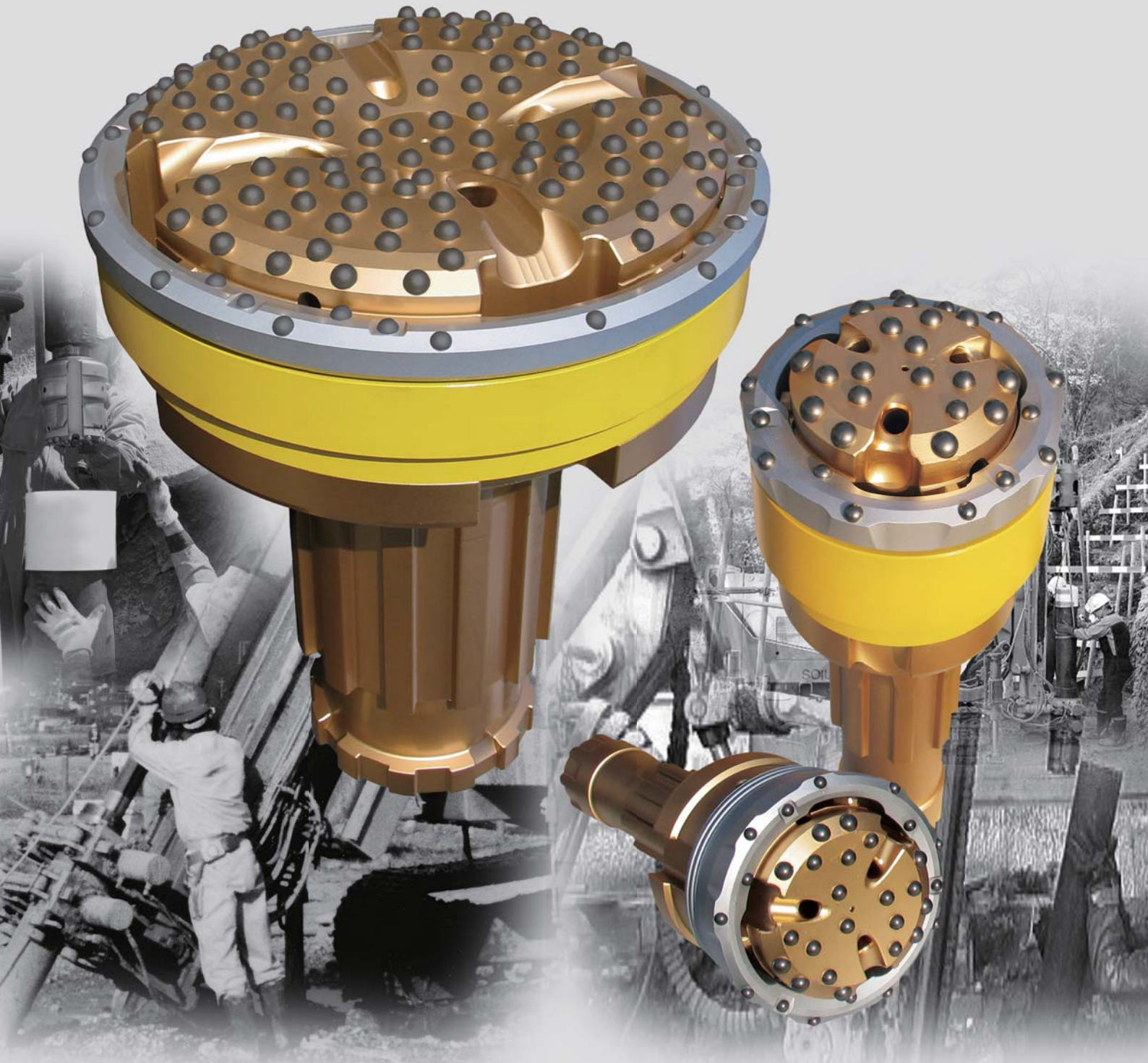


MITSUBISHI

RT07A

ADVANCED MULTI-PURPOSE SYSTEM FOR CASING ADVANCEMENT

ULTRA MAXBIT



MITSUBISHI MATERIALS

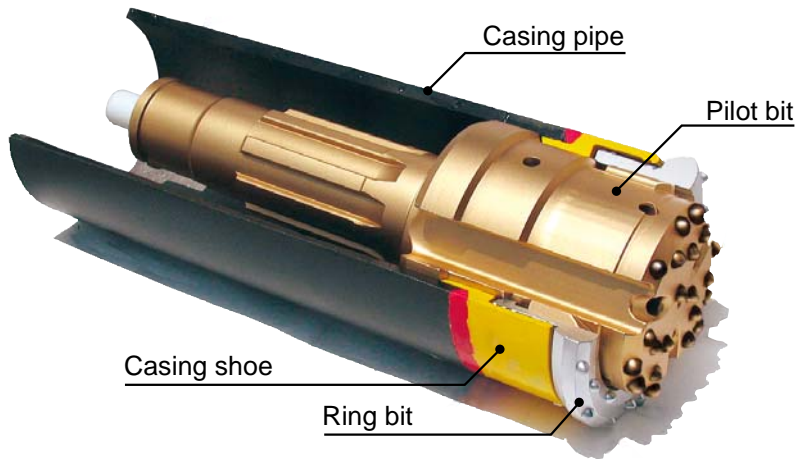
ULTRA MAXBIT

ADVANCED MULTI-PURPOSE SYSTEM FOR CASING ADVANCEMENT

STRUCTURE AND FEATURE

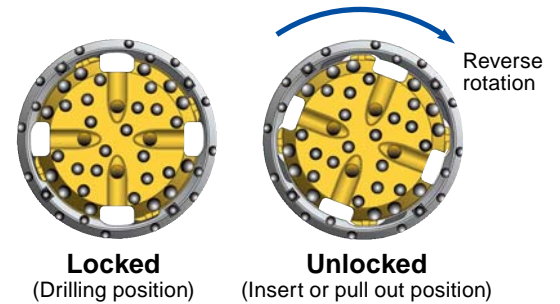
● High speed and straight drilling in wide range of ground conditions

- ULTRA MAXBIT is used for simultaneous drilling and casing in unstable soft ground formations.
- ULTRA MAXBIT is also applicable for wide range of ground conditions such as sand, gravel and boulders and rock.
- The dual bit system also allows vertical, horizontal, and even inclined drilling.



● Easy lock system

- Easy and speedy set-up.



● Pilot bit

(Standard-connected to DTH Hammer)

- Pilot Bit is manufactured in three models, Single, Normal and Multi pass models.
- Twin impact shoulders.



(Big Bore-connected to DTH Hammer)

- Big bore type is available. This new and improved model offers additional strength when drilling larger bore holes.
- Single impact shoulder.



(Top hammer-connected to threaded rod)

- Top hammer type with R32, T38, T45, T51 thread is available.
- Twin impact shoulders.



● Stiff connecting structure between ring bit and casing shoe

(Thread connection type)

- Single pass model
- Top hammer model

* Easy to assemble or disassemble at Job-site.



(Interlinked type)

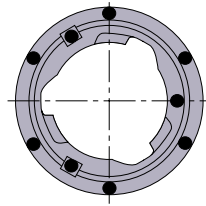
- Big bore model

* Assembled in the factory cannot be disassembled.

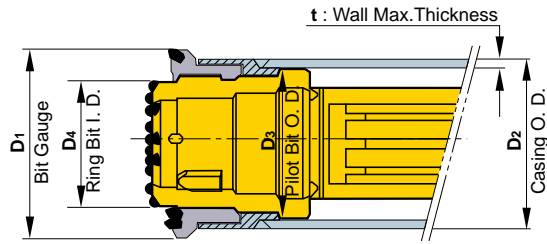


DIMENSIONS

Standard Type ULTRA MAXBIT



Single Pass Model



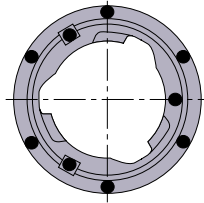
Casing Pipe				Type	Ring Bit				Pilot Bit	
Outer Diameter (D ₂)		Wall Max. Thickness (t)			Gauge Diameter (D ₁)		Inner Diameter (D ₄)		Max. Outer Diameter (D ₃)	
mm	inch	mm	inch		mm	inch	mm	inch	mm	inch
CASING PIPE ø139.7mm (5 1/2")										
139.7	5.5	10.0	0.39	097A	150	5.91	97	3.82	117.5	4.63
					158	6.22	97	3.82	117.5	4.63
CASING PIPE ø168.3mm (6 5/8")										
168.3	6.63	12.7	0.5	118A	178	7.01	118	4.65	140	5.51
					188	7.40	118	4.65	140	5.51
					185	7.28	118	4.65	140	5.51
CASING PIPE ø193.7mm (7 5/8")										
193.7	7.63	12.7	0.5	143A	206	8.11	143	5.63	166	6.54
CASING PIPE ø273.0mm (10 3/4")										
273.0	10.75	12.7	0.5	219A	284	11.18	219	8.62	245	9.65
					285	11.22	219	8.62	245	9.65
CASING PIPE ø323.9mm (12 3/4")										
323.9	12.75	12.7	0.5	273A	338	13.31	273	11.75	296	11.65
					340	13.39	273	11.75	296	11.65
CASING PIPE ø406.4mm (16")										
406.4	16.0	12.7	0.5	354A	420	16.54	354	13.94	378	14.89
CASING PIPE ø508.7mm (20")										
508.0	20.0	16.0	0.63	445B	521	20.51	445	17.52	473	18.62
CASING PIPE ø609.6mm (24")										
609.6	24.0	16.0	0.63	545A	625	24.61	545	21.46	574	22.60
CASING PIPE ø711.0mm (28")										
711.0	28.0	16.0	0.63	630A	726	28.58	630	24.80	674	26.54

Note 1) To order, please advise the system type, casing size / hammer size and the ring bit models.

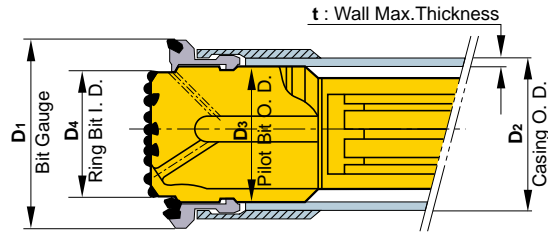
Note 2) Special types are also available according to customer's request.

DIMENSIONS

Big Bore Type ULTRA MAXBIT



Single Pass Model



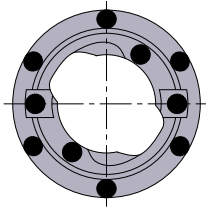
Casing Pipe				Type	Ring Bit				Pilot Bit	
Outer Diameter (D ₂)		Wall Max. Thickness (t)			Gauge Diameter (D ₁)		Inner Diameter (D ₄)		Max. Outer Diameter (D ₃)	
mm	inch	mm	inch		mm	inch	mm	inch	mm	inch
CASING PIPE ø114.3mm (4 1/2")										
114.3	4.5	8.0	0.31	086L	140	5.51	86	3.39	96	3.78
		5.6	0.22	092L	137	5.39	92	3.62	101.5	4.00
CASING PIPE ø139.7mm (5 1/2")										
139.7	5.5	10.0	0.39	106L	168	6.61	106	4.17	118	4.65
		5.6	0.22	117L	161	6.34	117	4.61	127	5.00
CASING PIPE ø168.3mm (6 5/8")										
168.3	6.63	12.5	0.49	127L	200	7.87	127	5.00	138	5.43
		5.6	0.22	142L	189	7.44	142	5.59	155	6.10
CASING PIPE ø193.7mm (7 5/8")										
193.7	7.63	6.3	0.25	167L	215	8.46	167	6.57	179	7.05
CASING PIPE ø219.1mm (8 5/8")										
219.1	8.63	12.5	0.49	177L	254	10.00	177	6.97	189	7.44
		10.0	0.39	187L	252	9.92	187	7.36	197	7.76
		6.3	0.25	192L	242	9.53	192	7.56	204	8.03
CASING PIPE ø273.0mm (10 3/4")										
273.0	10.75	8.0	0.31	242L	299	11.77	242	9.53	255	10.04

Note 1) To order, please advise the system type, casing size / hammer size and the ring bit models.

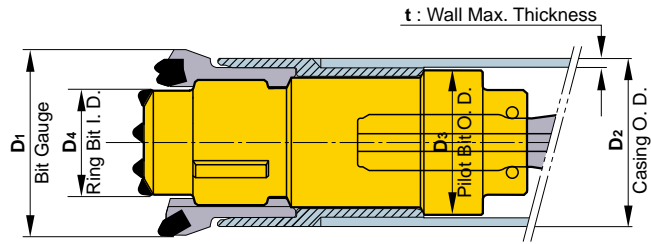
Note 2) Special types are also available according to customer's request.

DIMENSIONS

Top Hammer Type ULTRA MAXBIT



Single Pass Model



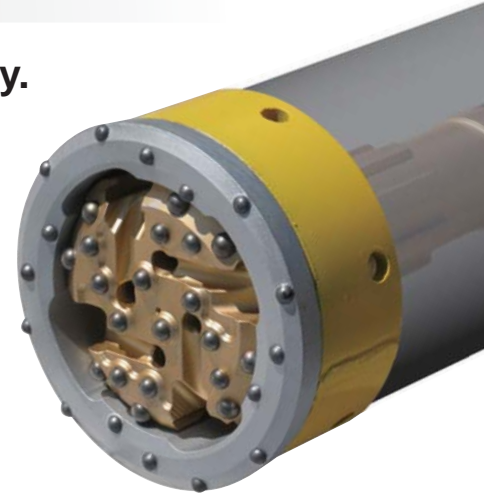
Casing Pipe				Type	Ring Bit				Pilot Bit	
Outer Diameter (D ₂)		Wall Max. Thickness (t)			Gauge Diameter (D ₁)		Inner Diameter (D ₄)		Max. Outer Diameter (D ₃)	
mm	inch	mm	inch		mm	inch	mm	inch	mm	inch
CASING PIPE ø114.3mm (4 1/2")										
114.3	4.5	10.0	0.39	072A	126	4.96	72	2.83	92	3.62
				082L	137	5.39	82	3.22	92	3.62
CASING PIPE ø139.7mm (5 1/2")										
139.7	5.5	10.0	0.39	097A	150	5.91	97	3.83	117.5	4.63
				106L	166	6.54	106	4.17	118	4.65

Note 1) To order, please advise the system type, casing size / hammer size and the ring bit models.

Note 2) Special types are also available according to customer's request.

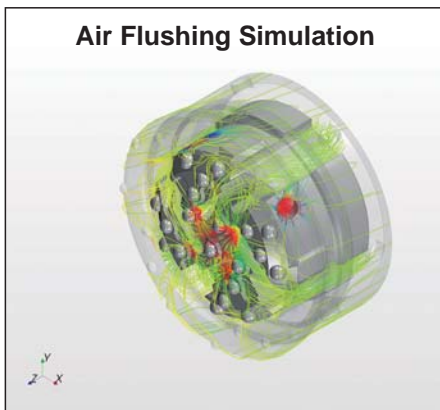
ULTRA MAXBIT VENTURI MODEL

- The Flushing air doesn't hit the drilled hole directly.
- Minimal air leakage into the formation won't enlarge the drilled borehole.
- The Reverse flushing causes a vacuum effect to remove the cuttings.
- The Efficient flushing and groove designed by CAE simulation and analysis.

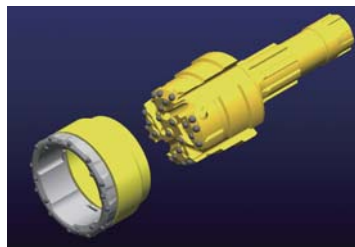


Air Flushing Simulation and Application Example

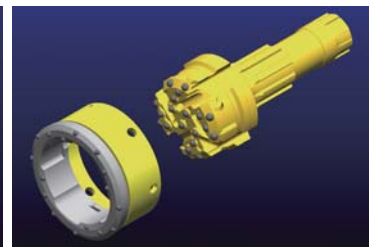
Our Flushing Technology confirmed by Computational Fluid Dynamics supply you the best solution for drilling in sensitive ground.



Systems



Standard System



Big Bore System

MITSUBISHI MATERIALS CORPORATION

JAPAN / ROCK TOOLS

MITSUBISHI MATERIALS CORPORATION
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