MAXDRILL

SELF-DRILLING ANCHOR

- Energy-saving
- Economical
- Efficient

www.maxdrillrocktools.com

MAXDRILL

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ABOUT US

We Are A Drilling Tools Manufacturer In China

Maxdrill Rock Tools Co., Ltd is an international market-oriented company specialized in manufacturing, supplying and services of rock drilling tools for mining, tunneling, quarry and also construction application areas, focus on drilling solution of softest to the hardest rock geological conditions. The high-performance products include top hammer drilling tools, down the hole drilling tools, rock anchors, taphole and quarry drilling tools, and more.

Owing to supply “Energy-saving, Economical, Efficient” products all along, we gradually become one of the most credible Chinese manufacturer in drilling industry.

Maxdrill adopted the advanced manufacturing process and procedures in production, ensuring high quality steels and tungsten carbides to guarantee the consistent high quality of the products.

Maxdrill rock tools always committed to supply low cost, high efficiency, energy saving and environment-friendly products for global customers. No matter what kinds of rock—soft rock, loose-medium rock, hard rock and any other special formations, just tell us what you need and leave others at our disposal, we will handle the following, our special Tailored service is waiting for you upon your demand.

Self-drilling hollow bar anchor system

The self-drilling hollow bar anchor system is comprised of a hollow threaded bar attached with a drill bit that performs drilling, the hollow bar allows air and water to freely pass through the bar during drilling to remove debris, after drilling at the required depth is completed, grout fills the hollow bar through the pressure for their requirement and completely covers the entire bolt.

Coupler: The couplers can be used to join hollow bars and extend the bolt length, it means the anchor can be elongated with the couplers.

Plate and Nut: The plate and nut are installed according to their design requirement.

Drill Bit: The drill bit would be selected at the choice of ground condition.

Application

When underground drilling is performed it is common to encounter soft rock, fractured zone and large deformations because of high ground stress. In case of serious collapsing, an extra-long anchor is needed instead of ordinary one.

Maxdrill self-drilling anchor embodies drilling, grouting and anchoring as a whole.

Anchoring is widely used in tunnel for pre-support, slope, coast, mine, water conservancy projects, building foundation, roadbed reinforcement and geological faulty treatment such as landslip, crack, and sink age. It’ s irreplaceable in narrow construction environment.

R TYPE

Bar Size	R25N	R32-210	R32-250	R32N	R32-320	R32S	R32SS	R38-430	R38N	R38/19	R38S	R51L	R51-660	R51N	R51-950
Nominal outer diameter(mm)	25	32	32	32	32	32	32	38	38	38	38	51	51	51	51
Effective outer diameter(mm)	24	31	31	31	31	31	31	37	37	37	37	49	49	49	49
Nominal inner diameter(mm)	13	21	20	19	18	17	15	24	22	19	21	35	34	32	29
Cross section area of bar(mm^2)	240	290	310	350	380	430	480	520	590	760	660	740	820	940	1,120
Ultimate load(kN) ⩾	200	210	250	280	320	360	405	430	500	500	550	550	660	800	950
Yield load(kN) ⩾	150	160	190	230	250	280	330	350	400	400	450	450	540	630	780
Ultimate strength(N/mm^2) ⩾	830	720	800	800	840	830	840	820	840	850	830	740	800	850	840
Yield strength(N/mm^2) ⩾	620	550	610	650	650	650	680	670	670	520	680	600	650	670	690
Elongation A_5(%)⩾	⩾6.00														
E Modulus (GPa)	178	190	180	185	188	205	180	182	202	202	200	182	186	185	182
Nominal weight (kg/m)	1.9	2.3	2.5	2.7	3	3.4	3.8	4.1	4.7	6	5.2	5.9	6.5	7.4	8.8
Thread (left-hand)	MAXDRILL Internal standard and based on ISO 10208 and 1720 etc.														
Steel grade	ASTM A519-03 5140/EN 10083-1 41Cr4														
Hardness(HB)	230-300														
Delivery lengths (m)	1m,2m,3m,4m. Other length can be special order														

T TYPE

Bar Size	T30N	T40L	T40N	T52N	T60N	T76L	T76N	T76M	T76S	T103N	T103S
Nominal outer diameter(mm)	30	40	40	52	60	76	76	76	76	103	103
Effective outer diameter(mm)	29	40	40	52	59	75	75	75	75	101	101
Nominal Inner diameter(mm)	13	23	19	30	38	54	49	47	42	75	52
Cross section area of bar(mm^2)	400	660	770	1150	1280	1650	2080	2190	2460	3200	5200
Ultimate load(kN)	320	540	660	929	1000	1300	1600	1700	1900	2300	3700
Yield load(kN)	260	425	525	730	800	1000	1200	1300	1500	1800	2670
Ultimate strength(N/mm^2)	800	810	850	800	780	780	760	770	770	710	710
Yield strength(N/mm^2)	650	640	680	630	620	600	570	590	600	560	510
Elongation A_5(%)≥	≥6.00										
E Modulus (GPa)	195	196	198	190	192	188	208	195	190	190	190
Nominal weight (kg/m)	3.1	5.2	6	9	10	14	16.3	17.2	19.3	25	40
Thread (left-hand)	MAXDRILL Internal standard and based on ISO 10208 and 1720 etc.										
Steel grade	ASTM A519-03 5140/EN 10083-1 41Cr4										
Hardness(HB)	240-310										
Delivery lengths (m)	1m,2m,3m,4m. Other length can be special order										

SPECIAL AND MIXED

Bar Size	R38/21	R51/32	R63/45	R76/56	T103/79	T103/75	T103/51	T130/90	T130/85	T130/60	T135/75
Nominal outer diameter(mm)	38	51	63	76	103	103	103	130	130	130	135
Effective outer diameter(mm)	37	50	63	76	102	102	102	129	129	129	134
Nominal Inner diameter(mm)	21	32	45	56	79	75	51	90	85	67	82
Cross section area of bar(mm^2)	660	1020	1360	1860	2520	3080	5510	6180	6910	9800	8400
Ultimate load(kN)	530	840	1160	1380	1600	1980	3660	4003	4600	7940	5400
Yield load(kN)	425	690	930	1100	1280	1590	2670	3203	3500	5250	4320
Ultimate strength(N/mm^2)	820	820	850	740	630	640	660	640	660	810	640
Yield strength(N/mm^2)	664	670	680	590	500	510	480	510	500	535	510
Elongation A_5(%)≥	≥6.00										
E Modulus (GPa)	200	185	190	190	192	190	190	190	185	188	190
Nominal weight (kg/m)	5.2	8	10.7	14.6	19.8	24.2	43.3	48.5	54.3	76.9	65.9
Thread	MAXDRILL Internal Standard; Left Hand or Right Hand										
Steel grade	ASTM A519-03 5140/EN 10083-1 41Cr4				37Mn5,36Mn2V,API 5CT Grade J55, similar to 28Mn6 of EN10083-1						
Steel grade (KSI)	96	97	99	86	73	74	70	74	73	78	74
Hardness(HB)	240-310										
Delivery lengths (m)	1m,2m,3m,4m. Other length can be special order										

R18

	Type	Diameter(mm)	Weight(kg)	Part No.
Bit with Thread R18	Button Bit with Carbide	30	0.22	18NMR31230
		36	0.25	18NMR31236

	Diamater(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Coupler R18N	36	150	0.25	18NMR1536

	SW(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Beveled Nut & Hex Nut R18N	36	35	0.24	18NMR3635
Domed Nut R18N	36	35	0.25	18NMR3635S

R22

	Type	Diameter(mm)	Weight(kg)	Part No.
Bit with Thread R22	Button Bit with Carbide	33	0.23	22MR31233
		41	0.28	22MR31241

	Diamater(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Coupler R22N	32	110	0.32	22NMR1132

	SW(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Beveled Nut & Hex Nut R22N	36	35	0.20	22NMR3635
Domed Nut R22N	36	35	0.21	22NMR3635S

R25

	Type	Diameter(mm)	Weight(kg)	Part No.
Bit with Thread R25	Cross Bit	42	0.31	25MR31142
		51	0.35	25MR31151
	Cross Bit with Carbide	42	0.31	25MR31242
		51	0.40	25MR31251
	Button Bit	42	0.35	25MR30142
		51	0.68	25MR30151
	Button Bit with Carbide	42	0.33	25MR30242
		51	0.45	25MR30251
	Arching Bit	42	0.30	25MR34142
		51	0.45	25MR34151
	Arching Bit with Carbide	42	0.26	25MR34242
		51	0.40	25MR34251
	Two Stage Retro-Flush Bit 1	76	0.62	25MR33276
	Two stage Retro-Flush Bit 2	76	0.55	25MR33376

	Diamater(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Coupler R25N	36	150	0.62	25NMR1536

	SW(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Beveled Nut & Hex Nut R25N	41	41	0.29	25NMR4141
	41	62	0.42	25NMR4162
Domed Nut R25N	41	41	0.30	25NMR4141S

	Size(mm)	Weight(Kg/pcs)	Hole dia	Part No.
Plate R25N	150x150x8	1.36	30	25NMR0830
	150x150x10	1.76	30	25NMR1030
	200x200x10	3.08	30	25NMR1030-1
	200x200x12	3.70	30	25NMR1230

R28

	Type	Diameter(mm)	Weight(kg)	Part No.
Bit with Thread R28	Button Bit with Carbide	42	0.32	28MR30242

	Diamater(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Coupler R28N	36	150	0.52	28NMR1536

	SW(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Beveled Nut & Hex Nut R28N	50	41	0.33	28NMR5041
Domed Nut R28N	50	41	0.34	28NMR5041S

R32

	Type	Diameter(mm)	Weight(kg)	Part No.
Bit with Thread R32	Cross Bit	51	0.38	32MR31151
		76	0.87	32MR31176
	Cross Bit with Carbide	51	0.41	32MR31251
		76	1.20	32MR31276
	Button Bit	51	0.71	32MR30151
		76	1.10	32MR30176
	Button Bit with Carbide	51	0.50	32MR30251
		76	1.40	32MR30276
		90	2.30	32MR30290
	Arching Bit	51	0.36	32MR34151
		76	0.56	32MR34176
	Arching Bit with Carbide	51	0.45	32MR34251
		76	0.80	32MR34276
	Arching Button Bit	76	0.86	32MR34376
		90	1.29	32MR34390
	Arching Button Bit With Carbide	76	0.86	32MR34476
		90	1.02	32MR34490
	Two Stage Retro-Flush Bit 1	76	0.55	32MR33276
		90	1.01	32MR33290
		100	1.16	32MR332100
		130	1.50	32MR332130
	Two stage Retro-Flush Bit 2	110	0.89	32MR333110
		130	1.03	32MR333130
	Two stage Cut Bit	90	0.98	32MR35190
	Two Stage Cut Bit With Carbide	90	1.10	32MR35290

	Diamater(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Coupler R32N/S	42	145	0.77	32(N/S)MR1542
	42	160	0.80	32(N/S)MR1642
	42	190	0.95	32(N/S)MR1942

	SW(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Beveled Nut & Hex Nut R32N/S	46	45	0.45	32(N/S)MR4645
	46	65	0.60	32(N/S)MR4665
Domed Nut R32N/S	46	46	0.45	32(N/S)MR4645S
	46	65	0.6	32(N/S)MR4665S

	Size(mm)	Weight(Kg/pcs)	Hole dia	Part No.
Plate R32N/S	150x150x8	1.32	35	32(N/S)MR0835
	200x200x10	3.06	35	32(N/S)MR1035
	200x200x12	3.67	35	32(N/S)MR1235

R38

	Type	Diameter(mm)	Weight(kg)	Part No.
Bit with Thread R38	Cross Bit	76	1.32	38MR31176
		90	1.60	38MR31190
	Cross Bit with Carbide	76	1.50	38MR31276
		90	2.20	38MR31290
	Button Bit	76	2.10	38MR30176
		115	4.90	38MR301115
	Button Bit with Carbide	76	1.40	38MR30276
		90	2.32	38MR30290
		115	3.98	38MR302115
	Arching Bit	76	0.58	38MR34176
		90	1.83	38MR34190
	Arching Bit with Carbide	76	0.90	38MR34276
		90	2.00	38MR34290
	Arching Button Bit	76	0.95	38MR34376
		90	1.45	38MR34390
		115	1.82	38MR343115
		130	2.10	38MR343130
	Arching Button Bit With Carbide	76	0.92	38MR34476
		90	1.32	38MR34490
		115	1.92	38MR344115
		130	2.20	38MR344130
	Two Stage Retro-Flush Bit 1	90	0.85	38MR33290
		115	1.36	38MR332115
		150	2.10	38MR332150
	Two stage Retro-Flush Bit 2	76	0.80	38MR33376
		100	1.25	38MR333100
		130	1.70	38MR333130
		150	2.50	38MR333150
		130	2.10	38MR333130-1
	Two stage Cut Bit	90	0.96	38MR35190
		115	1.50	38MR351115
	Two Stage Cut Bit With Carbide	90	0.99	38MR35290
		115	1.58	38MR352115

	Diamater(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Coupler R38N	51	180	1.40	38NMR1851
	51	200	1.60	38NMR2051

	SW(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Beveled Nut & Hex Nut R38N	50	60	0.50	38NMR5060
	50	80	0.63	38NMR5080
Domed Nut R38N	55	65	0.82	38NMR5565S

	Size(mm)	Weight(Kg/pcs)	Hole dia	Part No.
Plate R38N	200x200x10	3.03	40	38NMR1040
	200x200x12	3.67	40	38NMR1240
	200x200x14	4.30	40	38NMR1440

R51

	Type	Diameter(mm)	Weight(kg)	Part No.
Bit with Thread R51	Cross Bit	90	1.60	51MR31190
		100	1.90	51MR311100
		115	2.84	51MR311115
		130	4.80	51MR311130
		150	8.50	51MR311150
	Cross Bit with Carbide	90	2.10	51MR31290
		100	2.50	51MR312100
		115	3.21	51MR312115
	Button Bit	76	1.90	51MR30176
		100	3.70	51MR301100
	Button Bit with Carbide	76	1.29	51MR30276
		90	1.80	51MR30290
		115	3.25	51MR302115
		150	4.50	51MR302150
		200	14.00	51MR302200
	Arching Bit	76	1.50	51MR34176
		90	1.70	51MR34190
	Arching Bit with Carbide	76	0.87	51MR34276
		90	1.90	51MR34290
	Arching Button Bit	76	0.96	51MR34376
		90	1.52	51MR34390
		115	2.00	51MR343115
		150	3.60	51MR343150
		200	5.00	51MR343200
	Arching Button Bit With Carbide	76	1.20	51MR34476
		90	1.50	51MR34490
		115	1.97	51MR344115
		130	3.50	51MR344130
		150	4.20	51MR344150
		200	5.10	51MR344200
	Two Stage Retro-Flush Bit 1	76	1.00	51MR33276
		90	1.29	51MR33290
		150	2.87	51MR332150
		200	4.00	51MR332200
	Two stage Retro-Flush Bit 2	150	3.10	51MR333150
	Two stage Cut Bit	90	1.21	51MR35190
		115	1.79	51MR351115
	Two Stage Cut Bit With Carbide	90	1.24	51MR35290
		115	1.82	51MR352115

	Diamater(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Coupler R51L/N	63	200	1.80	51(L/N)MR2063
	63	260	2.43	51(L/N)MR2663
	63	270	2.54	51(L/N)MR2763
	63	280	2.63	51(L/N)MR2863

	SW(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Beveled Nut & Hex Nut R51L/N	75	70	1.60	51(L/N)MR7570
	75	90	2.00	51(L/N)MR7590
Domed Nut R51L/N	75	70	1.85	51(L/N)MR7570S
	75	100	2.20	51(L/N)MR75100S

	Size(mm)	Weight(Kg/pcs)	Hole dia	Part No.
Plate R51	200x200x10	3.03	53	51NMR1053
	200x200x12	3.67	53	51NMR1253
	200x200x25	17.10	53	51NMR2553

T30

	Type	Diameter(mm)	Weight(kg)	Part No.
Bit with Thread T30	Cross Bit	51	0.40	30MT31151
		76	1.04	30MT31176
	Cross Bit with Carbide	51	0.42	30MT31251
		76	1.27	30MT31276
	Button Bit	51	0.73	30MT30151
		76	1.20	30MT30176
	Button Bit with Carbide	51	0.55	30MT30251
		76	1.40	30MT30276
	Two Stage Retro-Flush Bit 1	76	0.90	30MT33276
		90	1.00	30MT33290

	Diamater(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Coupler T30	42	105	0.50	30MT1142

	SW(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Beveled Nut & Hex Nut T30	46	41	0.35	30MT4641
Domed Nut T30	46	41	0.38	30MT4641S

	Size(mm)	Weight(Kg/pcs)	Hole dia	Part No.
Plate T30	150x150x8	1.32	35	30MT835
	200x200x10	3.06	35	30MT1035
	200x200x12	3.67	35	30MT1235

T40

	Type	Diameter(mm)	Weight(kg)	Part No.
Bit with Thread T40	Cross Bit	76	1.10	40MT31176
		90	1.85	40MT31190
	Cross Bit with Carbide	76	1.30	40MT31276
		90	2.20	40MT31290
	Button Bit	76	2.10	40MT30176
		100	3.50	40MT301100
		130	3.90	40MT301130
	Button Bit with Carbide	76	1.40	40MT30276
		90	1.58	40MT30290
		115	2.60	40MT302115
	Arching Button Bit	76	0.90	40MT34376
		90	1.20	40MT34390
	Arching Button Bit With Carbide	76	0.91	40MT34476
		90	1.31	40MT34490
	Two Stage Retro-Flush Bit 1	90	0.95	40MT33290
		130	1.30	40MT332130
		150	1.95	40MT332150
		175	2.60	40MT332175
	Two stage Retro-Flush Bit 2	130	1.20	40MT333130

	Diamater(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Coupler T40	57	160	1.60	40MT1657

	SW(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Beveled Nut & Hex Nut T40	60	68	0.95	40MT6068
Domed Nut T40	60	68	1.00	40MT6068S

	Size(mm)	Weight(Kg/pcs)	Hole dia	Part No.
Plate T40	200x200x10	3.01	46	40MT1046
	200x200x12	3.62	46	40MT1246

T52

	Type	Diameter(mm)	Weight(kg)	Part No.
Bit with Thread T52	Button Bit with Carbide	76	2.00	52MT30276
		90	2.40	52MT30290
		115	3.15	52MT302115
	Arching Button Bit	76	1.05	52MR34376
		90	1.50	52MR34390
		115	2.00	52MR343115
		130	3.30	52MR343130
	Arching Button Bit With Carbide	90	1.50	52MR34490
		115	1.90	52MR344115
	Two Stage Retro-Flush Bit 1	150	2.73	52MR332150
		175	2.85	52MR332175
	Two Stage Retro-Flush Bit 2	130	2.02	52MR333130

	Size(mm)	Weight(Kg/pcs)	Hole dia	Part No.
Plate T52	200x200x12	3.67	56	52MT1256
	200x200x25	17.10	56	52MT2556

T76

	Type	Diameter(mm)	Weight(kg)	Part No.
Bit with Thread T76	Cross Bit	115	3.49	76MT311115
		130	4.10	76MT311130
		150	8.70	76MT311150
		200	10.50	76MT311200
	Cross Bit with Carbide	115	3.50	76MT312115
		130	4.80	76MT312130
		200	16.00	76MT312200
	Button Bit	120	4.15	76MT301120
		130	7.00	76MT301130
	Button Bit with Carbide	120	4.10	76MT302120
		130	4.50	76MT302130
		175	10.00	76MT302175
		200	15.00	76MT302200
	Arching Bit	100	5.80	76MT345100
		130	6.50	76MT345130
	Arching Bit with Carbide	100	5.70	76MT344100
		130	6.20	76MT344130
	Arching Button Bit	115	3.50	76MT343115
		120	3.70	76MT343120
		150	4.90	76MT343150
	Arching Button Bit With Carbide	115	3.60	76MT346115
		130	3.81	76MT346130
		150	4.50	76MT346150
	Two Stage Retro-Flush Bit 1	115	3.00	76MT332115
		130	3.37	76MT332130
		175	4.10	76MT332175
		200	4.70	76MT332200
		300	8.50	76MT332300
	Two stage Cut Bit	115	2.60	76MT351115
		130	3.20	76MT351130
		200	8.67	76MT351200
	Two Stage Cut Bit With Carbide	115	2.70	76MT352115
		130	3.45	76MT352130
		200	8.77	76MT352200

	Diamater(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Coupler T76L/N/S	97	220	4.86	76(L/N/S)MT2297
	95	200	4.60	76(L/N/S)MT2095
	95	220	4.70	76(L/N/S)MT2295

	SW(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Beveled Nut & Hex Nut T76L/N/S	100	80	2.65	76(L/N/S)MT10080
Domed Nut T76L/N/S	100	85	2.85	76(L/N/S)MT10085S

	Size(mm)	Weight(Kg/pcs)	Part No.
Plate T76L/N/S	250x250x40	17.80	76LMT4080L/76(N/S)MT4080
	250x250x60	26.70	76LMT6080L/76(N/S)MT6080

T103

	Type	Diameter(mm)	Weight(kg)	Part No.
Bit with Thread T103	Cross Bit	150	7.50	103MT311150
		280	15.70	103MT311280
	Cross Bit with Carbide	150	6.50	103MT312150
		175	10.50	103MT312175
	Button Bit	150	10.00	103MT301150
		175	11.20	103MT301175
		200	13.50	103MT301200
	Button Bit with Carbide	150	7.00	103MT301150
		175	11.78	103MT301175
	Arching Button Bit	150	7.00	103MT343150
		175	10.00	103MT343175
	Arching Button Bit With Carbide	150	7.00	103MT344150
		175	10.00	103MT344175

	Diamater(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Coupler T103N	121	220	6.00	103NMT22120
Coupler T103S	133	260	12.00	103SMT22120

	SW(mm)	Length(mm)	Weight(Kg/pcs)	Part No.
Beveled Nut & Hex Nut T103N	125	90	3.70	103NMT12590
Beveled Nut & Hex Nut T103S	125	130	5.40	103SMT125130
Domed Nut T103N	125	90	4.10	103NMT12590S
Domed Nut T103S	125	120	5.90	103SMT12590S

	Size(mm)	Weight(Kg/pcs)	Part No.
Plate T103N/S	400x400x50	57.80	103(N/S)MT50106
	330x330x60	46.50	103(N/S)MT60106

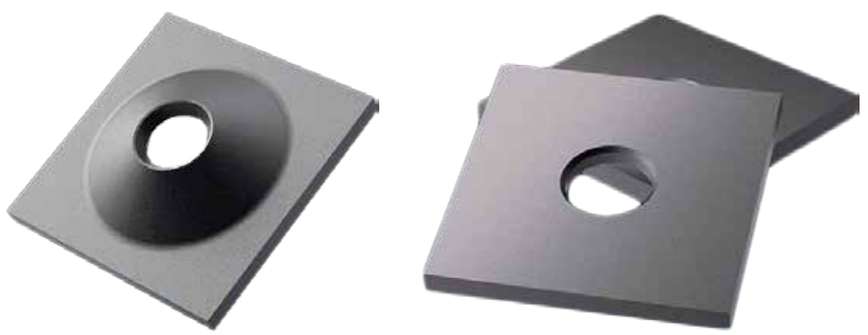
T130

	Type	Diameter(mm)	Weight(kg)	Part No.
Bit with Thread T130	Cross Bit with Carbide	150	8.50	130MT312150

DRILL BIT

Cross Bit	Cross Bit with Carbide	Button Bit
Button Bit with Carbide	Arching Bit	Arching Bit with Carbide
Arching Button Bit	Arching Button Bit With Carbide	Two Stage Retro-Flush Bit 1
Two stage Retro-Flush Bit 2	Two stage Cut Bit	Two Stage Cut Bit With Carbide

COUPLING

NUT

PLANTS