

DOWN THE HOLE

HAMMER & BIT



DOWN THE HOLE

HAMMER & BIT

GROUND AND CIVIL ENGINEERING



PRODUCTS

Hammer Series

TG Hammer
ACE Hammer
TD Hammer
TGX Hammer
RC Hammer
Bit retention Hammer
Screw Hammer

DTH Bit Series

DTH Bits
Ring Bits
Hole Openers

OVERBURDEN DRILLING SYSTEMS

TRB Overburden Drilling System
TREX Overburden Drilling System
TDEX Overburden Drilling System
TD Ring bit System

RCD Roller Cutter

CLUSTER DRILL(Tornado,TGM)

Tornado Hammer
RC Tornado
Hole Opener Tornado
TGM Hammer

Accessories

Shock Absorber
Stripping Bench
Oiler
Hammer Shroud
Adapter

HAMMER SERIES

ACE Hammer

ACE Hammer is proven in design.



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	195~270	DHD380	API 4 1/2 Reg. Pin	182	1310	181
ACE120	311~460	QL120	API 6 5/8 Reg. Pin, Hex Joint	286	1713	608
ACE380	445~610	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
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 T ype	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	300~445	SD12	API 6 5/8 Reg. Pin, Hex Joint	274	1,788	615
TD450	457~650	N180	API 8 5/8 Reg. Pin, Hex Joint	400	1,807	1,338
TD550	610~850	TD550	Hex Joint	525	1,875	2,460
TD700	710~975	TD700	Hex Joint	650	1,867	3,840

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
TD450	2120	3000	
TD550	2540	3580	
TD700	3400	4800	

Others size is available with customers' request



HAMMER SERIES

TGX Hammer

TGX Hammer eliminates operation problem associated with blow tube .
Because this model does not need blow tube of bit.

Model	Button Bit Standard Range (mm)	Shank Type	Connection	Outside Diameter (mm)	Length w/o bit (mm)
TGX40	105~127	M40	API 2 3/8 Reg. Pin	98	983
TGX50	130~152	M50	API 3 1/2 Reg. Pin	118	1031
TGX60	158~194	QL60	API 3 1/2 Reg. Pin	148	1089
TGX80	195~270	M80	API 4 1/2 Reg. Pin	182	1284
TGX100	251~305	SD10	API 6 5/8 Reg. Pin	225	1487

Air Consumption (cfm)

Model	150PSI (10.5kg/ cm ²)	250PSI (17.6kg/cm ²)	350PSI (24.6kg/ cm ²)
TGX40	180	370	560
TGX50	300	580	850
TGX60	340	650	970
TGX80	500	880	1240
TGX100	690	1290	

RC Hammer

Model	Button Bit Standard Range (mm)	Outside Diameter (mm)	Length w/o bit (mm)	Weight w/o bit (kg)
TRC81	86~102	81	900	24
TRC116	121~133	116	975	50
TRC121	127~141	121	1271	69
TRC130	131~145	130	1294	79
TRC525	550~660	525	2056	2700
TRC640	690~852	640	2059	4750

Bit Retention Hammer

Model	Shank
TG80	DHD380
TG125	N125
TG450S	N180
TG550	N240

SCREW Hammer

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

Model	Hole Size (mm)	Combined	
		Hammer	Bit
TDS 300	300	TG50	152mm
TDS 450	450	TG100	300mm
TDS 600	600	TG100	300mm



DTH BITS SERIES

DTH Bits

TOPDRILL produces various shank type DTH Bits including TG design shank. There are two grades-standard & big grade.

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.

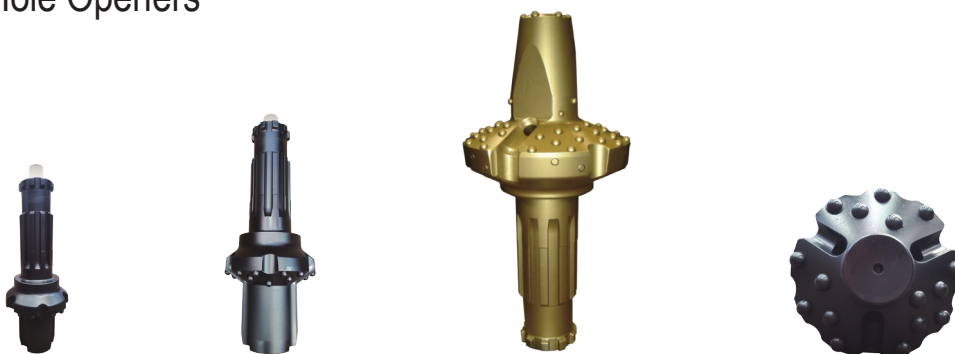
From small size bit to big size bit, manufactured under strict quality-controlled conditions and especially high quality of raw materials and advanced skills.

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, TG35	79, 85
3 7/8" (100)	5.4		
4 1/8" (105)	8.4	TG40	98
4 1/2" (115)	9.2		
5" (127)	10.3	TG50	118
5 1/2" (140)	17.3		
5 3/4" (146)	18.0	TG60	142
6 1/2" (165)	27.6		
6 3/4" (172)	30.4	TG80	182
7 1/2" (191)	33.5		
7 7/8" (200)	52	TG100	225
8 1/2" (216)	56		
9 1/2" (241)	62	TG120	274
10" (254)	83		
11 7/8" (302)	107	TG320S	320
11 7/8" (302)	163		
12 1/4" (311)	144	TG370	376
15" (381)	198		
15" (381)	255	TG450S	415
20" 5/8" (525)	405		
17" 1/2" (445)	372	TG550	530
26" 9/16" (675)	722		
22" (559)	588	TG640S	640
23 5/8" (600)	648		
24" (610)	670	TG800	800
27 3/4" (705)	1,116		
29 1/8" (740)	1,130		
30 1/2" (775)	1,234		
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	TG35
TRB 115	2	157	113	128.1	141.3	6.6	TG40
TRB 140	2	185	140	149.8	162	6.1	TG50
TRB 165	2	213	162	178	194	8.0	TG60
TRB 190	2, 3	240	187	203.8	219	7.6	TG60, TG80
TRB 215	3	265	213	225.9	244.4	9.3	TG80
TRB 240	3	295	240	254.6	273	9.2	TG80
TRB 250	3	317	248	270	300	15.0	TG80, TG100
TRB 280	3	345	280	304.8	323.9	9.6	TG100
TRB 315	3	380	319	335.6	355.6	10.0	TG100, TG120
TRB 365	3	425	356	387.4	406.4	9.5	TG120, TG125
TRB 410	3	480	408	425	457	16.0	TG320
TRB 460	3	530	460	482.6	508	12.7	TG370, TG450
TRB 510	3	581	508	533.4	558.8	12.7	TG450
TRB 560	3	630	557	584.2	609.6	12.7	TG450, TG550
TRB 610	3	684	605	635	660.4	12.7	TG550
TRB 660	3	735	655	685.8	711.2	12.7	TG550
TRB 710	3	784	702	736.6	762	12.7	TG550
TRB 745	3	835	752	780.8	812.8	16.0	TG550
TRB 810	3	886	809	838.2	863.6	12.7	TG640
TRB 830	3	938	825	876.4	914.4	19.0	TG640
TRB 950	3	1054	950	986	1016	15.0	TG800
TRB 1150	3	1245	1143	1181	1219	19.0	TG800

Others size is available with customers' request

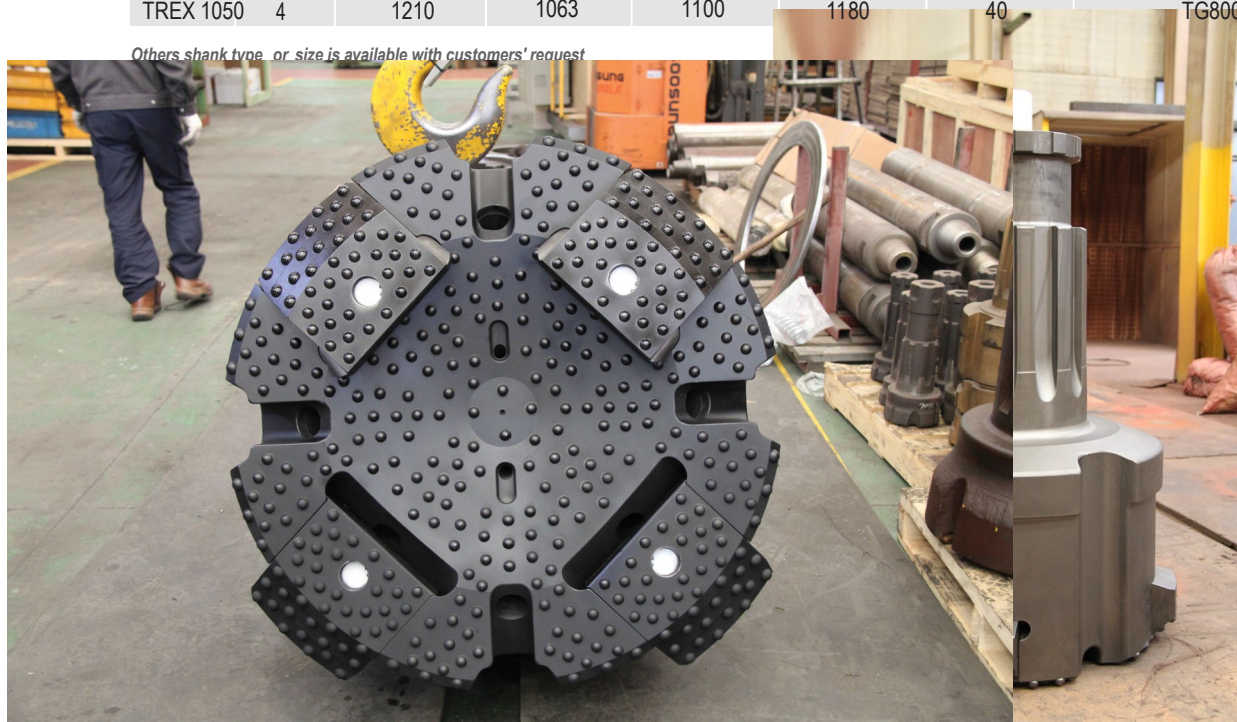


TREX Overburden Drilling System

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

Model	No. of Wings	Bit Diameter (mm)		Casing Size (mm)			Applicable Hammer
		Expanded	Retracted	I.D.	O.D.	Wall	
TREX 90	2	127	91	101.6	114.3	6.4	TG35
TREX 115	2	155	113	120	140	10.0	TG40
TREX 140	2	185	141	155.2	168.3	6.6	TG50
TREX 165	2	212	162	178	194	8.0	TG60
TREX 190	3	239	188	203	219	8.0	TG60, TG80
TREX 215	3	264	213	225.9	244.4	9.3	TG80
TREX 240	3	295	235	254.6	273	9.2	TG80
TREX 250	3	317	248	270	300	15.0	TG80, TG100
TREX 280	3	341	268	304.8	323.9	9.6	TG100
TREX 315	3	379	319	335.6	355.6	10.0	TG100, TG120
TREX 365	3	425	356	387.4	406.4	9.5	TG120, TG125
TREX 410	3	480	408	425	457	16.0	TG320
TREX 460	4	530	455	482.6	508	12.7	TG370, TG450
TREX 510	4	586	511	533.4	558.8	12.7	TG450
TREX 560	4	634	558	584.2	609.6	12.7	TG450, TG550
TREX 610	4	682	605	635	660.4	12.7	TG550
TREX 660	4	733	656	685.8	711.2	12.7	TG550
TREX 710	4	784	707	736.6	762	12.7	TG550
TREX 745	4	835	730	781	813	16.0	TG550
TREX 810	4	886	809	838.2	863.6	12.7	TG640
TREX 830	4	945	831	889	914.4	12.7	TG640
TREX 950	4	1046	957	985	1020	17.5	TG800
TREX 1050	4	1210	1063	1100	1180	40	TG800

Others shank type or size is available with customers' request



HAMMER SERIES

TG Hammer

TG Hammer is TOPDRILL's the latest new design hammer.
It has heavier piston which gives a powerful performance.

Specifications

Model	Recommended bit diameter (mm)	Shank T type	Connection	Outside Diameter (mm)	Length w/o bit (mm)	Weight w/o bit (kg)
TG35	93~105	DHD3.5	API 2 3/8 Reg. Pin	85	797	38
TG40	105 ~ 127	DHD340	API 2 3/8 Reg. Pin	98	962	41
TG50	130 ~ 152	QL50	API 3 1/2 Reg. Pin	118	1061	71
TG60	152 ~ 194	DHD360	API 3 1/2 Reg. Pin	142	1219	112
TG80	195 ~ 270	SD8	API 4 1/2 Reg. Pin	182	1370	202
TG90	219 ~ 290	QL90	API 4 1/2 Reg. Pin	197	1382	240
TG100	251 ~ 305	SD10	API 6 5/8 Reg. Pin, Hex Joint	225	1487	345
TG120L	290 ~ 400	DD10	API 6 5/8 Reg. Pin, Hex Joint	265	1386	444
TG120	300 ~ 445	SD12, TG120	API 6 5/8 Reg. Pin, Hex Joint	274	1788	628
TG125	311 ~ 460	N125	API 6 5/8 Reg. Pin, Hex Joint	286	1684	616
TG320	355 ~ 525	TG320	API 8 5/8 Reg. Pin, Hex Joint	320	1735	940
TG320S	355 ~ 525	TG320	API 8 5/8 Reg. Pin, Hex Joint	320	1985	984
TG370	445 ~ 625	SD15, TG370	API 8 5/8 Reg. Pin, Hex Joint	376	1918	1308
TG370S	445 ~ 625	SD15, TG370	API 8 5/8 Reg. Pin, Hex Joint	376	2075	1410
TG450S	460 ~ 660	N180	API 8 5/8 Reg. Pin, Hex Joint	415	2065	1724
TG450S	470 ~ 660	SD18	API 8 5/8 Reg. Pin, Hex Joint	415	2139	1635
TG550	610 ~ 850	N240, TG550	Hex Joint	530	1998	2700
TG640S	710 ~ 975	TG640	Hex Joint	640	2109	4263
TG800	900 ~ 1250	TG800	Hex Joint	800	2174	7580
TG900	1020 ~ 1450	TG900	Hex Joint	900	2397	8600

Others 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	TG35
TDEX 115	151	116	128.1	141.3	6.6	TG40
TDEX 140	185	141	155.4	168	6.3	TG50
TDEX 165	211	166	181	193.7	6.4	TG60
TDEX 180	232	180	194	219	12.5	TG60
TDEX 190	236	191	205	219	7.0	TG60, TG80
TDEX 215	278	215	241	257	8.0	TG80
TDEX 230	286	230	248	273	12.5	TG80
TDEX 240	308	241	260.2	273	6.4	TG80
TDEX 280	366	283	304.8	323.9	9.6	TG100
TDEX 315	397	315	335	355	10	TG100, TG120
TDEX 365	458	372	394	406	6	TG120, TG125

Others shank type or size is available with customers' request



■ TD Ring Bit Systems

TD Ring Bit System is overburden drilling system of concentric method of drilling.

TDS : Ring bit and casing shoe are not connected to each other. The Ring bit is left in the bottom of the hole

Model	Ring bit OD (mm)	Casing size		Applicable Hammer
		ID (mm)	OD (mm)	
TDS 190	234	187	219	TG60
TDS 240	293	253.1	273.1	TG80
TDS 280	340	303	323	TG100
TDS 560	633	584.2	609.6	TG450S

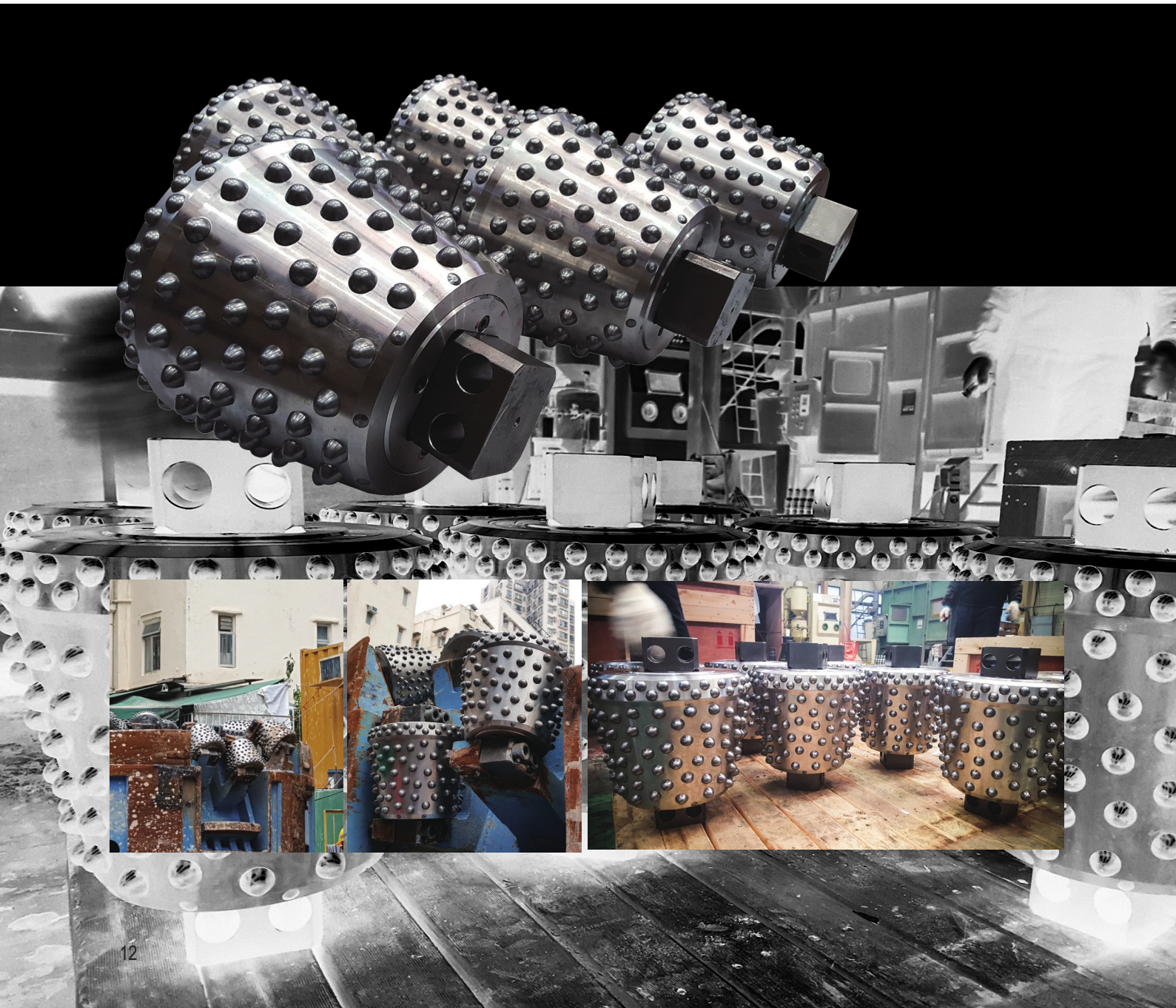
TDN : Ring bit and casing shoe are connected by interlocking. The ring set is retrived for mulit use.

Model	Ring bit OD (mm)	Casing size		Applicable Hammer
		ID (mm)	OD (mm)	
TDN 190	238	199	219	TG60
TDN 560	620	586	610	TG450S
TDN 745	832	789	813	TG550



RCD ROLLER CUTTER

RCD Roller Cutter



CLUSTER HAMMER SERIES

Tornado Hammer

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.

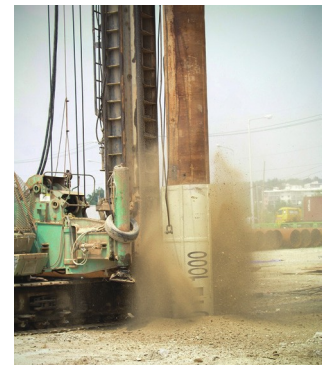
Due to using several bits with smaller size, economical bit replacement cost and fast delivery time would be possible including low maintenance cost.

Specifications

Model	No. of Hammers	Connection	Standard hole size (mm)	Length (mm)	Weight (kg)
TORNADO 380	3	Hexagon joint	380 ~ 390	1,600	890
TORNADO 445	3	Hexagon joint	445 ~ 455	1,708	1,260
TORNADO 465	5	Hexagon joint	465 ~ 475	1,656	1,300
TORNADO 470	3	Hexagon joint	470 ~ 480	1,708	1,320
TORNADO 525	3	Hexagon joint	525 ~ 535	1,955	1,890
TORNADO 550	3	Hexagon joint	550 ~ 560	1,955	1,940
TORNADO 600	3	Hexagon joint	600 ~ 610	1,955	2,000
TORNADO 775	3	Hexagon joint	775 ~ 800	2,567	7,680
TORNADO 860	4	Hexagon joint	860 ~ 880	2,567	8,300
TORNADO 975	4	Hexagon joint	975 ~ 1000	2,656	9,000

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

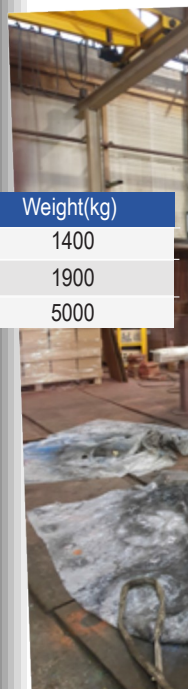
Model	No. of Hammers	Connection	Pilot Diameter (mm)	Reamer Diameter (mm)	Length (mm)
311x660	5	Hexagon joint	311	660	2198
311x711	5	API 8 5/8 Reg. Pin	311	711	2476
562x965	6	Hexagon joint	562	965	2183
565x1176	5	Hexagon joint	565	1176	3136

TGM hammer

TGM hammer is basket type cluster drill. TGM hammer provides cost effective solution for drilling large holes.

Specifications

Model	No. of Hammers	Diameter (mm)	Weight(kg)
TGM550	4	550	1400
TGM700	5	700	1900
TGM1380	13	1380	5000



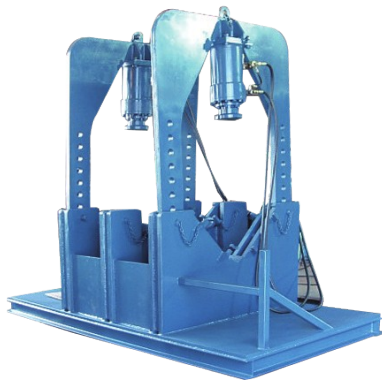
ACCESSORIES

Shock Absorber

Model	Outside Diameter (mm)	Length (mm)	Applicable Hammer
TDSA3.5	85	550	TG35
TDSA5	118	560	TG50
TDSA6	142	655	TG60
TDSA8	176	778	TG80
TDSA10	219	780	TG100
TDSA12	274	830	TG120, TG125
TDSA14	296	830	TG320
TDSA15	346	830	TG370, TG450
TDSA24	366	925	TG
TDSA28	386	1074	TG
TDSA36	508	1350	TG



Stripping bench



Oiler



Hammer Shroud

Model	Outside Diameter (mm)	Length (mm)
TG370 Shroud	559	1865
TG640 Shroud	813	1995
TG800 Shroud	880	2161

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

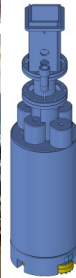


Large DTH Hammer



Cluster Drill (Tornado)

Cluster



M)



RCD Roller Cutter



DTH Bit



TRB overburden drilling system



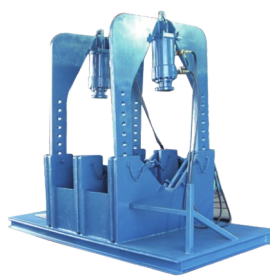
TDEX overburden drilling system



Hole Opener



Hammer shroud



Stripping bench



Adapter / Oiler / Shock Absorber / Drill rod