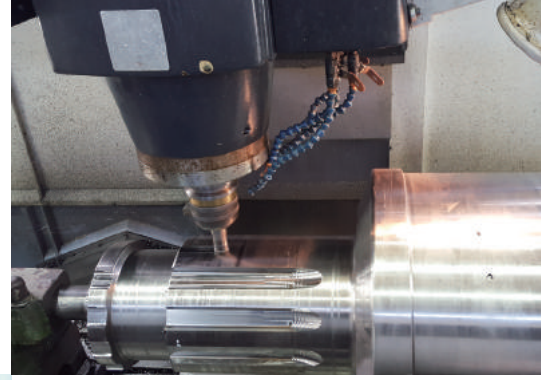


DOWN THE HOLE
HAMMER & BIT





PROVIDER OF VALUE AND BENEFIT

TOPDRILL, established in 1999, makes a constant effort to find out the best ways to harmonious our activities in development, production and sales, in order to achieve greater efficiency, greater flexibility and greater customer focus.

In spite of numerous brands dominating the market, TOPDRILL is continuously growing and has secured the leading position.

As a professional manufacturer of DTH Hammer and Bit, we have been operating in more than 40 countries around the world.

We explore how technology and services can help customers and drillers who applied mind to their problems and challenges, and realize their possibilities, aspirations and dreams.

We always try to apply new thinking and ideas to create easier to handling, save the drilling cost and time with trusted experiences in technology.

We provide basic solution for your drilling and business offerings that span from conventional hammer & bit to cluster drills up to the largest holes. (eg.96") Our comprehensive portfolio helps us match the right product, services and solutions to our customers' specific needs.

Our aim is never lose sight of what benefits our customers most.

TOPDRILL is moving forward with the vision to become the world's best drilling solution provider for YOU.





**WATER AND GEOTHERMAL WELLS
MINING AND QUARRY
EXPLORATION AND FOUNDATION HOLES
PILING AND CONSTRUCTIONS
GROUND AND CIVIL ENGINEERING**



**DOWN THE HOLE
HAMMER & BIT**

PRODUCTS

Hammer series

ACE Hammer
TD Hammer
TDU Hammer
TD RC Hammer
Bit Catcher Hammer
Screw Hammer

DTH Bit series

DTH Bits
Ring Bits
Hole openers

Overburden Drilling Systems

TRB Overburden Drilling System
NT Overburden Drilling System
TDEX Overburden Drilling System

RCD Roller Cutter

Tornado Series (Cluster Drill)

Tornado Hammer (Cluster Drill)
RC Tornado
Hole Opener Tornado
Overburden Tornado

Accessories

Shock Absorber
Stripping Bench
Hammer Shroud
Adapter

HAMMER SERIES

ACE Hammer

ACE Hammer is TOPDRILL's new design hammer.

Our new air flow system and advanced piston feature makes faster penetration and much longer service life.

Economical maintenance cost is also attractive point of this hammer.



Specifications

Model	Button Bit Standard Range (mm)	Shank Type	Connection	Outside Diameter (mm)	Length w/o bit (mm)	Weight w/o bit (kg)
ACE20	70~80	MACH20	50MM DIN405 6TPI BOX	62	797	13
ACE30	87~102	DHD3.5	API 2 3/8 Reg. Pin	79	839	23
ACE35	93~105	DHD3.5	API 2 3/8 Reg. Pin	85	795	25
ACE40	105~127	DHD340	API 2 3/8 Reg. Pin	98	925	38
ACE50	130~152	DHD350	API 3 1/2 Reg. Pin	121	1112	68
ACE55	140~152	DHD350	API 3 1/2 Reg. Pin	126	1112	74
ACE60	152~194	QL60	API 3 1/2 Reg. Pin	142	1070	90
ACE65	165~194	QL60	API 3 1/2 Reg. Pin	146	1070	93
ACE80	200~270	DHD380	API 4 1/2 Reg. Pin	182	1310	181
ACE120	311~451	QL120	API 6 5/8 Reg. Pin, Hex Joint	286	1713	608
ACE350	445~508	SD15	API 8 5/8 Reg. Pin, Hex Joint	355	1617	1080
ACE380	445~559	SD15	API 8 5/8 Reg. Pin, Hex Joint	376	1660	1140

Air Consumption

(cfm)

Model	150PSI (10.5kg/cm ²)	250PSI (17.6kg/cm ²)	350PSI (24.6kg/cm ²)
ACE20	135	270	
ACE30	175	300	430
ACE35	175	300	430
ACE40	200	365	535
ACE50	285	520	750
ACE60	390	710	1020
ACE80	610	1070	1600
ACE120	1100	1700	2500
ACE350	1650	2090	2680
ACE380	1890	3600	

Others size is available with customers' request



■ TD Hammer

TD Hammer is well reputed by over the world customers during 10years.
This model is known for the reliability.

Specifications

Model	Button Bit Standard Range (mm)	Shank Type	Connection	Outside Diameter (mm)	Length w/o bit(mm)	Weight w/o bit (kg)
TD100	251~305	SD10	API 6 5/8 Reg. Pin, Hex Joint	225	1,385	325
TD112	300~381	SD12	API 6 5/8 Reg. Pin, Hex Joint	274	1,788	615
TD320	355~475	TD320	API 8 5/8 Reg. Pin, Hex Joint	320	1,818	890
TD450	450~610	N180	API 8 5/8 Reg. Pin, Hex Joint	400	1,807	1,338
TD450S	470~650	SD18	API 8 5/8 Reg. Pin, Hex Joint	424	1,881	1,492
TD550	610~850	TD550	Hex Joint	525	1,875	2,460
TD700	710~975	TD700	Hex Joint	650	1,867	3,840
TD800H	900~1250	TD800H	Hex Joint	800	1,946	6,248

Air Consumption

(cfm)

Model	150PSI (10.5kg/cm ²)	200PSI (14.0kg/cm ²)	250PSI (17.6kg/cm ²)
TD100	690	980	1290
TD112	880	1250	1700
TD320	1150	1650	2110
TD450	2120	3000	
TD450S	2120	3000	
TD550	2540	3580	
TD700	3400	4800	
TD800H	4700	6500	

Others size is available with customers' request



HAMMER SERIES

■ TDU Hammer

TDU Hammer eliminates operation problem associated with blow tube .

Because this model does not need blow tube of bit.

There are no plastic make up ring which can distort through excessive heat.

Model	Button Bit Standard Range (mm)	Shank Type	Connection	Outside Diameter (mm)	Length w/o bit (mm)	Weight w/o bit (kg)
TDU45S	110~130	DHD340	API 2 3/8 Reg. Pin	100	1026	46
TDU50	130~152	TDU50	API 3 1/2 Reg. Pin	118	1025	65
TDU60C	152~194	QL60	API 3 1/2 Reg. Pin	142	1088	97
TDU80C	200~270	DHD380	API 4 1/2 Reg. Pin	182	1252	174
TDU100	251~305	TDU100	API 6 5/8 Reg. Pin	225	1371	320
TDU350	445~508	TDU350	API 8 5/8 Reg. Pin	355	1499	936

Air Consumption

(cfm)

Model	150PSI (10.5kg/cm ²)	250PSI (17.5kg/cm ²)	350PSI (24.6kg/cm ²)
TDU45S	180	370	560
TDU50	300	580	850
TDU60C	340	650	970
TDU80C	500	880	1240
TDU100	690	1290	-
TDU350	1650	2680	-



■ RC Hammer

Model	Button Bit Standard Range (mm)	Outside Diameter (mm)	Length w/o bit (mm)	Weight w/o bit (kg)
TD RC81	86~102	81	900	24
TD RC116	121~133	116	975	50

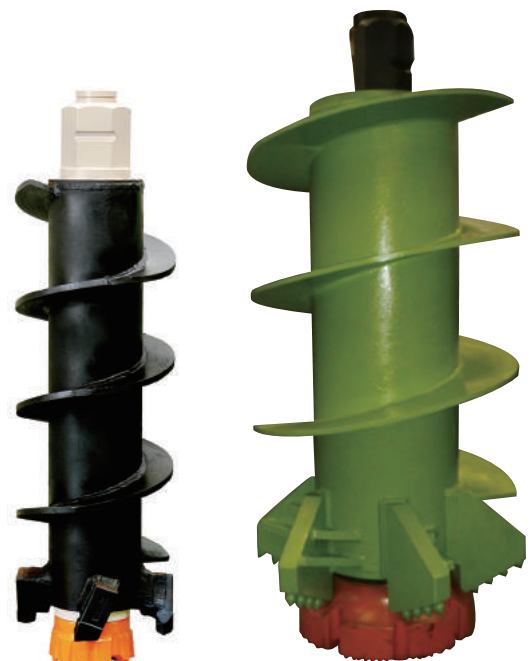
■ Bit Catcher Hammer

Model	Bit Range (mm)
ACE120 CA	311 ~ 451
TD450CA	450 ~ 610

■ SCREW Hammer

Screw Hammer can save drilling cost in soft & medium soil formation.

Model	Hole Size Standard Range (mm)	Combined	
		Hammer	Bit
TDS 400	350 ~ 400	ACE80	254mm (10")
TDS 500	400 ~ 500	TD100	305mm (12")
TDS 600	500 ~ 600	TD100	305mm (12")



DTH BITS SERIES

DTH Bits

TOPDRILL produces various shank type DTH Bits including TD design shank.

Concave, flat face, double step, convex face type are available and basically made from tough heat-treatment.

Also we are using premium & first grade of insert tip in order to make longer service life.

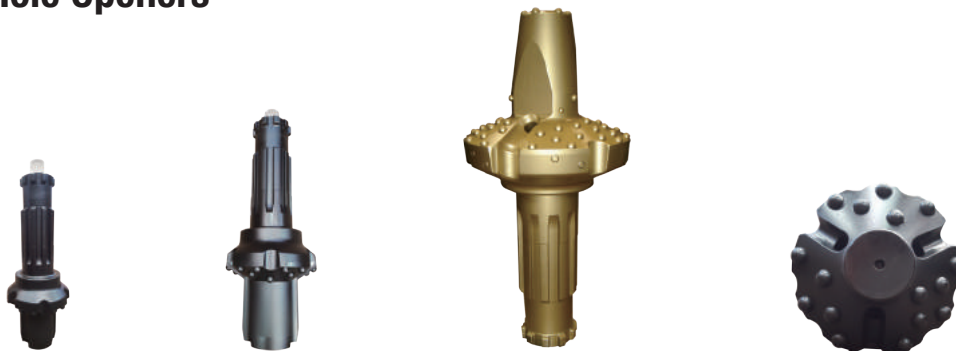
From small size bit to big size bit, manufactured under strict quality-controlled conditions and especially high quality of raw materials and advanced skills.

Bit Diameter (mm)	Weight (kg)	Standard Hammer	Hammer Outside Diameter (mm)
2 3/4" (70)	2.5	ACE20	62
3 1/8" (80)	2.7		
3 3/4" (90)	4.6	ACE30, ACE35	79, 85
3 7/8" (100)	5.4		
4 1/8" (105)	8.4	ACE40	98
4 1/2" (115)	9.2		
5" (127)	10.3	ACE50	121
5 1/2" (140)	17.3		
5 3/4" (146)	18.0	ACE60, TDU60C	142
6 1/2" (165)	27.6		
6 3/4" (172)	30.4	ACE80, TDU80C	182
7 1/2" (191)	33.5		
7 7/8" (200)	52	TD100	225
8 1/2" (216)	56		
9 1/2" (241)	62	TD112	274
10" (254)	83		
11 7/8" (302)	107	TD320	320
12 1/4" (311)	144		
15" (381)	198	ACE350	355
15" (381)	255		
17 1/2" (445)	340	ACE380	376
18" (457)	372		
20" (508)	470	TD450	400
21 5/8" (550)	532		
22" (559)	588	TD550	525
23 5/8" (600)	648		
24" (610)	670	TD700	650
30 1/2" (775)	1,290		
31 1/2" (800)	1,334	TD800H	800
38 3/8" (975)	2,350		
40" (1016)	3,420		
43" (1092)	3,550		
46 1/4" (1175)	3,634		

Others size is available with customers' request



Hole Openers



OVERBURDEN DRILLING SYSTEMS

TRB Overburden Drilling System

TRB overburden drilling system has a longer life and well proven quality by customer experience.

Model	No. of Wings	Bit Diameter (mm)		Casing Size (mm)			Applicable Hammer
		Expanded	Retracted	I.D.	O.D.	Wall	
TRB 90	2	126	88	102.8	114	5.6	ACE35
TRB 115	2	152	114	126.6	141.3	7.4	ACE40
TRB 140	2	185	140	149.8	162	6.1	ACE50
TRB 165	2	213	162	178	194	8.0	ACE60
TRB 190	3	240	187	203.8	219	7.6	ACE60, ACE80
TRB 215	3	265	213	225.9	244.4	9.3	ACE80
TRB 240	3	295	240	254.6	273	9.2	ACE80
TRB 250	3	317	248	270	300	15.0	TD100
TRB 280	3	345	280	304.8	323.9	9.6	TD100
TRB 315	3	380	319	335.6	355.6	10.0	ACE120
TRB 365	3	425	356	387.4	406.4	9.5	ACE120
TRB 410	3	480	408	425	457	16.0	TD320
TRB 460	3	530	460	482.6	508	12.7	ACE380, TD450
TRB 510	3	581	508	533.4	558.8	12.7	TD450
TRB 560	3	630	557	584.2	609.6	12.7	TD450, TD550
TRB 610	3	684	605	635	660.4	12.7	TD550
TRB 660	3	735	655	685.8	711.2	12.7	TD550
TRB 710	3	784	702	736.6	762	12.7	TD550
TRB 745	3	835	752	780.8	812.8	16.0	TD550
TRB 810	3	886	809	838.2	863.6	12.7	TD700
TRB 830	3	938	825	876.4	914.4	19.0	TD700
TRB 950	3	1054	950	986	1016	15.0	TD700, TD800H
TRB 1150	3	1245	1143	1181	1219	19.0	TD800H

Others size is available with customers' request



NT Overburden Drilling System

NT system is symmetrical overburden drilling system, designed with bits extended out when drilling the hole.

NT system reduce replacement cost of wing bit due to relatively longer life of wing bit.

Model	No. of Wings	Bit Diameter (mm)		Casing Size (mm)			Applicable Hammer
		Expanded	Retracted	I.D.	O.D.	Wall	
NT 460	4	530	455	482.6	508	12.7	ACE380, TD450
NT 510	4	586	511	533.4	558.8	12.7	TD450
NT 560	4	634	558	584.2	609.6	12.7	TD450, TD550
NT 610	4	682	605	635	660.4	12.7	TD550
NT 660	4	733	656	685.8	711.2	12.7	TD550
NT 710	4	784	707	736.6	762	12.7	TD550
NT 745	4	835	730	781	813	16.0	TD550
NT 810	4	886	809	838.2	863.6	12.7	TD550, TD700
NT 830	4	945	831	889	914.4	12.7	TD700
NT 930	4	1046	931	984.2	1016	15.9	TD800H

Others shank type or size is available with customers' request



OVERBURDEN DRILLING SYSTEMS

TDEX Overburden Drilling System

TDEX consists of guide device, reamer and pilot bit.
This model can be able to drill and case the hole simultaneously.

Model	Bit Diameter (mm)		Casing Size (mm)			Applicable Hammer
	Expanded	Retracted	I.D.	O.D.	Wall	
TDEX 90	123	90	102.3	115	6.4	ACE30, ACE35
TDEX 115	151	116	128.1	141.3	6.6	ACE40
TDEX 140	185	141	155.4	168	6.3	ACE50
TDEX 165	211	166	181	193.7	6.4	ACE60
TDEX 180	232	180	194	219	12.5	ACE60
TDEX 190	236	191	205	219	7.0	ACE60, ACE80
TDEX 215	278	215	241	257	8.0	ACE80
TDEX 230	286	230	248	273	12.5	ACE80
TDEX 240	308	241	260.2	273	6.4	ACE80
TDEX 280	366	283	304.8	323.9	9.6	TD100
TDEX 315	397	315	335	355	10	TD112
TDEX 365	458	372	394	406	6	ACE120

Others shank type or size is available with customers' request



RCD ROLLER CUTTER

RCD Roller Cutter



TORNADO HAMMER SERIES

Tornado Hammer(Cluster Drill)

TOP DRILL'S Tornado hammer is patented one and especially suitable with metropolitan city construction as it has spectacular low vibration and noise. It can drill from 220mm to 2000mm and even larger.

Due to using several bits with smaller size, economical bit replacement cost and fast delivery time would be possible including low maintenance cost.

Specifications

Model	No. of Hammers	Connection	Hole Size Standard Range (mm)	Length (mm)	Weight (kg)	Air Consumption cfm (200PSI~250PSI)
TORNADO 380	5	Hexagon joint	380 ~ 390	1,743	1,240	1300 ~ 1500
TORNADO 400	5	Hexagon joint	400 ~ 425	1,743	1,400	1300 ~ 1500
TORNADO 450	5	Hexagon joint	450 ~ 480	1,844	1,570	1800 ~ 2000
TORNADO 500	5	Hexagon joint	500 ~ 530	1,844	2,300	2200 ~ 2400
TORNADO 550	5	Hexagon joint	550 ~ 580	1,722	2,700	2700 ~ 3000
TORNADO 600	5	Hexagon joint	600 ~ 630	1,722	2,900	3500 ~ 4000
TORNADO 800	5	Hexagon joint	800 ~ 830	2,858	5,000	3600 ~ 4500
TORNADO 1000	5	Hexagon joint	1000 ~ 1030	2,858	8,500	4500 ~ 6000
TORNADO 1200	5	Hexagon joint	1200 ~ 1230	3,214	9,500	5500 ~ 6000
TORNADO 1500	5	Flange joint	1500 ~ 1530	3,295	13,000	5800 ~ 6500
TORNADO 2000	5	Flange joint	2000 ~ 2030	3,800	16,000	7000 ~ 7700

Others size is available with customers' request

Incorporated hammer's size and quantity can be changed according to job site conditions.



RC Tornado

RC Tornado is a new developed Reverse Circulation Cluster drill. This model enables RC drilling in big size hole.

Specifications

Model	No. of Hammers	Connection	Hole Size (mm)	Length (mm)	Weight (Kg)
1350	3	Reducer	1350	3474	19400

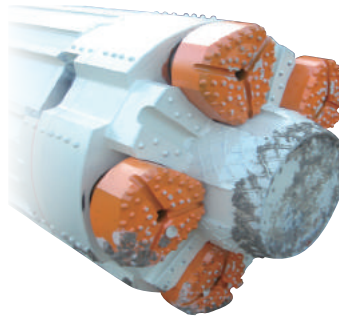
Other size is available with customers' request.

Incorporated hammer's size and quantity can be changed according to job site conditions.



Hole Opener Tornado

Pilot hole is drilled first, then Hole Opener Tornado drill to the size required.
This model is suitable for the large diameter hole.



Specifications

Model	No. of Hammers	Connection	Pilot Diameter (mm)	Reamer Diameter (mm)	Length (mm)
311x660	5	Hexagon joint	311	660	2198
311x711	5	API 8 5/8 Reg. Pin	311	711	2476
562x965	6	Hexagon joint	562	965	2183
565x1176	5	Hexagon joint	565	1176	3136

Other size is available with customers' request.

Incorporated hammer's size and quantity can be changed according to job site conditions.

Overburden Tornado

Overburden Tornado is a overburden drilling system of Tornado hammer, which advance a casing pipe simultaneously while drilling the hole.

Specifications

Model	No. of Hammers	Combined Bit		Casing Size(mm)		
		Expanded	Retracted	I.D.	O.D.	Wall
560	3	630	560	584.2	609.6	12.7
960	5	1116	957	1000	1080	40
1100	5	1200	1094	1130.4	1168.4	19
1370	5	1480	1371	1409.8	1447.8	19

Others size is available with customers' request

Incorporated hammer's size and quantity can be changed according to job site conditions.



ACCESSORIES

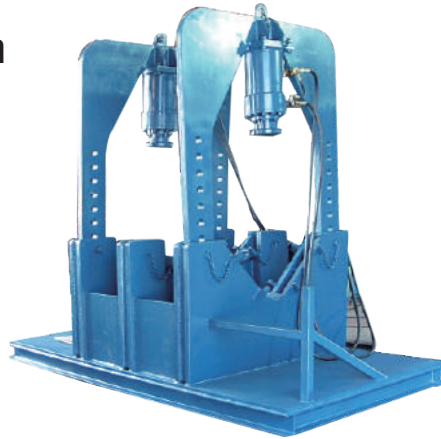
Shock Absorber

Model	Outside Diameter (mm)	Length (mm)	Applicable Hammer
TDSA5	121	560	ACE50
TDSA6	142	655	ACE60
TDSA8	176	778	ACE80
TDSA10	219	780	TD100
TDSA12	273	850	TD112
TDSA15	346	830	ACE350,TD450
TDSA24	366	925	TD550
TDSA28	386	1074	TD700
TDSA34	406	1074	TD800H

Other size is available with customers' request.



Stripping bench



Hammer Shroud

Model	Outside Diameter (mm)	Length (mm)
ACE120 Shroud	323, bar OD381	1765
ACE350 Shroud	406, bar OD432	1667
TD450 Shroud	508, bar OD584	1867
TD700 Shroud	700, bar OD780	1947

Other size is available with customers' request.



Adapter

Model	Outside Diameter (mm)	Length (mm)	Thread
API	89	266	API 2 3/8 pin - 2 3/8 box
Hexagon	280	424	API 8 5/8 pin - Hex box
Lifting adapter	320	518	240H box

Other size is available with customers' request.





Small DTH Hammer



Large DTH Hammer



Tornado



RCD Roller Cutter



DTH Bit



TRB overburden drilling system



TDEX overburden drilling system



Hole Opener



Hammer shroud



Stripping bench



Adapter / Shock Absorber / Drill rod



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