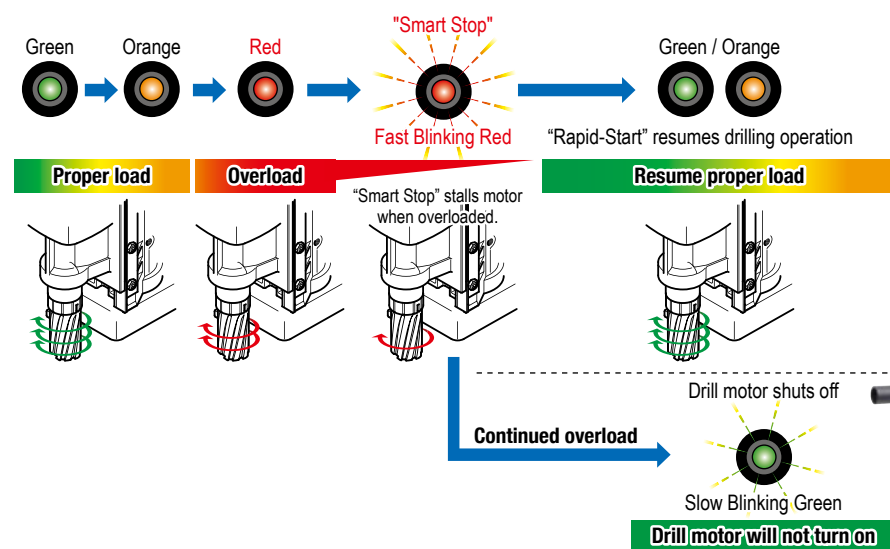
## Load Detector with "Smart-Stop/Rapid-Restart" Technology

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

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.

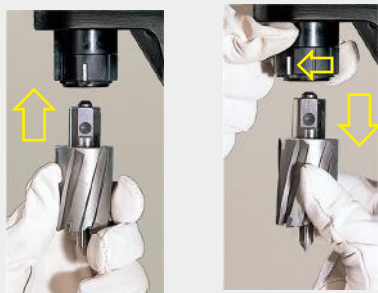
#### LED load indicator



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.



60 mm

#### 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)

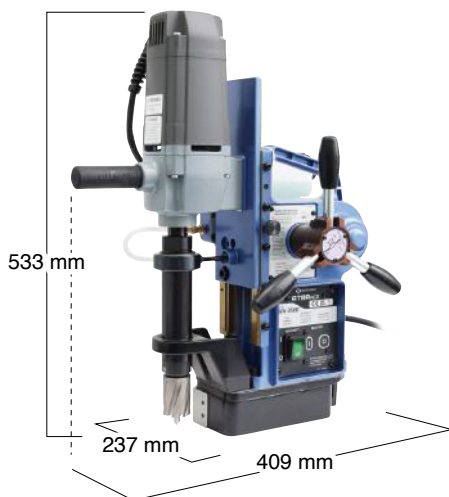




### ATRA ACE auto

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      | 1100  |                          | 1150  |                          |
|  | Rated Current                | 10.2  | 5.1                      | 10.8  | 5.4                      |
|  | No-load Speed                | 950   |                          | 350 / 650   |                          |
| Magnet Power Consumption                 |                              | 34  |                          | 75  |                          |
| Capacity<br>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                  |
| Min. Plate Thickness for Magnet Adhesion |                              | 9   |                          | 9   |                          |
| Max. Stroke                              |                              | 83  |                          | 107   |                          |
| Magnet Holding Power                     |                              | 7056 (720)  |                          | 9800 (1000)   |                          |
| Magnet Dimensions                        |                              | 92 (W) x 213 (L)  |                          | 101 (W) x 201 (L)   |                          |
| Power Cord Length                        |                              | 3   |                          | 3   |                          |
| Mass (Weight)                            |                              | 20  |                          | 23  |                          |
| Accessories Included                     |                              | <ul style="list-style-type: none"> <li>• Carry Case</li> <li>• Cutting Oil 0.5L</li> <li>• Pilot Pin 08035</li> <li>• Side Handle</li> <li>• 3 mm Hex. Socket Screw Key</li> <li>• 8 x 10 mm Spanner</li> <li>• Guard</li> <li>• Chain</li> </ul> |                          | <ul style="list-style-type: none"> <li>• Carry Case</li> <li>• Cutting Oil 0.5L</li> <li>• Pilot Pin 08050</li> <li>• Side Handle</li> <li>• 3 mm Hex. Socket Screw Key</li> <li>• 4 mm Hex. Socket Screw Key</li> <li>• 8 x 10 mm Spanner</li> <li>• Guard</li> <li>• Chain</li> <li>• Chip Breaker</li> </ul> |                          |

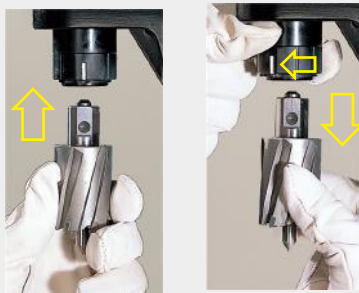
#### Optional Accessories

| Ref. No.                     | PN      | Description                             | Sales Unit | Applicable Model |         |
|------------------------------|---------|---|------------|------------------|---------|
|                              |         |   |            | WA-3500          | WA-5000 |
| 1                            | TB05186 | Chip Breaker Ass'y                      | 1 set      | ●                | ●       |
| 2                            | TB01507 | Cutting Oil 2L                          | 1 piece    | ●                | ●       |
| 3                            | TB04374 | Supporting Magnet Ass'y                 | 1 set      | ●                | ●       |
| 4                            | TB02536 | Sleeve 6.5 for Triangle Shank Drill Bit | 1 piece    | ●                | ●       |
| 5                            | TB07696 | Pipe Attachment Ass'y                   | 1 set      | ●                | ●       |
| 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    | ●                | ●       |



## 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.

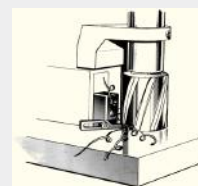
### Magnet Open-circuit Sensor

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

## Chip Breaker

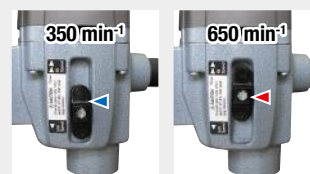
This chip breaker prevents the cutter from becoming jammed with metal shavings.

- 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.



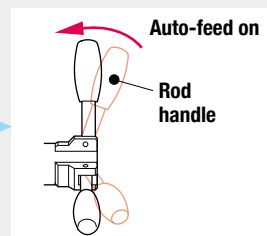
## New drill control prevents cutters from breaking

### 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.



## Portable Magnetic Base Drilling Machine

### ATRA ACE quick auto

#### Model QA-4000 Non-CE

- Max. 40 mm dia. x 35 mm deep

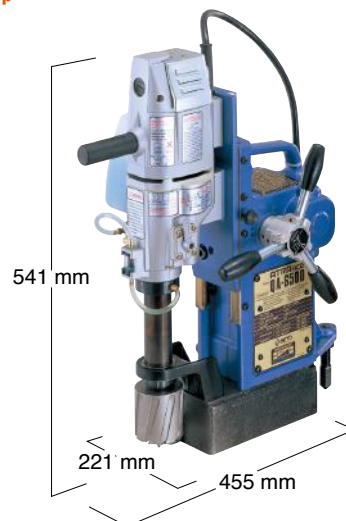


### Fully automatic drilling for increased productivity and reduced cost

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

#### Model QA-6500 Non-CE

- Max. 65 mm dia. x 50 mm deep

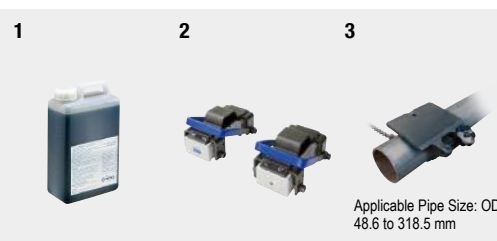


#### Specifications

| Specifications                           |                              |                         | QA-4000  |                 | QA-6500   |                 |
|--|------------------------------|-------------------------|--|-----------------|---|-----------------|
| Power Source (Single Phase)              |                              |                         | 110 - 120 V AC, 50/60 HZ   |                 | 220 - 240 V AC, 50/60 Hz  |                 |
| Electric                                 | Rated Power Consumption      | W                       | 680  |                 | 1010  |                 |
| Drill                                    | Rated Current                | A                       | 6.1  |                 | 4.5   |                 |
|  | No-load Speed                | min <sup>-1</sup> (rpm) | 750  |                 | 400 / 750   |                 |
| Magnet Power Consumption                 |                              | W                       | 50   |                 | 75  |                 |
| Hole                                     | Cutter                       |                         | Hole Diameter  | Plate Thickness | Hole Diameter   | Plate Thickness |
| Capacity<br>mm                           | 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   | 9 to 12         | 18 to 35  | 9 to 25         |
|  |                              |                         | 16 to 18   | 9 to 25         |   |                 |
| Min. Plate Thickness for Magnet Adhesion |                              | mm                      | 9  |                 | 9   |                 |
| Max. Stroke                              |                              | mm                      | 75   |                 | 88  |                 |
| Magnet Holding Power                     |                              | N(kgf)                  | 6664 (680)   |                 | 9800 (1000)   |                 |
| Magnet Dimensions                        |                              | mm                      | 82 (W) x 172 (L)   |                 | 100 (W) x 200 (L)   |                 |
| Power Cord Length                        |                              | m                       | 4  |                 | 5   |                 |
| Mass (Weight)                            |                              | kg                      | 18.5   |                 | 26  |                 |
| Accessories Included                     |                              |                         | <div><div><div>• Oil Tank</div><div>• Cutting Oil 0.5L</div><div>• Pilot Pin 08035</div><div>• Side Handle</div><div>• 3 mm Hex. Socket Screw Key</div></div><div><div>• 4 mm Hex. Socket Screw Key</div><div>• 8 x 10 mm Spanner</div><div>• Chain</div><div>• Tool Box</div></div></div> |                 | <div><div><div>• Oil Tank</div><div>• Cutting Oil 0.5L</div><div>• Pilot Pin 08050</div><div>• Side Handle</div><div>• 3 mm Hex. Socket Screw Key</div></div><div><div>• 4 mm Hex. Socket Screw Key</div><div>• 8 x 10 mm Spanner</div><div>• Chip Stopper</div><div>• Chain</div><div>• Tool Box</div></div></div> |                 |

#### 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 set      | ●                | ●       |
| 3        | TB07696 | Pipe Attachment Ass'y        | 1 set      | ●                | ●       |
|          |         | 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    | ●                | ●       |

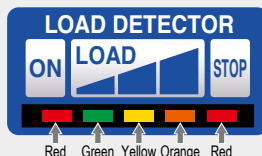


## Automatic Return

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

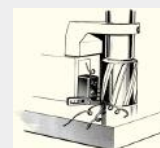
When cutting through difficult materials, the load sensor will automatically activate the Step Feed Program to help penetrate material.

## 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, and 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.



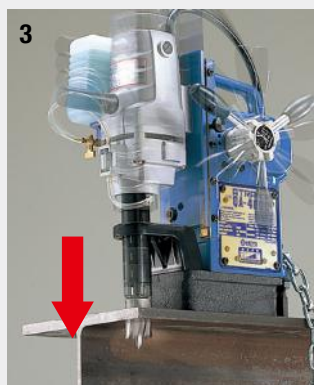
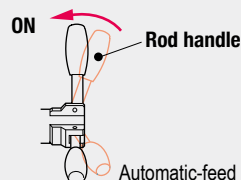
## Automatic-feed Hole-cutting Procedure



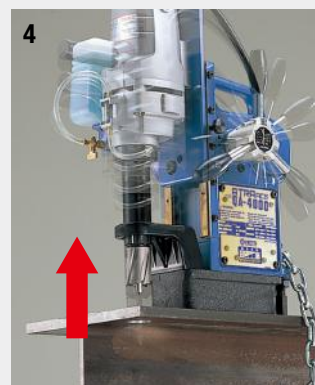
Align the pilot pin with the center punch mark of the hole to be drilled. Attach the machine to the beam with the proper safety chain and engage the magnet. Lower the drill down from the top limit switch location to the point of the pilot pin making contact with the material and engage the motor.



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



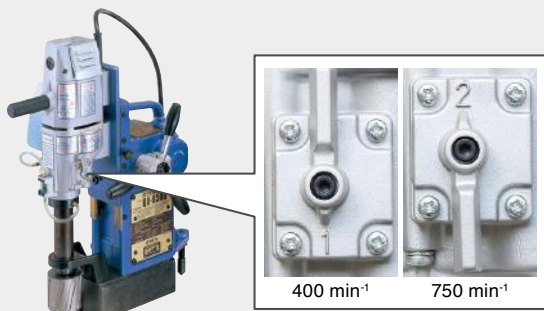
Slow start mechanism cuts smoothly through the mill scale. Then, speed and feed rate is controlled by the sensors to achieve efficient drilling.



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



## Portable Magnetic Base Drilling Machine

### ATRA ACE manual feed

Model **ARA-100A** 

• Max. 100 mm dia. x 75 mm deep



 YouTube



## The versatile drilling machine with top-class power in ATRA ACE series

- 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 <sup>-1</sup> (rpm)  | 110 - 210 / 330 - 660 |
|  | Morse Taper No.              |                          | MT3                   |
|  | Rated Duty                   | min                      | 30                    |
| Magnet Power Consumption                 |                              | W                        | 80                    |
| Hole Capacity<br>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.          |                       |
| Min. Plate Thickness for Magnet Adhesion |                              | mm                       | 13                    |
| Max. Stroke                              |                              | mm                       | 296                   |
| Magnet Holding Power                     |                              | N(kgf)                   | 17000 (1733)          |
| Magnet Dimensions                        |                              | mm                       | 110 (W) x 220 (L)     |
| Cutter Position                          | Straight Front to Back       | mm                       | 20                    |
| Adjustment                               | Swivel angle                 |                          | 30°                   |
| Power Cord Length                        |                              | m                        | 5                     |
| Mass (Weight)                            |                              | kg                       | 30                    |

### Accessories Included

- Pilot Pin 12075 Ass'y
- 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  | 1 set      |
| 3        | TB09727 | Holder MT03075 One-touch | 1 piece    |

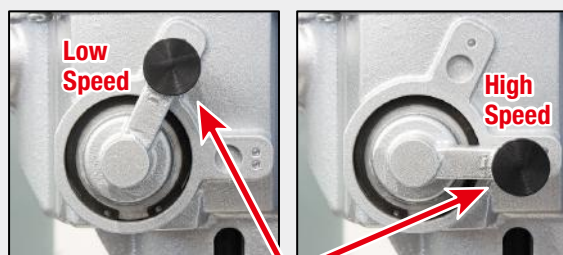
### Slow Starting Function

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



### 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



1

2

3



## Load Indication and LED Condition

### Load Indication

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

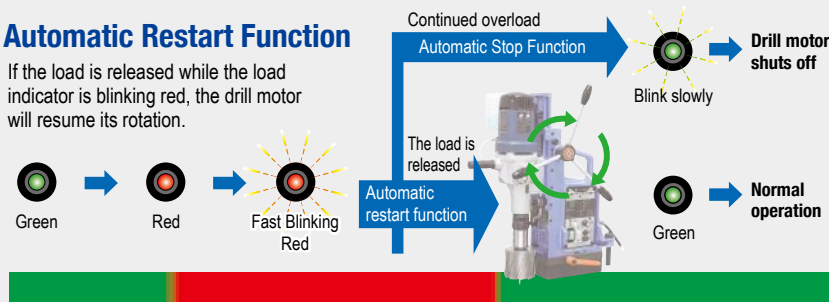
- The LED lights up in green. → The load on the drill motor is normal.
- The LED lights up in red. → The load on the drill motor is close to overload.
- The LED blinks in red. → The drill motor is overloaded.

### 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.

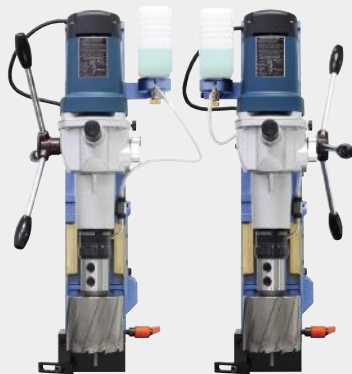
### Magnet Open-circuit Sensor

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

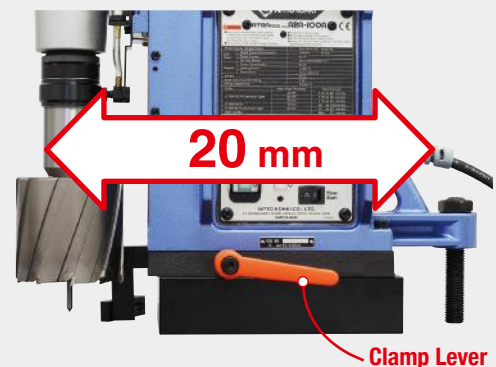


Feed handles can be positioned on the right or left hand side for ease of drilling. When changing the feed handle position, oil tank is required to be positioned opposite to the feed handles.

### 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 on the market

### Twist Drill Bit

MT3



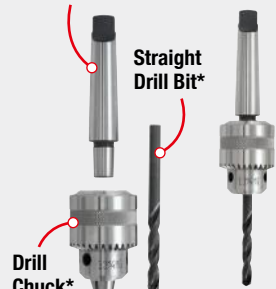
MT3 Morse taper shank drill bit can be directly installed.

Morse taper sleeve MT3\*



Use Morse taper sleeve MT3 for other sizes than MT3

Drill chuck Arbor MT3\*



Drill Chuck\*

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

\*Available on the market