

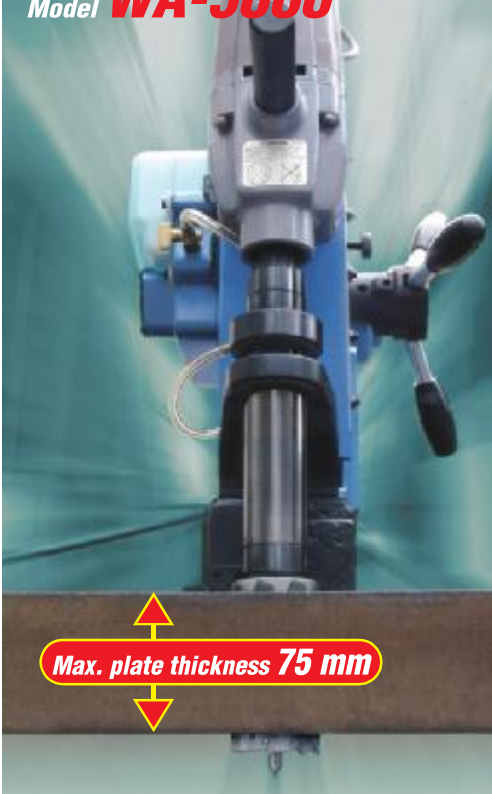
## ATRA ACE auto

Model **WA-3500**



## ATRA ACE auto

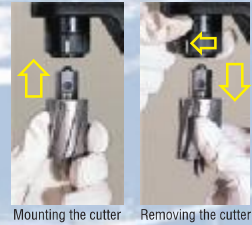
Model **WA-5000**



## High-performance mechanism & high-tech components

### One-touch cutter replacement

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



### 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.



## Fail-Safe Protection

### Built-in motion sensor

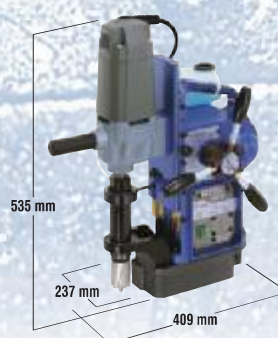
If any lateral movement or excess vibration is detected, both the drill and the feed motor stop instantly. Nitto Kohki is the first company to incorporate this feature into magnetic base drills.

### 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.



Model **WA-3500**



Model **WA-5000**

### New drill control prevents cutters from breaking

#### Slow start mechanism

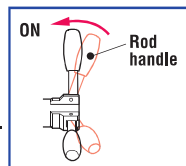
The feed speed is reduced for the first few seconds after boring begins to ensure a smooth cut through the mill scale.

#### Auto-feed

Automatic control & feed are activated by simply pushing the rod handle to engage the gears.

#### Load sensor

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



#### Variable speed

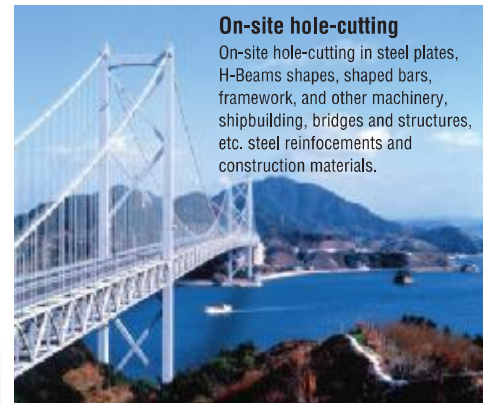
The feed speed is continuously monitored and updated proportionally to the load on the cutter.

#### 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 to prevent the cutter from breaking.



#### 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	1,100	1,150			
	Rated Current	A	10.2	5.1	10.8	5.4	
	No Load Speed	min <sup>-1</sup> (rpm)	950		350 / 650		
Magnet Power Consumption		W	34	75			
Hole-cutting Capacity		Cutter	Hole Diameter	Plate Thickness	Hole Diameter	Plate Thickness	
One-touch type JETBROACH 25L			—	—	12 to 17 mm	9 to 25 mm	
One-touch type JETBROACH 35L			17.5 to 35 mm	9 to 35 mm	17.5 to 40 mm	9 to 35 mm	
One-touch type JETBROACH 50L			17.5 to 35 mm	9 to 35 mm	12 to 50 mm	9 to 50 mm	
One-touch type JETBROACH 75L			—	—	17.5 to 50 mm	9 to 75 mm	
One-touch type HI-BROACH 25L			14 to 35 mm	9 to 25 mm	14 to 50 mm	9 to 25 mm	
One-touch type HI-BROACH 50L			—	—	14 to 50 mm	9 to 50 mm	
Magnet Holding Power		N (kgf)	7,056 (720)		9,800 (1,000)		
Magnet Dimensions		mm	92 x 216		101 x 201		
Mass (Weight)		kg	20		23		
Standard Accessories		<ul style="list-style-type: none"> <li>• Pilot Pin 08035 A2 : 1 pc.</li> <li>• Chain Ass'y : 1 set</li> <li>• Side Handle Ass'y : 1 set</li> <li>• 3 mm Hex Socket Screw Key : 1 pc.</li> <li>• 8 x 10 mm Spanner : 1 pc.</li> <li>• Cutting Oil 0.5 L : 1 can</li> <li>• Plastic Case : 1 pc.</li> <li>• Guard Ass'y : 1 set</li> </ul>			<ul style="list-style-type: none"> <li>• Pilot Pin 08050 A3 : 1 pc.</li> <li>• Chain Ass'y : 1 set</li> <li>• Side Handle Ass'y : 1 set</li> <li>• 3 mm / 4 mm Hex Socket Screw Key : each 1 pc.</li> <li>• 8 x 10 mm Spanner : 1 pc.</li> <li>• Cutting Oil 0.5 L : 1 can</li> <li>• Plastic Case : 1 pc.</li> <li>• Guard Ass'y : 1 set</li> </ul>		
Optional Accessories		<p>Always use genuine Nitto Kohki cutters &amp; coolant.</p>			<p>Always use genuine Nitto Kohki cutters &amp; coolant.</p>		



## Designed to use Jetbroach and Hi-broach Annular Cutters

# ATRA ACE quick auto



**QUICK AUTO Drills increase productivity and reduce hole drilling cost.**

### Proven Automatic Tecnology

- Self feeding
- Limit Switch
- Automatic step feed
- Load detection
- Automatic return
- Emergency stop

#### 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.



#### Automatic Step Feed (QA-6500)

Step feed feature optimizes cutter penetration.

#### Side Slip Detection Function



This feature automatically stops the drill from operating when sudden lateral force is applied to the machine.

**Built-in motion detection sensor**

#### 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.



Red Green Yellow Orange Red

#### Limit Switch

When the drill has reached to the top of its stroke, a limit switch stops the drill motor. There is also a limit switch at the bottom of drill stroke.

Light up



### Specifications

Model		QA-4000		QA-6500		
Power Source (Single Phase)		115 V AC, 50/60 Hz		220 - 240 V AC, 50/60 Hz		
Electric Drill	Rated Power Consumption	680 W		1,010 W		
	Rated Current	6.1 A	3.0 A	4.5 A		
	No Load Speed	750 min <sup>-1</sup> (rpm)		400 / 750 min <sup>-1</sup> (rpm)		
Magnet Power Consumption		50 W		75 W		
Hole-cutting Capacity		Cutter	Hole Diameter	Plate Thickness	Hole Diameter	Plate Thickness
One-touch type JETBROACH 35L			17.5 to 40 mm	9 to 35 mm	17.5 to 40 mm	9 to 35 mm
One-touch type JETBROACH 50L			—	—	17.5 to 65 mm	9 to 50 mm
One-touch type HI-BROACH 25L			14 to 15 mm	9 to 12 mm	18 to 35 mm	9 to 25 mm
			16 to 18 mm	9 to 25 mm	—	—
Magnet Holding Power		6,664 (680) N (kgf)		9,800 (1,000) N (kgf)		
Magnet Dimensions		82 x 172 mm		100 x 200 mm		
Mass (Weight)		18.5 kg		26 kg		
Standard Accessories		<ul style="list-style-type: none"> <li>• Pilot Pin 08035 A2 : 1 pc.</li> <li>• Chain : 1 pc.</li> <li>• 3 mm Hex Socket Screw Key : 1 pc.</li> <li>• 4 mm Hex Socket Screw Key : 1 pc.</li> <li>• 8 x 10 mm Spanner : 1 pc.</li> <li>• Cutting Oil 0.5 L : 1 can.</li> <li>• Tool box : 1 pc.</li> <li>• Side Handle : 1 pc.</li> <li>• Oil Tank Ass'y : 1 set.</li> </ul>		<ul style="list-style-type: none"> <li>• Pilot Pin 08050 A3 : 1 pc.</li> <li>• Chain : 1 pc.</li> <li>• 3 mm Hex Socket Screw Key : 1 pc.</li> <li>• 4 mm Hex Socket Screw Key : 1 pc.</li> <li>• 8 x 10 mm Spanner : 1 pc.</li> <li>• Cutting Oil 0.5 L : 1 can.</li> <li>• Tool box : 1 pc.</li> <li>• Chip Stopper : 1 pc.</li> <li>• Side Handle : 1 pc.</li> <li>• Oil Tank Ass'y : 1 set.</li> </ul>		

### One-touch Cutter Replacement!

One-Touch arbor system requires no tools for cutter installation and removal.

### Improved Feature Bearing Bracket

Precision bearing bracket aligns cutters precisely, which increases cutter life.



**Chip Breaker**  
Chip breaker prevents swarf and chip nesting.

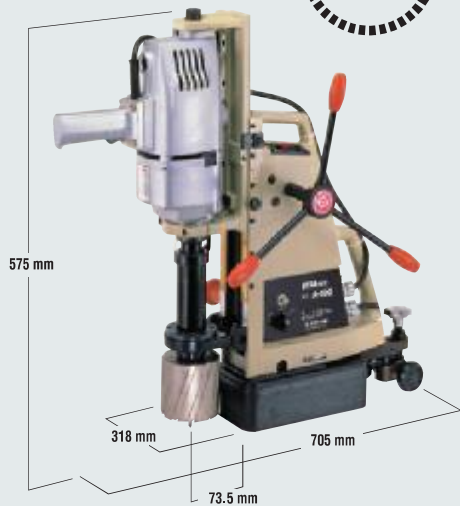


Designed to use Jetbroach Carbide Tipped Annular Cutters



**ATRA ACE**  
manual feed

Model **A-100**



Side-lock Type Cutter

Max. Hole-cutting Capacity : 100 mm dia.  
Max. Plate Thickness : 75 mm

**The largest capacity drilling machine in the Nitto Kohki line.**

#### Specifications

Model		<b>A-100</b>	
Power Source (Single Phase)		220 - 240 V AC, 50/60 Hz	
Electric Drill	Rated Power Consumption	W	1,600
	Rated Current	A	7.4
	No Load Speed	min <sup>-1</sup> (rpm)	330
Magnet Power Consumption		W	80
Hole-cutting Capacity		Cutter	Hole Diameter
Side-Lock type JETBROACH 75L		50 to 100 mm	13 to 75 mm
Magnet Holding Power		N (kgf)	17,640 (1,800)
Magnet Dimensions		mm	130 x 256
Mass (Weight)		kg	50
Standard Accessories		<ul style="list-style-type: none"> <li>• Pilot Pin 12075 : 1 pc.</li> <li>• Chain : 1 pc.</li> <li>• 2 mm / 2.5 mm / 3 mm / 4 mm / 5 mm / 6 mm / 8 mm Hex Socket Screw Key : each 1 pc.</li> <li>• 7 x 8 mm Spanner : 1 pc.</li> <li>• Cutting Oil 0.5 L : 1 can</li> <li>• Tool box : 1 pc.</li> <li>• Oil Cap Ass'y : 1 set.</li> <li>• Rod Handle : 3 pcs.</li> </ul>	

**The magnet bases of ATRA MASTER hold the drills perpendicular to steel plates even on non horizontal places.**



**ATRA MASTER**  
Model **M-100**



Drilling Capacity : 10 mm  
Power Source (Single Phase) :  
220 - 240 V AC, 50/60 Hz  
Mass (weight) : 6.2 kg

**ATRA MASTER**  
Model **M-130A**



Drilling Capacity : 13 mm  
Power Source (Single Phase) :  
220 - 240 V AC, 50/60 Hz  
Mass (weight) : 16 kg

**ATRA MASTER**  
Model **M-250B**



Drilling Capacity : 25 mm  
Power Source (Single Phase) :  
220 - 240 V AC, 50/60 Hz  
Mass (weight) : 25.5 kg

**ATRA MASTER**  
Model **M-320**



Drilling Capacity : 32 mm  
Power Source (Single Phase) :  
220 - 240 V AC, 50/60 Hz  
Mass (weight) : 29 kg

**N.B. : The electric drill and drill mount fixture do not come with ATRA MASTERS.**

# JETBROACH CUTTERS & HI-BROACH CUTTERS

**BROACH CUTTERS are far better than twist drills:**

- No dead point
- Peripheral cutting
- Blade cutting resistance reduced by 50 %
- 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.



## BROACH HOLDERS





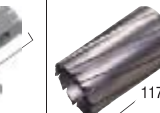
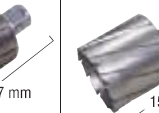
**Industrial cutters for faster and better finished holes.**

- 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 - 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

Morse Taper No.	Model	Cutter	Cutter Diameter	Pilot Pin	Accessory
M.T.No.2	 163 mm	HBO-25L	12 - 17 dia.	06025 (PN TK01167)	Optional
			17.5 - 35 dia.	08025 (PN TJ12696)	
M.T.No.3	 182 mm	HBO-25L	12 - 17 dia.	06025 (PN TK01167)	Optional
			17.5 - 52 dia.	08025 (PN TJ12696)	
		HBO-50L	12 - 18 dia.	06050 (PN TK01166)	Optional
			19 - 52 dia.	08050 (PN TK00802) 08050 (PN TJ16019)	
		JBO-35L	17.5 - 40 dia.	08035 (PN TJ15859)	Standard
		JBO-50L	17.5 - 65 dia.	08050 (PN TJ16019)	Optional
JBO-50L(W)	18 - 35 dia.	08050 (PN TJ16019)	Optional		
M.T.No.4	 248 mm	JBS-75L	50 - 100 dia.	12075 (PN TA9A207)	Standard
			 232 mm		

HI-BROACH One-touch Type		AO-5575	WA-3500	WA-5000	QA-4000	QA-6500
mm dia.	Depth	PN				
12	25 mm	TK00698	•			
13		TK00699	•			
14		TK00700	•	•	•	•
15		TK00701	•	•	•	•
16		TK00702	•	•	•	•
17		TK00703	•	•	•	•
17.5		TK00335	•	•	•	•
18		TK00336	•	•	•	•
19		TK00337	•	•	•	•
19.5		TK00338	•	•	•	•
20		TK00339	•	•	•	•
21		TK00340	•	•	•	•
21.5		TK00341	•	•	•	•
22		TK00342	•	•	•	•
22.5		TK00343	•	•	•	•
23		TK00344	•	•	•	•
23.5		TK00345	•	•	•	•
24		TK00346	•	•	•	•
24.5		TK00347	•	•	•	•
25		TK00348	•	•	•	•
26		TK00349	•	•	•	•
27		TK00351	•	•	•	•
28		TK00352	•	•	•	•
29		TK00353	•	•	•	•
30		TK00354	•	•	•	•
31	TK00355	•	•	•	•	
32	TK00356	•	•	•	•	
33	TK00357	•	•	•	•	
34	TK00359	•	•	•	•	
35	TK00361	•	•	•	•	
36	TK00704	•	•			
37	TK00705	•	•			
38	TK00706	•	•			
39	TK00707	•	•			
40	TK00708	•	•			
41	TK00709	•	•			
42	TK00710	•	•			
43	TK00711	•	•			
44	TK00712	•	•			
45	TK00713	•	•			
46	TK00714	•	•			
47	TK00715	•	•			
48	TK00716	•	•			
49	TK00717	•	•			
50	TK00718	•	•			
51	TK00719					
52	TK00720					

HI-BROACH One-touch Type		AO-5575	WA-5000
mm dia.	Depth	PN	
12	50 mm	TK00721	•
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		

	HI-BROACH	HI-BROACH	JETBROACH	JETBROACH	JETBROACH	JETBROACH	
	One-touch Type / 25L	One-touch Type / 50L	One-touch Type / 25,35,50L	One-touch Type / 50L(W)	One-touch Type / 75L	Side lock Type / 75L	
	 65 mm (12 - 19.5 dia.) 58 mm (20 - 52 dia.)	 86 mm	 65 mm (25L) 73 mm (35L) 95 mm (12 - 17 x 50L) 90 mm (17.5 - 65 x 50L)	 90 mm	 117 mm	 156 mm	
Hole-cutting Capacity	Hole Diameter mm	25L : 12 - 52 dia.	25L : 12 - 17 dia. 35L : 17.5 - 40 dia.	—	—	—	
	Plate Thickness mm	—	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.
		—	—	—	—	—	—
	—	—	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)			

JETBROACH One-touch Type			WOJ-3200	AO-5575	WA-3500	WA-5000	OA-4000	OA-6500
mm dia.	Depth	PN						
12	25 mm	TK01148	•	•	•	•	•	•
13		TK01149	•	•	•	•	•	•
14		TK01150	•	•	•	•	•	•
15		TK01151	•	•	•	•	•	•
16		TK01152	•	•	•	•	•	•
17	TK01153	•	•	•	•	•	•	
17.5	35 mm	TK00301	•	•	•	•	•	•
18		TK00302	•	•	•	•	•	•
19		TK00304	•	•	•	•	•	•
19.5		TK00305	•	•	•	•	•	•
20		TK00306	•	•	•	•	•	•
20.5		TK00307	•	•	•	•	•	•
21		TK00308	•	•	•	•	•	•
21.5		TK00309	•	•	•	•	•	•
22		TK00310	•	•	•	•	•	•
22.5		TK00311	•	•	•	•	•	•
23		TK00312	•	•	•	•	•	•
23.5		TK00313	•	•	•	•	•	•
24		TK00314	•	•	•	•	•	•
24.5		TK00315	•	•	•	•	•	•
25		TK00316	•	•	•	•	•	•
26	TK00317	•	•	•	•	•	•	
26.5	TK00318	•	•	•	•	•	•	
27	TK00319	•	•	•	•	•	•	
28	TK00320	•	•	•	•	•	•	
29	TK00321	•	•	•	•	•	•	
30	TK00322	•	•	•	•	•	•	
31	TK00323	•	•	•	•	•	•	
32	TK00324	•	•	•	•	•	•	
33	TK00325	•	•	•	•	•	•	
34	TK00326	•	•	•	•	•	•	
35	TK00328	•	•	•	•	•	•	
36	TK00602	•	•	•	•	•	•	
37	TK00603	•	•	•	•	•	•	
38	TK00604	•	•	•	•	•	•	
39	TK00605	•	•	•	•	•	•	
40	TK00606	•	•	•	•	•	•	

JETBROACH One-touch Type			WOJ-3200	AO-5575
50L for stacked two (=W) plates.				
mm dia.	Depth	PN		
18	50 mm	TK01068	•	•
22		TK00622	•	•
24		TK00623	•	•
24.5		TK00631	•	•
25		TK00624	•	•
26		TK00625	•	•
26.5		TK00632	•	•
28		TK00626	•	•
32		TK00627	•	•
35		TK00628	•	•

JETBROACH One-touch Type			WOJ-3200	AO-5575	WA-3500	WA-5000	OA-6500
mm dia.	Depth	PN					
12	50 mm	TK01154	•	•	•	•	•
13		TK01155	•	•	•	•	•
14		TK01156	•	•	•	•	•
15		TK01157	•	•	•	•	•
16		TK01158	•	•	•	•	•
17		TK01159	•	•	•	•	•
17.5		TK00380	•	•	•	•	•
18		TK00381	•	•	•	•	•
19		TK00382	•	•	•	•	•
19.5		TK00383	•	•	•	•	•
20		TK00384	•	•	•	•	•
20.5		TK00385	•	•	•	•	•
21		TK00386	•	•	•	•	•
21.5		TK00387	•	•	•	•	•
22		TK00388	•	•	•	•	•
22.5		TK00389	•	•	•	•	•
23		TK00390	•	•	•	•	•
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24.5		TK00393	•	•	•	•	•
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51	TK00422	•	•	•	•	•	
52	TK00443	•	•	•	•	•	
53	TK00444	•	•	•	•	•	
54	TK00445	•	•	•	•	•	
55	TK00446	•	•	•	•	•	
56	TK00447	•	•	•	•	•	
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61	TK00607	•	•	•	•	•	
62	TK00608	•	•	•	•	•	
63	TK00609	•	•	•	•	•	
64	TK00610	•	•	•	•	•	
65	TK00611	•	•	•	•	•	

JETBROACH One-touch Type			AO-5575	WA-5000
mm dia.	Depth	PN		
17.5	75 mm	TK01036	•	•
18		TK01003	•	•
19		TK01004	•	•
20		TK01005	•	•
21		TK01006	•	•
22		TK01007	•	•
23		TK01008	•	•
24		TK01009	•	•
25		TK01010	•	•
26		TK01011	•	•
27		TK01012	•	•
28		TK01013	•	•
29		TK01014	•	•
30		TK01015	•	•
31		TK01016	•	•
32		TK01017	•	•
33		TK01018	•	•
34		TK01019	•	•
35		TK01020	•	•
36		TK01021	•	•
37		TK01022	•	•
38		TK01023	•	•
39		TK01024	•	•
40		TK01025	•	•
41		TK01026	•	•
42	TK01027	•	•	
43	TK01028	•	•	
44	TK01029	•	•	
45	TK01030	•	•	
46	TK01031	•	•	
47	TK01032	•	•	
48	TK01033	•	•	
49	TK01034	•	•	
50	TK01035	•	•	
51	TK01112	•	•	
52	TK01113	•	•	
53	TK01114	•	•	
54	TK01115	•	•	
55	TK01116	•	•	

JETBROACH Side-lock Type			A-100
mm dia.	Depth	PN	
50	75 mm	TJ17709	•
51		TJ16651	•
52		TJ16652	•
53		TJ16653	•
54		TJ16654	•
55		TJ16655	•
56		TJ16656	•
57		TJ16657	•
58		TJ16658	•
59		TJ16659	•
60		TJ16660	•
61		TJ16661	•
62		TJ16662	•
63		TJ16663	•
64		TJ16664	•
65		TJ16665	•
66		TJ16666	•
67		TJ16667	•
68		TJ16668	•
69		TJ16669	•
70		TJ16670	•
71		TJ16671	•
72		TJ16672	•
73		TJ16673	•
74		TJ16674	•
75		TJ16675	•
76		TJ16676	•
77		TJ16677	•
78		TJ16678	•
79		TJ16679	•
80		TJ16680	•
81		TJ16681	•
82		TJ16682	•
83		TJ16683	•
84		TJ16684	•
85		TJ16685	•
86		TJ16686	•
87		TJ16687	•
88		TJ16688	•
89		TJ16689	•
90		TJ16690	•
91		TJ16691	•
92		TJ16692	•
93		TJ16693	•
94		TJ16694	•
95		TJ16695	•
96		TJ16696	•
97		TJ16697	•
98		TJ16698	•
99		TJ16699	•
100	TJ16700	•	

### Combination of Pilot Pins & Broach Cutters

Pilot Pin	HI-BROACH Cutters
06025 PN : TK01167 	HBO 12 - 17 dia. Depth 25 mm 
08025 PN : TJ12696 	HBO 17.5 - 52 dia. Depth 25 mm 
06050 PN : TK01166 	HBO 12 - 18 dia. Depth 50 mm 
0850 PN : TK00802 	HBO 19 - 52 dia. Depth 50 mm 
08050 PN : TJ16019 	

Pilot Pin	JETBROACH Cutters
06025 PN : TK01167 	JBO 12 - 17 dia. Depth 25 mm 
08035 PN : TJ15859 	JBO 17.5 - 40 dia. Depth 35 mm 
06050 PN : TK01166 	JBO 12 - 17 dia. Depth 50 mm 

Pilot Pin	JETBROACH Cutters
08050 PN : TJ16019 	JBO 17.5 - 65 dia. Depth 50 mm 
08075 PN : TJ17436 	JBO(W) 18 - 35 dia. Depth 50 mm for stacked two (=W) plates. 
12075 PN : TA9A207 	JBS 50 - 100 dia. Depth 75 mm 

