

**HEBEI  
GIMARPOL**  
MACHINERY TECHNOLOGY CO., LTD

**GMP**

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MACHINERY TECHNOLOGY CO., LTD**

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HEBEI CHINA

## TRADE EXPORT



## COMPANY PROFILE

Hebei Gimarpol Machinery Technology Co.,Ltd is located in hebei province of China.

Our company is specialized in manufacturing and exporting of drilling tools, such as tapered and thread rod, Chisel and button bit for mining with own factory.

With our rich experience for over a decade and with professional engineers and sales term, we focus on providing complete solutions for mining machinery. Target market is gradually shifted from domestic market to international market, products are exported to more than thirty countries and regions, including Southeast Asia, the United States, Germany, Britain, South Africa, Poland, Russia Middle Asia and so on, and established a good brand and reputation in the international market.

Looked forward to the future, we will continue to adhere to the development trend of “Sincerity&Continuous improvement”, bring wealth to our employees, and create quality for our enterprise, value for our customers, and benefits for the society.

## MQT Series Roof Bolter

MQT series pneumatic roof bolters are applicable to support with cable or bolt in coal laneway, half-coal laneway and rock laneway with rock hardness no more than 100MPa, combined with drilling, mixing and assembling.



Parameter	MQT-100/3.1			MQT-110/2.8			MQT-120/3.0			MQT-130/3.2			
Working Pressure (MPa)	0.4 -- 0.63			0.4 -- 0.63			0.4 -- 0.63			0.4 -- 0.63			
Rated Pressure (MPa)	0.5			0.5			0.5			0.5			
Rated Torque (N.m)	≥ 100			≥ 110			≥ 120			≥ 130			
Rated Rotate Speed (r/min)	280			240			240			240			
LEG PROPULSION(Kn)	II	9.8			9.8			9.8			9.8		
	I												
	II	6.7			6.7			6.7			6.7		
	I	5.2			5.2			5.2			5.2		
Idle Pushing Speed (mm/s)	400			400			400			400			
Max. Output Power (kw)	3.1			2.8			3			3.2			
Idle Rotate Speed (r/min)	900			700			700			700			
Stall Torque (N.m)	≥ 180			≥ 230			≥ 240			≥ 240			
Max Loading Torque (N.m)	170			220			230			230			
Air Consumption (m <sup>3</sup> /min)	3.8			3.6			3.8			4			
Noise Level (dB(A))	<90			<90			<90			<90			
Leg Type	I	II	III	I	II	III	I	II	III	I	II	III	
Weight (kg)	45	47	49	48	50	50	48	50	52	48	50	52	
Max Height (mm)	2566	3046	3614	2552	3032	3600	2552	3032	3600	2552	3032	3600	
Min Height (mm)	1189	1309	1451	1175	1295	1437	1175	1295	1437	1175	1295	1437	
Hexagonal Drill Rod													
Specification (mm)	B19 , B22												
Screw Thread Size	M14X1.5 Rectangular Thread 16 M16X2 Rectangular Thread 18												
Length	Be Customized as Requirements												
Drill Bit													
Specification (mm)	Φ27, Φ28, Φ30, Φ32, Φ38, Φ42, Φ44												
Screw Size	M14X1.5 M16X2												

## Rock Drill/Pneumatic Pick



### Rock Drill:

Model	YT24	YT28	YT29
Weight	24kg	28kg	26.5kg
Length	678mm	661mm	659mm
Air pressure	0.4-0.63Mpa	0.4-0.63Mpa	0.4-0.63Mpa
Impact frequency	≥ 31HZ	≥ 37HZ	≥ 37HZ
Air consumption	≤ 67L/S	≤ 81L/S	≤ 65L/S
Impact energy	≥ 65J	≥ 70J	≥ 70J
Cylinder stroke	70mm*70mm	80mm*60mm	82mm*60mm
Air pipe diameter	19mm	25mm	25mm
Shank diameter	22*108mm	22*108mm	22*108mm
Drilling depth	5m	5m	5m
Bit diameter	34-42mm	34-42mm	34-45mm

### Pneumatic Pick:

Model	G10	G11	G15
Impact Frequency	≥ 16HZ	≥ 18.4HZ	≥ 15HZ
Impact energy	≥ 43J	≥ 43J	≥ 50L
Weight	10Kg	10.6Kg	11Kg
Length	570mm	570mm	600mm
Air consumption	≤ 26L/S	≤ 25L/S	≤ 25L/S
Rated pressure	0.63Mpa	0.63Mpa	0.63Mpa
Min pressure	0.3Mpa	0.3Mpa	0.3Mpa
Air Pipe Diameter	16mm	16mm	16mm

## Hydraulic Crawler Drill Rig

Hydraulic crawler drill jumbo is widely used for geological exploration, gas and water drainage, water injection and in coal mines, metal mines and civil tunneling work.



Parameter	3200L	4000L
Drilling Depth (m)	350/100	350
Dia of Drill Rod (mm)	73	73
Max Torque (N.m)	3200	4000
Rotate Speed (r/min)	70-240	70-240
Max Feeding Force (kN)	102	123
Feeding Stroke (mm)	600	600
Inclination of Main Shaft (°)	-5-60	-5-25
Power (kW)	45	55
Weight (kg)	4500	4700
Max Travel Speed (km/h)	2.0	2.0
Max Incline Capacity (°)	20	20
Ground Pressure (Mpa)	0.06	0.048
Dimension (LxHxW) (m)	2.8x1.35x1.70	2.8x1.35x1.70

## ZDY Hydraulic Drill Rig

ZDY series drill rig is widely used in different angles drill for water exploring, water injection, gas drainage, geological exploring, etc. specially for horizontal drilling but it can be adjusted within  $\pm 90^\circ$ .



Parameters	ZDY-660	ZDY-1200S	ZDY-2000S	ZDY-3300s	ZDY-4000s
Drill Depth (m)	150/100	200	100/300	350	400
Drilling Angles (°)	$\pm 90$	$\pm 90$	$\pm 90$	$\pm 45$	$\pm 45$
Drilling Diameter(mm)	$\Phi 56-\Phi 108$	$\Phi 65-\Phi 110$	$\Phi 94-\Phi 200$	$\Phi 108-\Phi 200$	$\Phi 108-\Phi 200$
Idle Speed (r/min)	10-150/10-300	80-280	10-300	10-150/10-300	80-280
Rated Torque (N.m)	660	1200	2000	3300-1050	4000-1050
Rated Rotate Speed (r/min)/	140/270	140/270	76	73-230	60-230
Feeding Stroke (mm)	650	650	600	800	800
Feeding Force (kN)	29	36	105	150	150
Pulling Out Force (kN)	42	52	70	150	150
Max Feeding Speed (mm/min)	5000	5000	3500	1500	1500
Max Pulling Out Speed (mm/min)	4000	4000	2200	1500	1500
System Rated Pressure (MPa)	16	18	22	25	25
Oil Tank Capacity (L)	85	198	180	250	250
Main Frame External Size (mm)	1800x620x1300	1800x750x1360	2180x800x1516	2300x1170x1600	2300x1170x1600
Pump Station External Size (mm)	1400x500x1000	1450x790x1100	1700x850x1100	1890x810x1150	1890x810x1150
Main Frame Weight (kg)	418	673	1228	1870	1780
Pump Station Weight(kg)	328	465	750	966	866
Operation Desk Weight(kg)	78	101	55	136	136
Drill Rig Weight (kg)	900	1200	2000	3000	2800
Rated Power of Motor (kW)	15	22	37	55	55
Rated Voltage (V)	380/660 660/1140	380/660 660/1140	380/660 660/1140	380/660 660/1140	380/660 660/1140
Fitting Drill Tools:					
Drill Diameter (mm)	$\Phi 42/\Phi 50$	$\Phi 50/\Phi 63.5$	$\Phi 63.5/\Phi 73$		
Geological Drill Bit Diameter (mm)	$\Phi 56-\Phi 94$	$\Phi 65-\Phi 108$	$\Phi 75-\Phi 133$		

## ZYJ Series Prop Hydraulic Drill Machine

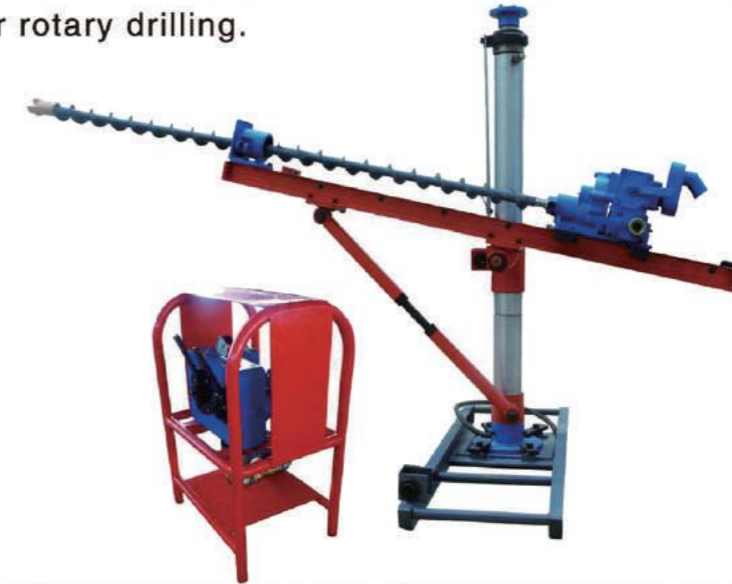
ZYJ prop hydraulic drill machine equip with carbide or PDC drill bit and high efficiency spiral drill rod. It is designed to release the gas and water in coal face. The depth of hole can up to 100-300m. The prop can be adjusted in 360°, making the drilling angle  $\pm 90^\circ$ .



Parameters	ZYJ-380/210	ZYJ-400/130	ZYJ-680/200	ZYJ-800/190	ZYJ-1000/135	ZYJ-1300/190
Rated Pressure (MPa)	16	12	17	17	18	17
Rated Torque(N.m)	380	≥ 400	680	800	1000	1300
Rated Rotate Speed(r/min)	210	≥ 130	200	190	135	190
Rated Flow (L/min)	70	45/14	60	85	68/13	112
Feeding Force(kN)	I 20 II 10	I 30 II 20	30	I 25 II 15	I 30 II 20	I 50 II 25
Back Speed(mm/min)	9000	I 3800 II 6000	8000	8000	I 3800 II 6000	8000
Idle Load Feeding Speed(mm/min)	5000	I 3400 II 6100	5000	5000	I 3400 II 6100	5000
Feeding Stroke(mm)	1080	1080	1080	1290	I 610 II 690	1300
Water Pressure(MPa)	0.6-1.2	0.6-1.2	0.6-1.2	0.6-1.2	0.6-1.2	0.6-1.2
Diameter of Boring(mm)	Φ65-Φ94	Φ50-Φ113	Φ50-Φ113	Φ63-Φ113	Φ65-Φ113	Φ63-Φ113
Depth of Boring (m)	100-150	100-150	200	200	200-300	200-300
Prop Height(mm)	2200-3800	2200-3800	2200-3800	2200-3800	2200-3800	2200-3800
Noise(dB(A))	≤90	≤90	≤90	≤90	≤90	≤90
Rated Power of Motor(kw)	15	15	22	22	22	37
Rated Voltage of Motor(V)	380/660 660/1140	380/660 660/1140	380/660 660/1140	380/660 660/1140	380/660 660/1140	380/660 660/1140
Main Frame Weight(kg)	230	240	350	365	385	500
Pump Station Weight(kg)	223	240	350	360	355	500
Oil Tank Capacity(L)	120	120	150	150	190	185
Operation Desk Weight(kg)	50	50	50	55	50	60
Pump Station External Size(mm)	1370x460x790	1370x460x790	1930x460x830	1930x460x830	1688x460x930	1905x460x935
Fitting Drill Tools:						
High Efficiency Spiral Rod Diameter (mm)	Φ69 Φ82					
High Efficiency combined Drill Bit Diameter(mm)	Φ76 Φ89					
Geological Drill Rod Diameter (mm)	Φ4 Φ50					
Geological Drill Bit Diameter(mm)	Φ65-Φ113					

## ZQJC Series Prop Pneumatic Drill Machine

ZQJC prop pneumatic drill machine is widely used in coal mine such as water detection, water injection and gas drainage with high efficiency spiral rod and carbide drill bit for rotary drilling.



Parameter	ZQJC-360/7.1			ZQJC-420/10			ZQJC-560/10		
	0.40	0.50	0.63	0.40	0.5	0.63	0.4	0.5	0.63
Working Pressure(MPa)	0.40	0.50	0.63	0.40	0.5	0.63	0.4	0.5	0.63
Rated Torque(N.m)	310	360	385	330	420	510	460	560	650
Rated Speed(r/min)	170	190	200	200	230	245	170	180	190
Max Output Power(kw)	5.5	7.1	8.1	8	10	12	8	10	12
Max Load Torque(N.m)	460	500	520	440	550	660	590	730	930
Stall Torque(N.m)	490	530	550	460	570	680	610	750	950
Starting Torque(N.m)	480	520	540	450	560	670	600	740	940
Air Consumption(m3/min)	8.5	9.5	11	10	11	12	10	11	12
Unload Speed(r/min)	360	400	440	470	500	530	360	380	400
1/2 Unload Speed(r/min)	180	200	220	235	250	265	180	190	200
1/2 Unload Torque(N.m)	290	340	360	280	350	420	480	500	580
Noise(dB(A))	Pressure Level			120			120		
	Power Level			110			110		
Propelling Force(kN)	8			15			7		
Guide Rail Length(mm)	2015			2010+-20			2140+-20		
Guide Rail Propelling Stroke(mm)	1400			1280+-20			1570+-20		
Max Working Height(mm)	1570			1700+-20			1870+-20		
Min Working Height(mm)	620			700+-20			510+-20		
Weight(kg)	220			265			276		
Frame Size(mm)	2015x575x2000			2015x575x2000			2137x575x2100		
Operation Desk Weight(kg)	45			45			45		
Operation Desk Size(mm)	645x420x500			645x420x500			645x420x500		
Drilling Diameter(mm)	Φ56-Φ110								

## Individual Hydraulic Props

Individual hydraulic props can be used individually or with metal articulated roof beam.



	Max Height (mm)	Min Height (mm)	Working Stroke (mm)	Resistance (kg)	Weight (kg)	Pump Station Pressure (Mpa)	Supporting Force (KN)
DW35-250/100	3500	2400	1100	200	78.7	15-20	132.3-176.4
DW31.5-250/100	3150	2100	800	250	70.8		
DW28-250/100	2800	2200	800	250	64.5		
DW25-300/100	2500	1625	800	300	58.9		
DW22-300/100	2240	1350	800	300	52.5		
DW20-300/100	2000	1200	760	300	48.2		
DW18-300/100	1800	1077	690	300	43.7		
DW16-300/100	1600	970	595	300	40.0		
DW14-300/100	1400	868	500	300	36.2		
DW12-300/100	1200	760	408	300	30.3		
DW10-300/100	1000	652	315	300	28.2		
DW08-300/100	800	546	436	300	24.4		
DW06-300/100	600	436	164	300	20.5		

## Pneumatic Diaphragm Pump

Pneumatic Diaphragm Pump is used for water draining in coal mines, food industry and chemical treatment.



Parameters	BQG-100/0.3	BQG-150/0.2	BQG-200/0.3	BQG-250/0.2	BQG-350/0.2
Rated Pressure(MPa)	0.5	0.5	0.5	0.5	0.5
Pressure Range(MPa)	0.4-0.63	0.4-0.63	0.4-0.63	0.4-0.63	0.4-0.63
Rated Flux(L/min)	100	150	200	250	300
Rated Lift(M)	30	20	30	20	20
Rated Suction(M)	3	3	3	3	3
Air Consumption(m3/min)	0.6-1.9	0.6-1.9	1.5-3	2.0-3.5	2.5-3.8
Max Grain Dia(mm)	Φ3	Φ3	Φ3	Φ3	Φ3
Noise(dB(A))	≤87	≤87	≤95	≤95	≤95
Weight(kg)	18	22	50	50	54
Suitable Medium	Water,Oil	Water,Oil	Water,Oil	Water,Oil	Water,Oil

## DTH Hammer

DTH hammers can match pneumatic drill rig like CM351 downhole drill rig, which is widely used for drill blasthole in mining, quarrying and roading. They can also drill downhole for wells and ground-source air conditioners.



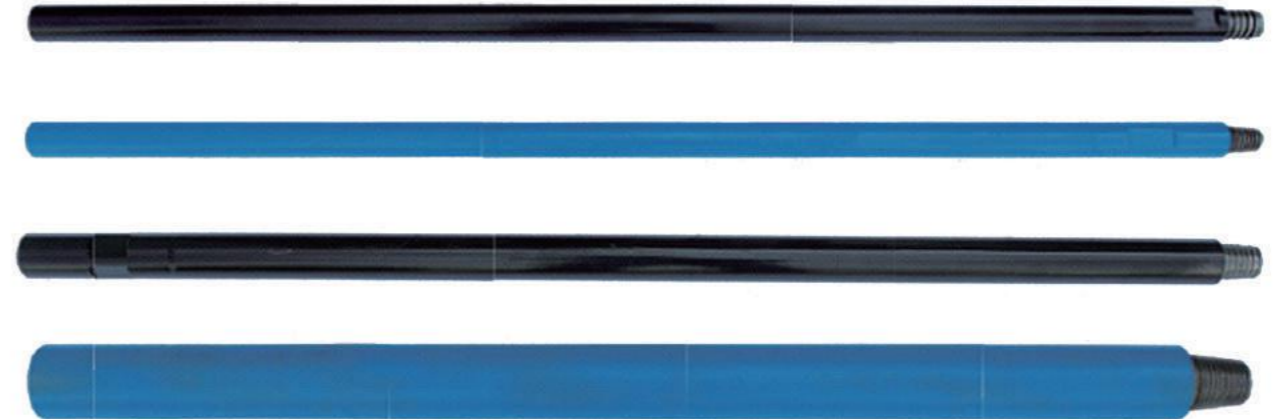
Size	Air Pressure(MPa)	Air Consumption(m <sup>3</sup> /min)	Length(mm)	Weight(kg)	Locking Jaw(mm)	Acceptable Bit(mm)
TRC90	0.5-0.7	0.5-5	855	22	60x60	Φ90-100
TRC35G	1.0-2.5	3.8-7.5	888	25	60x60	Φ90-105
TRC45G	1.0-2.5	6-15	1011	43.2	65x65	Φ110-135
TRC55G	1.0-2.5	7-19	1110	69	74x74	Φ135-155
TRC65G	1.0-2.5	9-26	1238	98	101x101	Φ155-190
TRC75G	1.0-2.5	11-27	1258	115	101x101	Φ175-216
TRC85G	1.0-2.5	12-28	1359	175	148x148	Φ195-254
TRC100G	1.0-2.5	22-55	1502	290	176x176	Φ254-311

## DTH Bit:

Size	Air Vent	Diameter (mm)	Weight(kg)	Side Tooth(mm)	Central Tooth(mm)	Acceptable Hammer(mm)
TRZ90	2	90	3.75	6xΦ14	4xΦ12	TRC90
TRZ90G	2	90	4.6	6xΦ14	4xΦ12	TRC35G
TRZ115G	2	115-118	9.0	7xΦ14	6xΦ13	TRC45G
TRZ140G	2	140	17	7xΦ18	7xΦ14	TRC55G
TRZ152G	2	152-155	22	8xΦ18	7xΦ16	TRC65G
TRZ165G	2	165-170	26	8xΦ18	8xΦ16	TRC65G
TRZ203G	2	203-206	40	10xΦ18	10xΦ16	TRC85G
TRZ219G	2	219-222	49	10xΦ18	12xΦ16	TRC85G
TRZ254G	3	254-258	71	12xΦ18	21xΦ16	TRC85G
TRZ305G	4	305-310	95	12xΦ18	29xΦ16	TRC100G

## Geological Drill Rod

Geological drill rod is used for water and gas exploring and injection in underground coal mine. It adopts special geological steel and advanced friction welding method with following features: high strength, stable welding, long working life, etc.



NO.	Diameter	Thickness	Steel products	Torque	Depth	Taper ratio	Pitch	Joint hardness	Collocation drill
1	φ 33.5	5	DZ50	2000n/m	100m	1:5	4.233	HRC28-32	55
2	φ 42	6.2	DZ50	3000n/m	100m	1:8	5.08	HRC28-32	65、75
3	φ 50	6.5	DZ50	5000n/m	100m	1:8	5.08	HRC28-32	75
4	φ 63.5	7.1	R780	8000n/m	200m	1:6	5	HRC28-32	94
5	φ 73	7.8	R780	10000n/m	200m	1:4	5.08	HRC28-32	94
6	φ 89	9.38	R780	12000n/m	300m	1:6	6.35	HRC28-32	108、133

## Geological Spiral Drill Rod

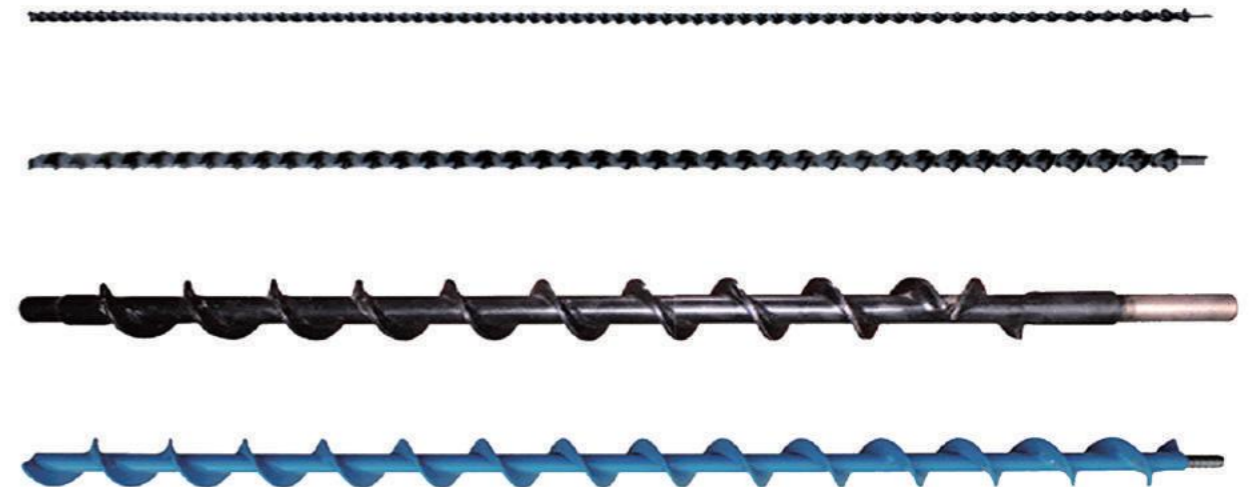
The geological spiral drill rod has high torque performance ,which is used with single screw blades or double helical blade.It adopt special geological steel and advanced friction welding method.



No.	Diameter	Spiral diameter	Steel	Torque	Depth	Matching rig	Bit diameter	Joint hardness
1	¢ 34mm	50-80mm	DZ50	2000n/m	100m	ZDY-400、540、650、1200	65-113mm	HRC28-32
2	¢ 42mm	50-100mm	DZ50	3000n/m	100m		65-146mm	HRC28-32
3	¢ 50mm	73-150mm	DZ50	5000n/m	100m		94-200mm	HRC28-32
4	¢ 60mm	73-170mm	R780	7000n/m	150m	ZDY-1500、1900、4000、6000	94-250mm	HRC28-32
5	¢ 63.5mm	73-200mm	R780	8000n/m	200m		94-250mm	HRC28-32
6	¢ 73mm	89-250mm	R780	10000n/m	200m		108-300mm	HRC28-32
7	¢ 89mm	100-300mm	R780	12000n/m	300m		108-350mm	HRC28-32

## Spiral Drill Rod

Spiral rod is designed for water and gasexploring and injection for underground coal mine.Made of high quality steel ,tension-resistance can be up to 1400mpa after forging and heating treatment. With spiral dry drilling techniques,high drilling speed can be achieved,make coal seam gas discharge faster and safer.



No	Specifications				Torque	Connection type
	Spiral diameter	Diameter	Length	Joint dimension		
1	¢ 26	¢ 16	500-3000	M16*1.5	100-150	Square /spiral
2	¢ 28	¢ 16-18	500-3000	F12/M18*1.5	100-150	Square /spiral
3	¢ 30	¢ 16-18	500-3000	F12/M18*1.5	100-150	Square /spiral
4	¢ 32	¢ 18-22	500-3000	F12/M18*1.5	100-250	Square /spiral
5	¢ 38	¢ 21-22	500-3000	F14/Tr16	150-350	Square /spiral
6	¢ 40	¢ 21-22	500-3000	F14/Tr16	150-350	Square /spiral
7	¢ 42	¢ 21-22	500-3000	F14/Tr16	150-350	Square /spiral
8	¢ 45	¢ 25-27	500-3000	F18/Tr19	350-450	Square /spiral
9	¢ 55	¢ 25-27	500-3000	F18/Tr19	350-450	Square /spiral
10	¢ 65	¢ 25-27	500-3000	F24/Tr19	350-450	Square /spiral

## PDC Drill Bit



No.	Specifications	Drilling procedure		
		Pressure(kg)	Speed(rpm)	Capacity(1/min)
1	Φ28	300-700	300-350	150-200
2	Φ30	300-700	300-350	150-200
3	Φ32	300-700	300-350	150-200
4	Φ48	300-700	300-350	120-160
5	Φ56	320-800	250-350	130-180
6	Φ75	480-1200	200-300	150-200
7	Φ94	640-1600	150-250	200-250
8	Φ110	880-2200	120-200	200-300
9	Φ152	1500-3000	100-200	500-850
10	Φ190	1800-4000	100-200	600-1200
11	Φ230	2200-4500	100-200	750-1400
12	Φ270	2400-5000	100-200	1000-1500

## Hard Alloy Drill Bit



No.	Specifications and Size			Cutters	Structures
	Dia	Conncting size			
1	Φ27	M12 × 1.75	M14 × 1.5	2	Integral
2	Φ28	M12 × 1.75	F12 × 12	2	Integral
3	Φ30	M12 × 1.75	F12 × 12	2	Integral
4	Φ32	M14 × 1.5	F12 × 12	2	Integral
5	Φ34	M14 × 1.5	F12 × 12	2	Integral
6	Φ36	M14 × 1.5	F12 × 12	2	Integral
7	Φ38	T24 × 5	F14 × 14	2-3	Integral
8	Φ42	T24 × 5	F13-14	2-3	Integral
9	Φ45	T24 × 5	F13-18	2-3	Integral
10	Φ55	T24 × 5	F13-18	4	Two-stage
11	Φ65	T24 × 5	F13-18	4-5	Two-stage
12	Φ75	T33 × 4.23	F13-18	4-5	Two-stage
13	Φ76	T33 × 4.23	F18-24	4-5	Two-stage
14	Φ82	T42 × 5.08	F18-24	4-5	Two-stage
15	Φ85	T42 × 5.08	F18-24	4-5	Two-stage
16	Φ89	T42 × 5.08	F24-32	5-7	Three-stage
17	Φ95	T55 × 5.08	F24-32	5-7	Three-stage
18	Φ110	T55 × 5.08	B35-45	5-7	Three-stage
19	Φ125	T55 × 5.08	B35-45	5-12	Four-stage
20	Φ135	T55 × 5.08	B35-45	5-12	Four-stage

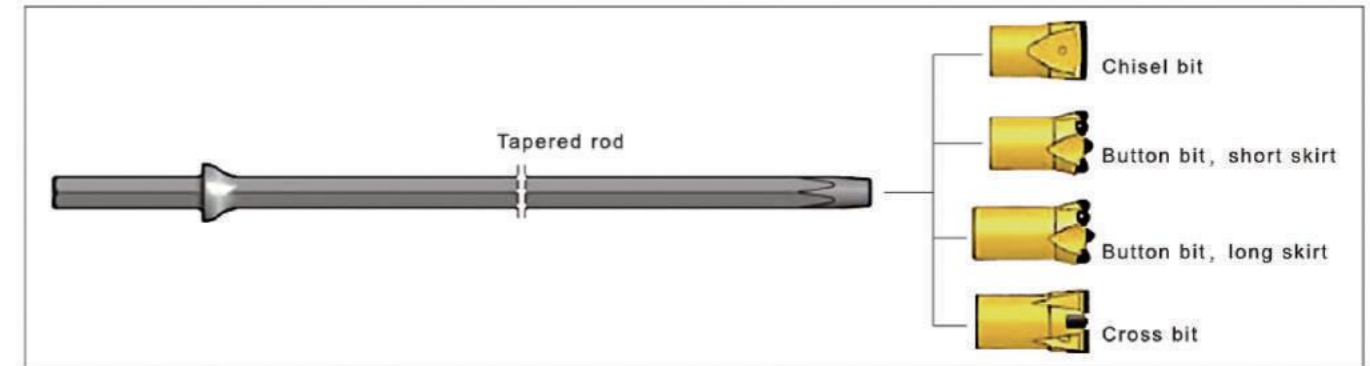
## Integral drill steels

19mm	Length		Bit dia.	Weight approx kg	P/N
	mm	Foot			
Chisel bit integral Shank 19mmX108mm	400	1' 4"	29	1.3	H19-291508-0400-55-Z25
	800	2' 7"	28	2.2	H19-281508-0800-55-Z25
	1200	3' 11"	27	3.0	H19-271508-1200-55-Z25
	2400	7' 10"	26	5.7	H19-261508-2400-55-Z25
	3200	10' 6"	25	7.5	H19-251508-3200-55-Z25
	400	1' 4"	24	1.3	H19-241508-0400-55-Z25
	600	2'	27	1.7	H19-271508-0600-55-Z25
	400	1' 4"	35	1.3	H19-351810-0400-55-Z25
	800	2' 7"	34	2.2	H19-341810-0800-55-Z25
	Chisel bit integral Shank 22mmX108mm	400	1' 4"	29	1.5
600		2'	27	1.7	H19-271508-0600-55-Z25
800		2' 7"	23	2.3	H19-231508-0800-55-Z25
800		2' 7"	28	2.3	H19-281508-0800-55-Z25
1200		3' 11"	23	3.2	H19-231508-1200-55-Z25
1600		5' 3"	27	4.0	H19-271508-1600-55-Z25
2000		6' 7"	28	5.0	H19-281508-2000-55-Z25
2400		7' 10"	26	5.8	H19-261508-2400-55-Z25
3200		10' 6"	25	7.5	H19-251508-3200-55-Z25
Plug hole integral steels Shank 19mmX108mm		Length mm	Bit dia.	Turned length	Weight approx kg
	210	17	150	0.7	5H19-171308-0210-55-Z25
	210	20	150	0.7	5H19-201308-0210-55-Z25
	210	22	150	0.7	5H19-221308-0210-55-Z25
	19mmX82mm	210	20	150	0.7
Shank 19mmX82mm	210	22	150	0.7	5H19-221308-0210-55-Z25

22mm	Length		Bit dia.	Weight approx kg	P/N
	mm	Foot			
Chisel bit integral Shank 22mmX108mm	5600	18' 4"	28	17.6	5H22-281508-5600-55-Z25
	6400	21'	27	20.1	5H22-271508-6400-55-Z25
	7200	23' 6"	26	22.5	5H22-261508-7200-55-Z25
	800	2' 7"	40	3.0	5H22-401810-0800-55-Z25
	1600	5' 3"	39	5.2	5H22-391810-1600-55-Z25
	2400	7' 10"	38	8.0	5H22-381810-2400-55-Z25
	3200	10' 6"	37	10.2	5H22-371810-3200-55-Z25
	4000	13' 1"	36	12.9	5H22-361810-4000-55-Z25
	4800	15' 9"	35	15.1	5H22-351810-4800-55-Z25
	5600	18' 4"	34	17.6	5H22-341810-5600-55-Z25
	6400	21'	33	20.1	5H22-331810-6400-55-Z25
	7200	23' 6"	32	22.5	5H22-321808-7200-55-Z25
	8000	26' 2"	31	25.0	5H22-311808-8000-55-Z25

## Tapered rock drilling tools

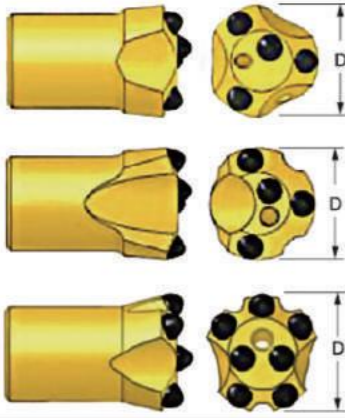
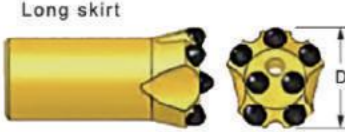
7°



Drill bit	Diameter		For class of clock	Tip size(mm)	Taper	Weight kg	P/N
	mm	inch		Height X Width			
Horseshoe chisel bit	26	1 1/32	10-14	10x7	7°	0.17	1111-26721-10/7-40-Z25
	28	1 7/64	10-14	10x7	7°	0.18	1111-28721-10/7-40-11
	30	1 3/16	8-12	13.5x8	7°	0.22	1111-30722-13.5/8-40-9
	30	1 3/16	10-14	13.5x8	7°	0.22	1111-30722-13.5/8-40-Z25
	32	1 1/4	8-12	13.5x8	7°	0.24	1111-32722-13.5/8-40-9
	32	1 1/4	10-14	13.5x8	7°	0.24	1111-32722-13.5/8-40-Z25
	34	1 11/32	8-12	13.5x8	7°	0.27	1111-34722-13.5/8-40-9
	34	1 11/32	10-14	13.5x8	7°	0.27	1111-34722-13.5/8-40-Z25
	36	1 27/64	8-12	13.5x8	7°	0.30	1111-36722-13.5/8-40-9
	36	1 27/64	10-14	13.5x8	7°	0.30	1111-36722-13.5/8-40-Z25
	38	1 1/2	8-12	13.5x8	7°	0.33	1111-38723-13.5/8-40-9
	38	1 1/2	10-14	13.5x8	7°	0.33	1111-38723-13.5/8-40-Z25
	38	1 1/2	8-12	15x9	7°	0.33	1111-38723-15/9-40-9
	38	1 1/2	10-14	15x9	7°	0.33	1111-38723-15/9-40-Z25
	40	1 37/64	8-12	13.5x9.2	7°	0.38	1111-40723-13.5/9.2-40-9
	40	1 37/64	10-14	13.5x9.2	7°	0.38	1111-40723-13.5/9.2-40-Z25
	40	1 37/64	14-16	13.5x9.2	7°	0.38	1111-40723-13.5/9.2-40-Z25
	40	1 37/64	16-18	13.5x9.2	7°	0.38	1111-40723-13.5/9.2-40-9
	40	1 37/64	8-12	15x9.8	7°	0.38	1111-40723-15/9.8-40-9
	40	1 37/64	10-14	15x9.8	7°	0.38	1111-40723-15/9.8-40-Z25
40	1 37/64	14-16	15x9.8	7°	0.38	1111-40723-15/9.8-40-11	
40	1 37/64	16-18	15x9.8	7°	0.38	1111-40723-15/9.8-40-Y25	
42	1 2/3	8-12	13.5x9.2	7°	0.41	1111-42723-13.5/9.2-40-9	
42	1 21/32	10-14	13.5x9.2	7°	0.41	1111-42723-13.5/9.2-40-Z25	
42	1 21/32	14-16	13.5x9.2	7°	0.41	1111-42723-13.5/9.2-40-11	
42	1 21/32	16-18	13.5x9.2	7°	0.41	1111-42723-13.5/9.2-40-Y25	
42	1 21/32	8-12	15x9.8	7°	0.41	1111-42723-15/9.8-40-9	
42	1 21/32	10-14	15x9.8	7°	0.41	1111-42723-15/9.8-40-Z25	
42	1 21/32	10-14	15x9.8	7°	0.41	1111-42723-15/9.8-40-11	
42	1 21/32	16-18	15x9.8	7°	0.41	1111-42723-15/9.8-40-Y25	
43	1 11/16	8-12	13.5x9.2	7°	0.42	1111-43723-13.5/9.2-40-11	
43	1 11/16	10-14	13.5x9.2	7°	0.42	1111-43723-13.5/9.2-40-Y25	
43	1 11/16	8-12	15x9.8	7°	0.42	1111-43723-15/9.8-40-9	
43	1 11/16	10-14	15x9.8	7°	0.42	1111-43723-15/9.8-40-Z25	

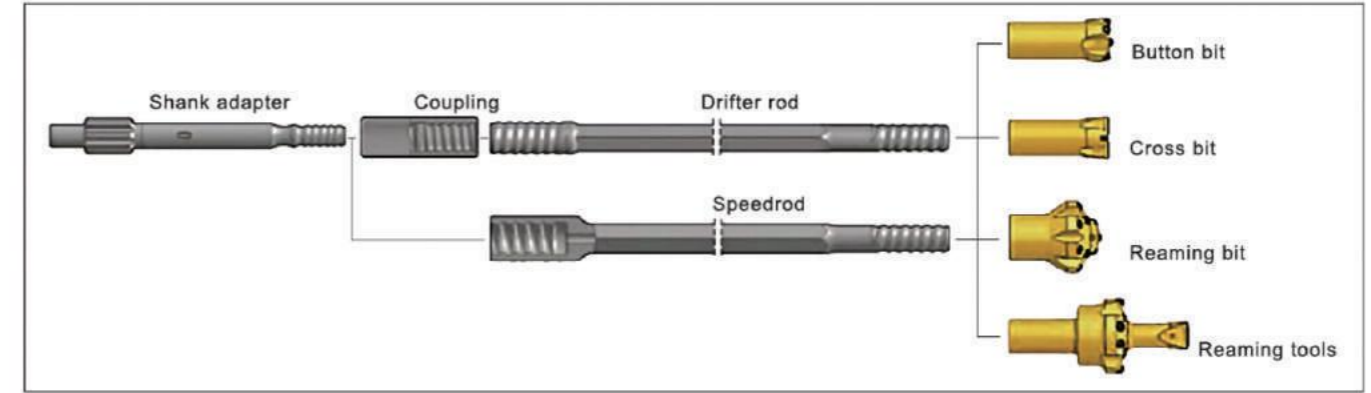
## Tapered rock drilling tools

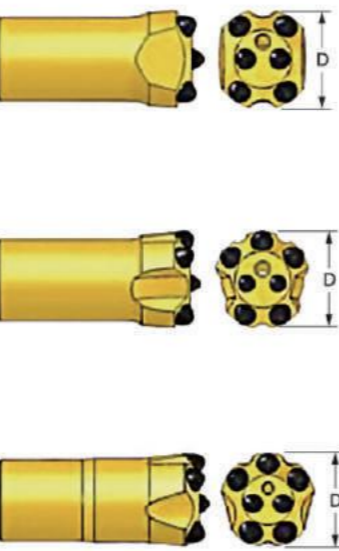
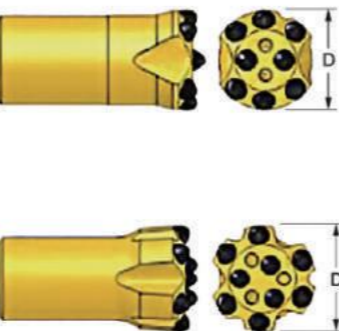
7°

Drill bit	Diameter		NOX button diameter			Flushing hole		Weight approx kg	P/N
	mm	inch	Front	Gauge	Angle	Front	Side		
<b>Button bit, short skirt</b> 	32	1 1/4	1×8	3×8	35°	1	1	0.24	1431-32722-18/38-42-ZK5
	33	1 19/64	2×7	5×7	35°	2	1	0.26	1431-33722-27/57-42-ZK5
	34	1 11/32	2×7	4×7	40°	1	1	0.29	1431-34722-27/47-42-ZK5
	35	1 3/8	2×7	5×8	35°	1	1	0.33	1431-35722-27/58-42-ZK5
	36	1 27/64	1×8	3×9	40°	1	1	0.37	1431-36722-18/39-42-ZK5
	36	1 27/64	2×7	5×8	35°	1	1	0.37	1431-36722-27/58-42-ZK5
	38	1 1/2	1×8	3×9	35°	1	1	0.38	1431-38723-18/39-42-ZK5
	38	1 1/2	2×7	5×8	35°	1	1	0.38	1431-38723-27/58-42-ZK5
	38	1 1/2	2×7	5×9	40°	2	1	0.38	1431-38723-27/59-42-ZK5
	40	1 37/64	1×8	3×9	30°	1	1	0.40	1431-40723-18/39-42-ZK5
	40	1 37/64	1×9	3×10	30°	1	1	0.40	1431-40723-19/310-42-ZK5
	40	1 37/64	1×9	3×9	35°	1	1	0.40	1431-40723-19/39-42-ZK5
	40	1 37/64	2×7	5×9	35°	1	1	0.40	1431-40723-27/59-42-ZK5
	42	1 21/32	1×8	3×9	30°	1	1	0.43	1431-42723-18/39-42-ZK5
42	1 21/32	1×9	3×10	30°	1	1	0.43	1431-42723-19/310-42-ZK5	
42	1 21/32	1×9	3×9	35°	1	1	0.43	1431-42723-19/39-42-ZK5	
42	1 37/64	2×8	5×9	35°	1	1	0.43	1431-42723-28/59-42-ZK5	
<b>Long skirt</b> 	32	1 1/4	2×7	5×7	35°	1	1	0.30	1435-32722-27/57-45-YK5
	33	1 19/64	2×7	5×7	35°	1	1	0.31	1435-33722-27/57-45-YK5
	35	1 3/8	2×7	5×8	35°	1	1	0.36	1435-35722-27/58-45-YK5
	38	1 1/2	2×7	5×9	35°	1	1	0.41	1435-38723-27/59-45-YK5
	41	1 5/8	2×7	5×9	35°	1	1	0.42	1435-41723-27/59-45-YK5

## Drifting and tunneling



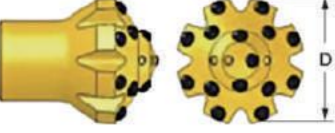
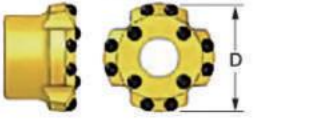

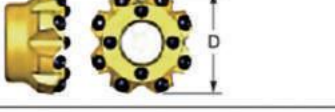


R32



Drill bit	Diameter		NoXbutton diameter			Flushing hole		Weight approx kg	P/N
	mm	inch	Front	Gauge	Angle	Front	Side		
<b>Button bit</b> 	<b>Spherical buttons</b>								
	41	1 5/8	2X9	4X9	35°	1	1	0.6	1431-41R32-29/49-45-QYK5
	41	1 5/8	2X8	5X9	35°	1	1	0.7	1431-41R32-28/59-45-QYK5
	43	1 11/16	2X9	5X9	35°	1	2	0.7	1431-43R32-29/59-45-QYK5
	43	1 11/16	2X9	5X10	35°	1	1	0.7	1431-43R32-29/510-45-QYK5
	43	1 11/16	2X9	6X9	40°	2	-	0.7	1431-43R32-29/69-45-QYK5
	45	1 3/4	2X9	5X11	30°	1	1	0.8	1431-45R32-29/511-45-QYK5
	45	1 3/4	2X9	6X10	35°	2	-	0.8	1431-45R32-29/610-45-QYK5
	45	1 3/4	3X8	6X10	30°	3	-	0.8	1431-45R32-38/610-45-QYK5
	48	1 7/8	2X9	5X11	35°	1	1	0.9	1431-48R32-29/511-45-QYK5
	48	1 7/8	2X9	6X10	40°	2	-	0.9	1431-48R32-29/610-45-QYK5
	48	1 7/8	3X8	6X10	40°	3	-	0.9	1431-48R32-38/610-45-QYK5
	48	1 7/8	3X9	6X10	30°	3	-	0.9	1431-48R32-39/610-45-QYK5
	51	2	2X10	5X11	35°	1	1	1.0	1431-51R32-210/511-45-QYK5
	51	2	2X10	6X10	40°	2	-	1.0	1431-51R32-210/610-45-QYK5
	51	2	3X9	6X10	35°	3	-	1.0	1431-51R32-39/610-45-QYK5
	57	2 1/4	3X9	6X11	35°	3	-	1.3	1431-57R32-39/611-45-QYK5
	64	2 1/2	3X10, 1X10	6X11	35°	3	-	1.6	1433-64R32-410/611-45-QYK5
	64	2 1/2	4X10	8X10	40°	2	-	1.6	1431-64R32-410/611-45-QYK5
	76	3	4X11	8X11	40°	2	-	2.6	1431-76R32-411/811-45-QYK5
	<b>抛物线齿 Parabolic buttons</b>								
	41	1 5/8	2X8	5X9	40°	1	1	0.7	1431-41R32-28/59-45-YK5
	43	1 11/16	2X9	5X9	40°	1	2	0.7	1431-43R32-29/59-45-YK5
	43	1 11/16	2X9	6X9	40°	2	-	0.7	1431-43R32-29/69-45-YK5
	43	1 11/16	3X8	6X8	40°	3	1	0.7	1431-43R32-38/68-45-YK5
	45	1 3/4	2X9	5X11	30°	1	2	0.8	1431-45R32-29/511-45-YK5
	45	1 3/4	2X9	6X9	40°	2	2	0.8	1431-45R32-29/69-45-YK5
	45	1 3/4	3X8	6X9	40°	3	1	0.8	1431-45R32-38/69-45-YK5
	48	1 7/8	2X9	5X11	35°	1	1	0.9	1431-48R32-29/511-45-YK5
	48	1 7/8	2X9	6X10	40°	2	-	0.9	1431-48R32-29/610-45-YK5
	48	1 7/8	3X8	6X10	40°	3	-	0.9	1431-48R32-38/610-45-YK5
	51	2	2X10	6X10	40°	2	-	1.0	1431-51R32-210/610-45-YK5
	51	2	3X9	6X10	40°	3	1	1.0	1431-51R32-39/610-45-YK5
	54	2 1/8	3X9	6X10	40°	3	1	1.0	1431-54R32-39/610-45-YK5
	57	2 1/4	3X9	6X11	35°	3	-	1.3	1431-57R32-39/611-45-YK5
64	2 1/2	4X10	8X10	40°	2	-	1.6	1431-64R32-410/810-45-YK5	

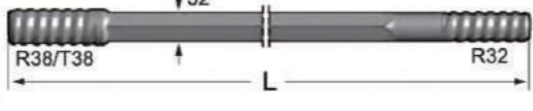
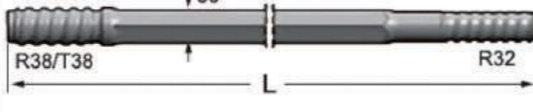
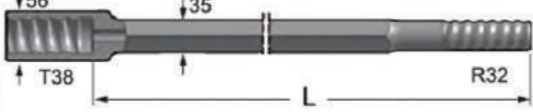
## Drifting and tunneling


R32

Drill bit	Diameter		NoXbutton diameter			Flushing hole		Weight approx kg	P/N
	mm	inch	Front	Gauge	Angle	Front	Side		
<b>Retrac button bit</b> 	<b>Spherical buttons</b>								
	45	1 3/4	3X8	6X9	40°	3	-	1.1	1531-45R32-38/69-45-QYK5
	48	1 7/8	3X9	6X10	30°	3	-	1.2	1531-48R32-39/610-45-QYK5
	51	2	3X9	6X10	30°	3	-	1.4	1531-51R32-39/610-45-QYK5
	64	2 1/2	3X10, 1X10	6X11	35°	3	-	2.2	1531-64R32-410/611-45-QYK5
	64	2 1/2	4X10	8X10	40°	2	-	2.2	1531-64R32-410/810-45-QYK5
	76	3	4X11, 1X11	8X11	35°	4	1	3.5	1531-76R32-511/811-45-QYK5
	<b>Parabolic buttons</b>								
	45	1 3/4	3X8	6X9	40°	3	-	1.1	1531-45R32-38/69-45-YK5
	48	1 7/8	3X9	6X10	30°	3	-	1.2	1531-48R32-39/610-45-YK5
	51	2	3X9	6X10	30°	3	-	1.4	1531-51R32-39/610-45-YK5
	64	2 1/2	3X10, 1X10	6X11	35°	3	-	2.2	1531-64R32-410/611-45-YK5
	64	2 1/2	4X10	8X10	40°	2	-	2.2	1531-64R32-410/810-45-YK5
	76	3	4X11, 1X11	8X11	35°	4	1	3.5	1531-76R32-511/811-45-YK5
<b>Dome bit for reaming</b> 	<b>Spherical buttons</b>								
	76	3	1X13	9X13	35°	3	1	2.0	1441-76R32-113/913-45-QYK5
	89	3 1/2	1X13	14X13	35°	2	2	2.6	1441-89R32-113/1413-45-QYK5
	102	4	1X13	16X13	35°	2	2	3.2	1441-102R32-113/1613-45-QYK5
	127	5	1X13	18X16	35°	3	1	4.8	1441-127R32-113/1813-45-QYK5
	<b>Parabolic buttons</b>								
	76	3	1X13	9X13	35°	3	1	2.0	1441-76R32-113/913-45-YK5
	89	3 1/2	1X13	14X13	35°	2	2	2.6	1441-89R32-113/1413-45-YK5
	102	4	1X13	16X13	35°	2	2	3.2	1441-102R32-113/1613-45-YK5
	127	5	1X13	18X16	35°	3	1	4.8	1441-127R32-113/1813-45-YK5
<b>Reaming bit 6°</b> 	64	2 1/2	2X10	8X9	35°	-	-	0.8	1441-646-210/89-45-QYK5
	64	2 1/2	4X8	8X9	25°	-	-	0.8	1441-646-48/89-45-QYK5
	76	3	2X11	8X11	35°	-	-	1.2	1441-766-211/811-45-QYK5
	76	3	4X10	8X10	30°	-	-	1.2	1441-766-410/810-45-QYK5
	89	3 1/2	4X11	8X11	35°	-	-	1.7	1441-896-411/811-45-QYK5
	89	3 1/2	4X10	8X10	30°	-	-	1.7	1441-896-410/810-45-QYK5
<b>Pilot adapter 6°</b> 	26	1 1/32	12X8		-	-	-	1.5	1442-26R32-12/8-42-Z25
<b>Reaming bit 12°</b> 	89	3 1/2	4X10	8X12	35°	-	-	1.8	1441-8912-410/812-45-QYK5
	102	4	4X12	8X12	35°	-	-	2.1	1441-10212-412/812-45-QYK5
	127	5	4X12	8X12	35°	-	-	4.0	1441-12712-412/812-45-QYK5
	127	5	4X13	8X13	35°	-	-	4.0	1441-12712-413/813-45-QYK5
<b>Pilot adapter 12°</b> 	40	1 37/64	15X10		-	-	-	2.2	1442-40R32-15/10-42-Z25
<b>Cross-type bit</b> 	41	1 5/8	16X10		-	1	4	0.7	1221-41R32-16/10-42-Z25
	43	1 11/16	16X10		-	1	2	0.8	1221-43R32-16/10-42-Z25
	45	1 3/4	16X10		-	1	4	0.9	1221-45R32-16/10-42-Z25
	48	1 7/8	16X10		-	1	4	0.9	1221-48R32-16/10-42-Z25
	51	2	16X10		-	1	4	1.2	1221-51R32-16/10-42-Z25
	64	2 1/2	18X13		-	1	4	1.5	1221-64R32-18/13-42-Z25

## Drifting and tunneling

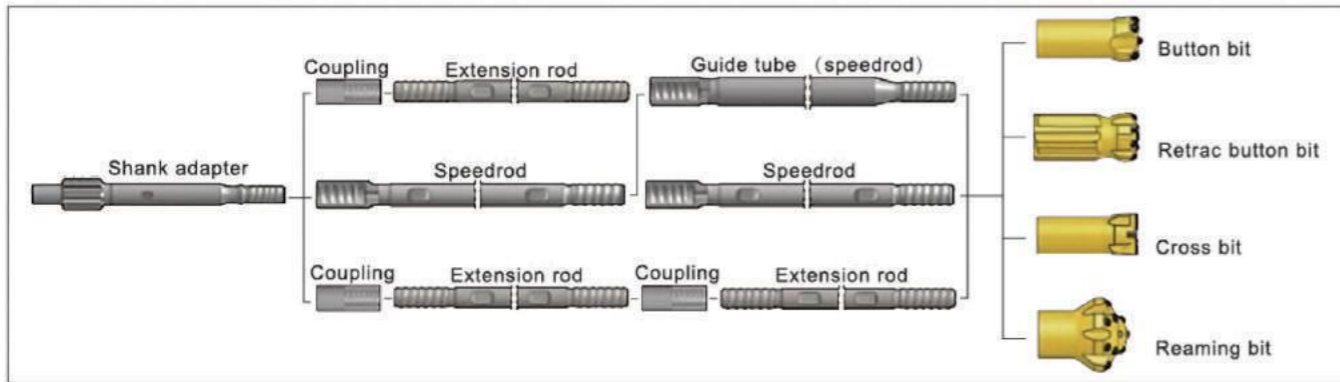
R32






Drill rod	Length		Diameter		Weight approx kg	P/N
	mm	Foot	mm	inch		
<b>Drifter rod, R/T38-Hex32-R32</b> Flushing hole 9.6mm. 	2400	7' 10"	32	1 1/4	15.3	22H32-R32/T38-2400-23
	3090	10' 11/2"	32	1 1/4	19.8	22H32-R32/T38-3090-23
	3400	11' 13/4"	32	1 1/4	21.7	22H32-R32/T38-3400-23
	4000	13' 13/8"	32	1 1/4	25.5	22H32-R32/T38-4000-23
	4310	14' 11/2"	32	1 1/4	27.5	22H32-R32/T38-4310-23
	4920	16' 11/2"	32	1 1/4	31.3	22H32-R32/T38-4920-23
	5530	18' 11/2"	32	1 1/4	35.2	22H32-R32/T38-5530-23
<b>Drifter rod, R/T38-Hex35-R32</b> Flushing hole 9.5mm. 	3090	10' 11/2"	35	1 3/8	24.0	22H35-R32/T38-3090-23
	3700	12' 11/2"	35	1 3/8	28.7	22H35-R32/T38-3700-23
	4000	13' 13/8"	35	1 3/8	31.1	22H35-R32/T38-4000-23
	4310	14' 11/2"	35	1 3/8	33.4	22H35-R32/T38-4310-23
	4920	16' 11/2"	35	1 3/8	37.8	22H35-R32/T38-4920-23
	5530	18' 11/2"	35	1 3/8	42.9	22H35-R32/T38-5530-23
	6100	20'	35	1 3/8	47.3	22H35-R32/T38-6100-23
<b>Speed rod, T38-Hex35-R32</b> Flushing hole 9.5mm. 	3700	12' 11/2"	35	1 3/8	29.0	24H35-R32/T38-3700-23
	4310	14' 11/2"	35	1 3/8	34.1	24H35-R32/T38-4310-23
	4920	16' 11/2"	35	1 3/8	38.8	24H35-R32/T38-4920-23
	5530	18' 11/2"	35	1 3/8	43.6	24H35-R32/T38-5530-23
	6400	21'	35	1 3/8	50.3	24H35-R32/T38-6400-23

Coupling	Length		Diameter		Thread	Weight approx kg	P/N
	mm	inch	mm	inch			
Coupling sleeves	170	6 3/4	55	2 5/32	R38	1.8	31-R38-55-170-23
	190	7 1/2	55	2 5/32	T38	2.0	31-T38-55-190-23
<b>Coupling sleeves of different diameter</b> 	150	6 1/8	45	1 3/4	R25-R32	1.1	33-R25/R32-45-150-23
	160	6 1/4	45	1 3/4	R25-R32	1.2	33-R25/R32-45-160-23
	160	6 1/4	45	1 3/4	R25-R32	1.2	33-R28/R32-45-160-23
	160	6 1/4	55	2 5/32	R28-R32	1.8	33-R32/R38-55-160-23
	170	6 3/4	55	2 5/32	R32-R38	2.0	33-R32/R38-55-170-23
	180	7 1/16	55	2 5/32	R32-R38	2.2	33-R32/R38-55-180-23
	210	8 1/4	55	2 5/32	R32-R38	2.8	33-R32/R38-55-210-23
	170	6 3/4	56	2 1/8	R32-T38	2.1	33-R32/T38-56-170-23
	180	7 1/16	56	2 1/8	R32-T38	2.2	33-R32/T38-56-180-23
	210	8 1/4	56	2 1/8	R32-T38	2.8	33-R32/T38-56-210-23
	190	7 1/2	63	2 33/64	R32-T45	3.2	33-R32/T45-63-190-23

## Bench drilling

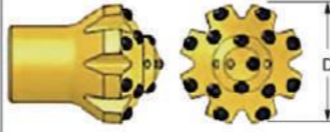
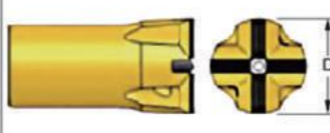

R32

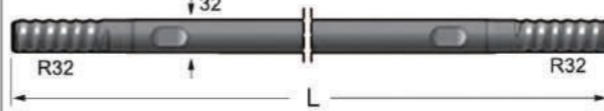




Drill bit	Diameter		NoXbutton diameter			Flushing hole		Weight approx kg	P/N
	mm	inch	Front	Gauge	Angle	Front	Side		
<b>Spherical buttons</b>									
 Button bit	48	1 7/8	2X9	5X11	35°	1	2	1.0	1431-48R32-29/511-45-QYK5
	48	1 7/8	3X8	6X10	40°	3	-	0.9	1431-48R32-38/610-45-QYK5
	51	2	2X10	5X11	35°	1	2	1.0	1431-51R32-210/511-45-QYK5
	51	2	3X9	6X10	35°	3	-	1.0	1431-51R32-39/610-45-QYK5
	57	2 1/4	3X9	6X11	35°	3	-	1.3	1431-57R32-39/611-45-QYK5
	57	2 1/4	3X10	6X11	35°	3	-	1.3	1431-57R32-310/611-45-QYK5
	64	2 1/2	3X11	6X12	30°	3	-	1.6	1431-64R32-311/612-45-QYK5
	64	2 1/2	3X10, 1X10	6X11	35°	3	-	1.6	1433-64R32-410/611-45-QYK5
 Retrac button bit	64	2 1/2	4X10	8X10	40°	2	-	1.6	1431-64R32-410/810-45-QYK5
	70	3	4X11	8X11	40°	2	-	2.6	1431-70R32-411/811-45-QYK5
	76	3	4X11, 1X11	8X11	35°	2	-	2.6	1433-76R32-511/811-45-QYK5
	<b>Parabolic buttons</b>								
	48	1 7/8	3X8	6X10	40°	3	-	0.9	1431-48R32-38/610-45-YK5
	51	2	3X9	6X10	40°	3	1	1.0	1431-51R32-39/610-45-YK5
	54	2 1/8	3X9	6X10	40°	3	1	1.0	1431-54R32-39/610-45-YK5
	57	2 1/4	3X9	6X11	35°	3	-	1.3	1431-57R32-39/611-45-YK5
	57	2 1/4	3X10	6X11	35°	3	-	1.3	1431-57R32-310/611-45-YK5
	64	2 1/2	4X10	8X10	40°	2	-	1.6	1431-64R32-410/810-45-YK5
<b>Spherical buttons</b>									
 Retrac button bit	48	1 7/8	3X8	6X10	40°	3	-	1.2	1531-48R32-38/610-45-QYK5
	51	2	3X9	6X10	35°	3	-	1.4	1531-51R32-39/610-45-QYK5
	64	2 1/2	3X10, 1X10	6X11	35°	3	-	2.2	1533-64R32-410/611-45-QYK5
	64	2 1/2	4X10	8X10	40°	2	-	2.2	1531-64R32-410/810-45-QYK5
	76	3	4X11, 1X11	8X11	35°	4	1	3.5	1533-76R32-511/811-45-QYK5
<b>Parabolic buttons</b>									
	48	1 7/8	3X9	6X10	30°	3	-	1.2	1531-48R32-39/610-45-YK5
	51	2	3X9	6X10	30°	3	-	1.4	1531-51R32-39/610-45-YK5
	64	2 1/2	3X10, 1X10	6X11	35°	3	-	2.2	1533-64R32-410/611-45-YK5
	64	2 1/2	4X10	8X10	40°	2	-	2.2	1531-64R32-410/810-45-YK5
	76	3	4X11, 1X11	8X11	35°	4	1	3.5	1533-76R32-511/811-45-YK5

## Bench drilling

R32

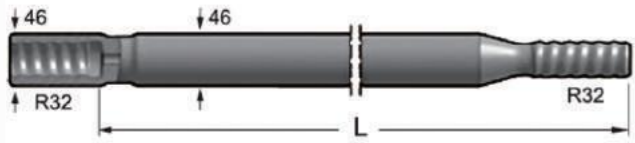
Drill bit	Diameter		NoXbutton diameter			Flushing hole		Weight approx kg	P/N
	mm	inch	Front	Gauge	Angle	Front	Side		
<b>Spherical buttons</b>									
 Dome bit for reaming	76	3	1X13	9X13	35°	3	1	2.0	1441-76R32-113/913-45-QYK5
	89	3 1/2	1X13	14X13	35°	2	2	2.6	1441-89R32-113/1413-45-QYK5
	102	4	1X13	16X13	35°	2	2	3.2	1441-102R32-113/1613-45-QYK5
	127	5	1X13	18X13	35°	3	1	4.8	1441-127R32-113/1813-45-QYK5
<b>Parabolic buttons</b>									
	76	3	1X13	9X13	35°	3	1	2.0	1441-76R32-113/913-45-YK5
	89	3 1/2	1X13	14X13	35°	2	2	2.6	1441-89R32-113/1413-45-YK5
	102	4	1X13	16X13	35°	2	2	3.2	1441-102R32-113/1613-45-YK5
	127	5	1X13	18X13	35°	3	1	4.8	1441-127R32-113/1813-45-YK5
<b>Cross-type bits</b>									
 Cross-type bits	45	1 3/4	16X10		-	1	4	0.9	1221-45R32-16/10-42-Z25
	48	1 7/8	16X10		-	1	4	0.9	1221-48R32-16/10-42-Z25
	51	2	16X10		-	1	4	1.2	1221-51R32-16/10-42-Z25
	57	2 1/4	16X10		-	1	4	1.3	1221-57R32-16/10-42-Z25
	64	2 1/2	18X13		-	1	4	1.5	1221-64R32-18/13-42-Z25

Drill rod	Length		Diameter		Weight approx kg	P/N
	mm	Foot	mm	inch		
 Extension rod, R32-Round32-R32 Flushing hole 9.2mm. Wrench flat 25.4mm.	915	3'	32	1 1/4	5.4	23R32-R32-0915-23
	1000	3' 3/8"	32	1 1/4	5.9	23R32-R32-1000-23
	1220	4'	32	1 1/4	7.2	23R32-R32-1220-23
	1830	6'	32	1 1/4	10.8	23R32-R32-1830-23
	2435	8'	32	1 1/4	14.3	23R32-R32-2435-23
	3050	10'	32	1 1/4	17.9	23R32-R32-3050-23
 MF-rod, R32-Round32-R32 Flushing hole 9.2mm. Wrench flat 25.4mm.	3660	12'	32	1 1/4	21.5	23R32-R32-3660-23
	915	3'	32	1 1/4	6.2	24R32-R32/46-0915-23
	1220	4'	32	1 1/4	8.0	24R32-R32/46-1220-23
	1525	5'	32	1 1/4	9.8	24R32-R32/46-1525-23
	1830	6'	32	1 1/4	11.6	24R32-R32/46-1830-23
	2435	8'	32	1 1/4	15.1	24R32-R32/46-2435-23
 Guide speedrod, R32-Round39-R32 Flushing hole 14.5mm.	3050	10'	39	1 1/2	27.0	24R39-R32/46-3050-23
	3660	12'	39	1 1/2	32.0	24R39-R32/46-3660-23


## Bench drilling

R32

Guide tube	Length		Diameter		Weight approx kg	P/N
	mm	Foot	mm	inch		
Guide tube D46 51-64mm D46 for bits from 51-64mm	1220	4'	46	1 3/4	10.0	24R46-R32/46-1220-23
	1525	5'	46	1 3/4	12.5	24R46-R32/46-1525-23
	1830	6'	46	1 3/4	14.2	24R46-R32/46-1830-23
	3050	10'	46	1 3/4	25.0	24R46-R32/46-3050-23

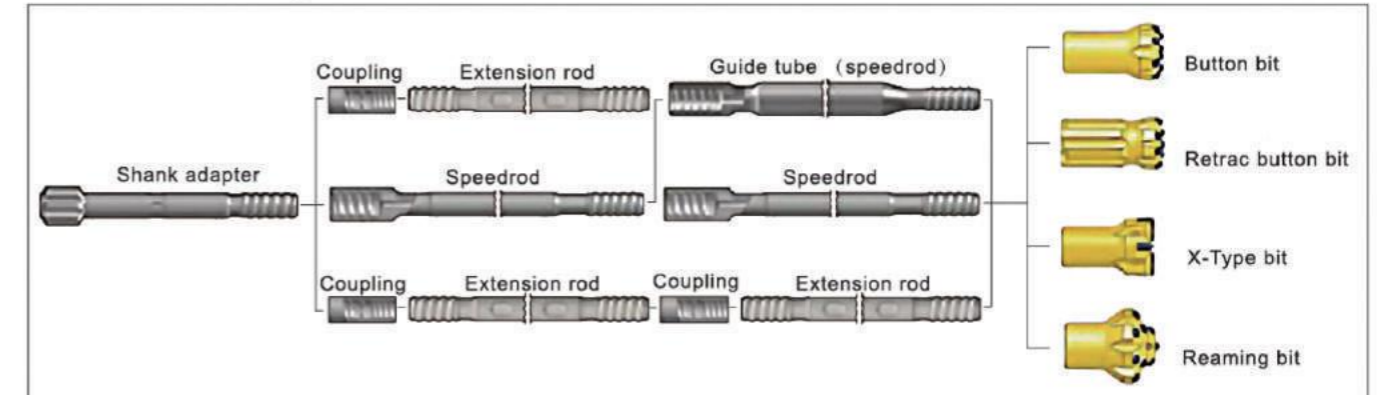


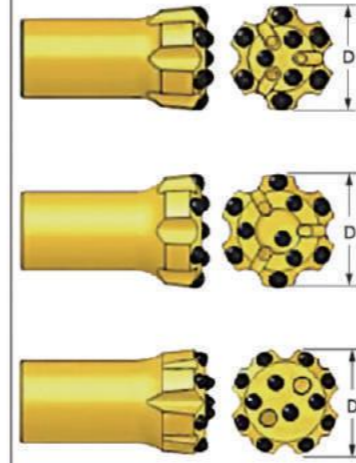
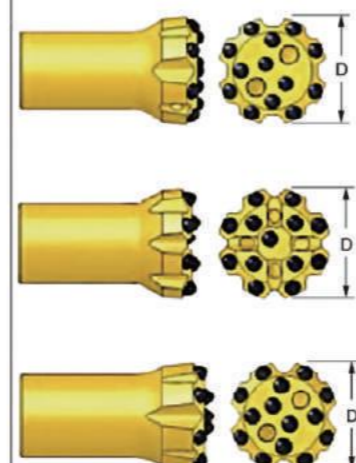
Coupling	Length		Diameter		Thread	Weight approx kg	P/N
	mm	inch	mm	inch			
Coupling sleeves	150	6 1/8	44	1 3/4	R32	1.0	31-R32-44-150-23
	160	6 1/4	44	1 3/4	R32	1.1	31-R32-44-160-23



## Bench drilling





T38



Drill bit	Diameter		NoXbutton diameter			Flushing hole		Weight Approx kg	P/N
	mm	inch	Front	Gauge	Angle	Front	Side		
<b>Spherical buttons</b>									
Button bit 	64	2 1/2	3X11	6X12	35°	3	-	1.8	1431-64T38-311/612-45-QYK5
	64	2 1/2	4X10	8X10	40°	2	-	1.6	1431-64T38-410/810-45-QYK5
	64	2 1/2	3X10,1X10	6X11	35°	3	-	1.7	1433-64T38-410/611-45-QYK5
	70	2 3/4	4X11	8X11	40°	2	-	1.9	1431-70T38-411/811-45-QYK5
	70	2 3/4	4X10,1X10	8X11	30°	4	-	1.9	1432-70T38-510/811-45-QYK5
	70	2 3/4	3X10,1X10	6X12	35°	3	-	1.8	1433-70T38-410/612-45-QYK5
	76	3	4X11	8X11	40°	2	-	2.4	1431-76T38-411/811-45-QYK5
	76	3	5X11	8X13	35°	2	1	2.4	1431-76T38-511/813-45-QYK5
	76	3	3X11,1X11	6X12	35°	3	1	2.6	1433-76T38-411/612-45-QYK5
	76	3	4X11,1X11	8X12	35°	4	-	2.6	1432-76T38-511/812-45-QYK5
	76	3	4X11,1X11	8X11	40°	4	-	2.6	1432-76T38-511/811-45-QYK5
	89	3 1/2	4X13	8X13	40°	2	-	3.3	1431-89T38-413/813-45-QYK5
	89	3 1/2	5X13	8X13	35°	2	-	3.3	1431-89T38-513/813-45-QYK5
	89	3 1/2	6X11	8X12	35°	2	-	3.3	1431-89T38-611/812-45-QYK5
	89	3 1/2	3X11,2X11	6X13	35°	3	1	3.3	1433-89T38-511/613-45-QYK5
	89	3 1/2	4X11,1X11	8X13	35°	4	-	3.3	1433-89T38-511/813-45-QYK5
89	3 1/2	4X13,1X13	8X13	35°	4	-	3.3	1432-89T38-513/813-45-QYK5	
<b>Parabolic buttons</b>									
	64	2 1/2	3X11	6X12	35°	3	-	1.8	1431-64T38-311/612-45-YK5
	64	2 1/2	4X10	8X10	40°	2	-	1.6	1431-64T38-410/810-45-YK5
	64	2 1/2	3X10,1X10	6X11	35°	3	-	1.7	1433-64T38-410/611-45-YK5
	70	2 3/4	4X11	8X11	40°	2	-	1.9	1431-70T38-411/811-45-YK5
	70	2 3/4	3X10,1X10	6X12	35°	3	-	1.8	1433-70T38-410/612-45-YK5
	76	3	4X11	8X11	40°	2	-	2.4	1431-76T38-411/811-45-YK5
	76	3	5X11	8X13	35°	2	1	2.4	1431-76T38-511/813-45-YK5
	76	3	3X11,1X11	6X13	35°	3	1	2.6	1433-76T38-411/613-45-YK5
	76	3	4X11,1X11	8X12	35°	4	-	2.6	1432-76T38-511/812-45-YK5
	76	3	4X11,1X11	8X11	40°	4	-	2.6	1432-76T38-511/811-45-YK5
	89	3 1/2	5X13	8X13	35°	2	-	3.3	1431-89T38-513/813-45-YK5
	89	3 1/2	6X11	8X12	35°	2	-	3.3	1431-89T38-611/812-45-YK5
	89	3 1/2	3X11,2X11	6X13	35°	3	1	3.3	1433-89T38-511/613-45-YK5
	89	3 1/2	4X11,1X11	8X13	35°	4	-	3.3	1433-89T38-511/813-45-YK5
	89	3 1/2	4X13,1X13	8X13	35°	4	-	3.3	1432-89T38-513/813-45-YK5

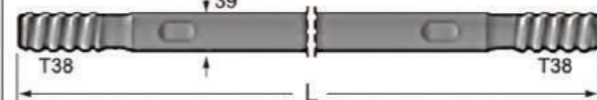




## Bench drilling

T38

Drill bit	Diameter		NoXbutton diameter			Flushing hole		Weight approx kg	P/N	
	mm	inch	Front	Gauge	Angle	Front	Side			
<b>Spherical buttons</b>										
Retrac button bit 	64	2 1/2	4X10	8X10	30°	2	-	2.2	1531-64T38-410/810-45-QYK5	
	64	2 1/2	3X10,1X10	6X11	35°	3	-	2.2	1533-64T38-410/611-45-QYK5	
	70	2 3/4	4X11	8X11	40°	2	-	2.4	1531-70T38-411/811-45-QYK5	
	70	2 3/4	3X10,1X10	6X13	35°	3	-	2.4	1533-70T38-410/613-45-QYK5	
	70	2 3/4	4X10,1X10	8X11	35°	4	-	2.4	1632-70T38-510/811-45-QYK5	
	76	3	4X11	8X11	40°	2	-	3.3	1531-76T38-411/811-45-QYK5	
	76	3	4X11,1X11	8X11	35°	4	-	3.3	1632-76T38-511/811-45-QYK5	
	76	3	4X11,1X11	8X12	35°	4	-	3.3	1632-76T38-511/812-45-QYK5	
	89	3 1/2	4X13	8X13	40°	2	-	4.8	1531-89T38-413/813-45-QYK5	
	89	3 1/2	5X13	8X13	35°	2	-	4.8	1531-89T38-513/813-45-QYK5	
Parabolic buttons 	64	2 1/2	4X10	8X10	30°	2	-	2.2	1531-64T38-410/810-45-YK5	
	64	2 1/2	3X10, 1X10	6X11	35°	3	-	2.2	1533-64T38-410/611-45-YK5	
	70	2 3/4	4X11	8X11	40°	2	-	2.4	1531-70T38-411/811-45-YK5	
	70	2 3/4	3X10,1X10	6X13	35°	3	-	2.4	1533-70T38-410/613-45-YK5	
	70	2 3/4	4X10,1X10	8X11	35°	4	-	2.4	1632-70T38-510/811-45-YK5	
	76	3	4X11	8X11	40°	2	-	3.3	1531-76T38-411/811-45-YK5	
	76	3	4X11,1X11	8X11	35°	4	-	3.3	1632-76T38-511/811-45-YK5	
	76	3	4X11,1X11	8X12	35°	4	-	3.3	1632-76T38-511/812-45-YK5	
	89	3 1/2	4X13	8X13	40°	2	-	4.8	1531-89T38-413/813-45-YK5	
	89	3 1/2	5X13	8X13	35°	2	-	4.8	1531-89T38-513/813-45-YK5	
X-type bit 	64	2 1/2	25X13		-	1	2	1.9	1321-64T38-25/13-42-Z25	
	76	3	25X13		-	1	2	2.5	1321-76T38-25/13-42-Z25	
	89	3 1/2	25X13		-	1	2	2.8	1321-89T38-25/13-42-Z25	
	<b>Spherical buttons</b>									
Dome bit for reaming 	102	4	1X13	16X13	35°	2	2	3.8	1441-102T38-113/1613-45-QYK5	
	127	5	1X13	18X13	35°	1	3	5.2	1441-127T38-113/1813-45-QYK5	
	<b>Parabolic buttons</b>									
	102	4	1X13	16X13	35°	2	2	3.8	1441-102T38-113/1613-45-YK5	
127	5	1X13	18X13	35°	1	3	5.2	1441-127T38-113/1813-45-YK5		

## Bench drilling

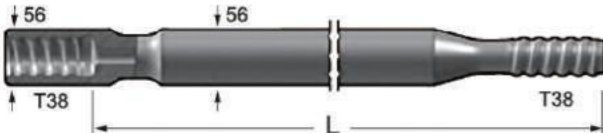
T38


Drill rod	Length		Diameter		Weight approx kg	P/N
	mm	Foot	mm	inch		
Extension rod, T38-Round39-T38 Flushing hole 14.5mm. Wrench flat 32mm. 	1220	4'	39	1 1/2	10.2	23R39-T38-1220-23
	1525	5'	39	1 1/2	12.8	23R39-T38-1525-23
	1830	6'	39	1 1/2	15.3	23R39-T38-1830-23
	2435	8'	39	1 1/2	20.4	23R39-T38-2435-23
	3050	10'	39	1 1/2	25.5	23R39-T38-3050-23
	3660	12'	39	1 1/2	30.9	23R39-T38-3660-23
	3965	13'	39	1 1/2	33.2	23R39-T38-3965-23
	4270	14'	39	1 1/2	35.7	23R39-T38-4270-23
	4880	16'	39	1 1/2	41.0	23R39-T38-4880-23
	5530	18' 11/2"	39	1 1/2	46.3	23R39-T38-5530-23
6095	20'	39	1 1/2	50.9	23R39-T38-6095-23	
MF-rod, T38-Round39-T38 Flushing hole 14.5mm. 	915	3'	39	1 1/2	10.7	24R39-T38/57-0915-23
	1220	4'	39	1 1/2	13.3	24R39-T38/57-1220-23
	1525	5'	39	1 1/2	15.8	24R39-T38/57-1525-23
	1830	6'	39	1 1/2	18.3	24R39-T38/57-1830-23
	3050	10'	39	1 1/2	28.5	24R39-T38/57-3050-23
	3660	12'	39	1 1/2	33.6	24R39-T38/57-3660-23
	4270	14'	39	1 1/2	38.7	24R39-T38/57-4270-23
	4880	16'	39	1 1/2	43.7	24R39-T38/57-4880-23
5530	18' 11/2"	39	1 1/2	49.2	24R39-T38/57-5530-23	
6095	20'	39	1 1/2	53.9	24R39-T38/57-6095-23	
Hex. extension rod, T38-Hex32-T38 Flushing hole 9.6mm. 	1220	4'	32	1 1/4	8.6	23H32-T38-1220-23
	1830	6'	32	1 1/4	12.6	23H32-T38-1830-23
	2435	8'	32	1 1/4	16.6	23H32-T38-2435-23
	3050	10'	32	1 1/4	20.8	23H32-T38-3050-23
3660	12'	32	1 1/4	24.9	23H32-T38-3660-23	
Double thread rod, T38-Round39-T38 Flushing hole 14.5mm. Wrench flat 32mm. 	3050	10'	46	1 3/4	25.7	23R39-T38/2T38-3050-23
	3660	12'	46	1 3/4	30.9	23R39-T38/2T38-3660-23
Guide speedrod, T38-Round46-T38 Flushing hole 17mm. 	1830	6'	46	1 3/4	23.5	24R46-T38/57-1830-23
	3050	10'	46	1 3/4	37.2	24R46-T38/57-3050-23
	3660	12'	46	1 3/4	44.0	24R46-T38/57-3660-23
	4270	14'	46	1 3/4	50.9	24R46-T38/57-4270-23
	4880	16'	46	1 3/4	57.7	24R46-T38/57-4880-23
	5530	18' 11/2"	46	1 3/4	65.0	24R46-T38/57-5530-23
	6095	20'	46	1 3/4	71.3	24R46-T38/57-6095-23

## Bench drilling

T38

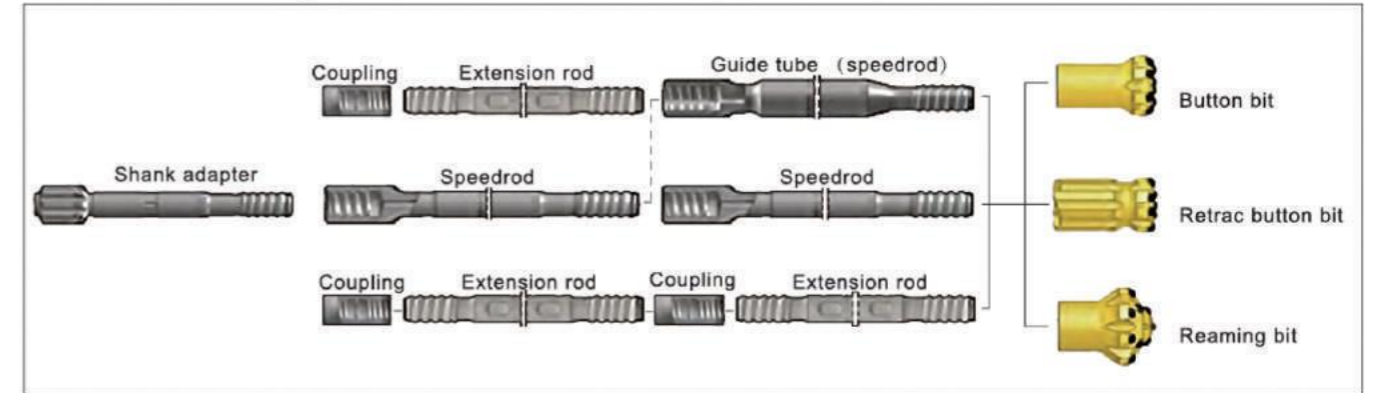
Guide tube	Length		Diameter		Weight approx kg	P/N
	mm	Foot	mm	inch		
Guide tube D56 64-76 D64 76-89 D56 for bits from 64-76mm and D64 for bits from 76-89mm	1220	4'	56	2 1/8	12.6	24G56-T38/56-1220-23
	1525	5'	56	2 1/8	14	24G56-T38/56-1525-23
	1830	6'	56	2 1/8	17.4	24G56-T38/56-1830-23
	3050	10'	56	2 1/8	28.3	24G56-T38/56-3050-23
	3660	12'	56	2 1/8	32.8	24G56-T38/56-3660-23
	4920	16' 2"	56	2 1/8	47.9	24G56-T38/56-4920-23
	3660	12'	64	2 1/2	51	24G64-T38/64-3660-23

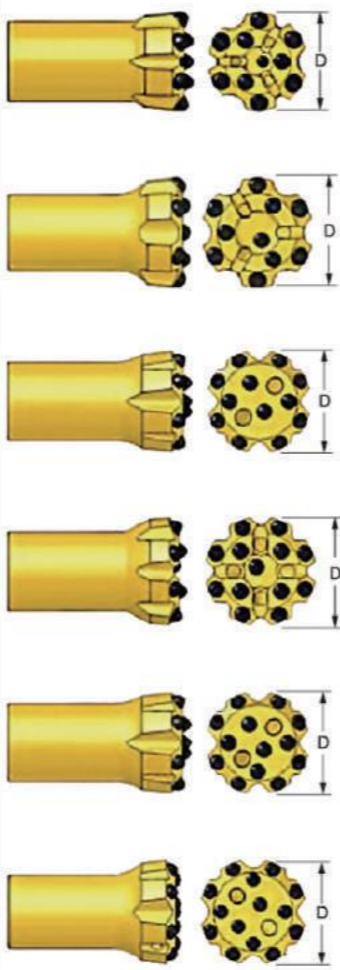


Coupling	Length		Diameter		Thread	Weight approx kg	P/N
	mm	inch	mm	inch			
Coupling sleeves 	190	7 1/2	55	2 5/32	T38	2.1	31-T38-55-190-23

## Bench drilling




T45



Drill bit	Diameter		NoXbutton diameter			Flushing hole		Weight approx kg	P/N
	mm	inch	Front	Gauge	Angle	Front	Side		
<b>Spherical buttons</b>									
Button bit 	70	2 3/4	4X11	8X11	40°	2	-	2.3	1431-70T45-411/811-45-QYK5
	70	2 3/4	3X11, 1X9	6X11	35°	3	-	2.2	1433-70T45-411/611-45-QYK5
	70	2 3/4	4X10, 1X10	8X11	35°	4	-	2.2	1432-70T45-510/811-45-QYK5
	76	3	4X11	8X11	40°	2	-	2.6	1431-76T45-411/811-45-QYK5
	76	3	5X11	8X12	35°	2	1	2.6	1431-76T45-511/812-45-QYK5
	76	3	3X11, 1X11	6X13	35°	3	-	2.4	1433-76T45-411/613-45-QYK5
	76	3	4X11, 1X11	8X12	35°	4	-	2.6	1432-76T45-511/812-45-QYK5
	89	3 1/2	4X13	8X13	40°	2	-	4.6	1431-89T45-413/813-45-QYK5
	89	3 1/2	6X11	8X12	35°	2	-	4.6	1431-89T45-611/812-45-QYK5
	89	3 1/2	3X11, 2X11	6X13	35°	3	1	4.1	1433-89T45-511/613-45-QYK5
	89	3 1/2	4X11, 1X11	8X12	35°	4	-	4.6	1433-89T45-511/812-45-QYK5
	89	3 1/2	4X13, 1X13	8X13	35°	4	-	4.6	1432-89T45-513/813-45-QYK5
	102	4	5X14	8X14	40°	2	-	5.0	1431-102T45-514/814-45-QYK5
	102	4	6X13	8X16	40°	2	1	5.0	1431-102T45-613/816-45-QYK5
	102	4	3X13, 2X13	6X14	35°	3	1	4.5	1433-102T45-513/614-45-QYK5
	102	4	4X13, 1X13	8X14	35°	4	-	4.5	1433-102T45-513/814-45-QYK5
102	4	4X13, 2X13	8X13	35°	4	1	4.5	1433-102T45-613/813-45-QYK5	
<b>Parabolic buttons</b>									
70	2 3/4	3X11, 1X9	6X11	35°	3	-	2.2	1433-70T45-411/611-45-YK5	
70	2 3/4	4X10, 1X10	8X11	35°	4	-	2.2	1432-70T45-510/811-45-YK5	
76	3	4X11	8X11	40°	2	-	2.6	1431-76T45-411/811-45-YK5	
76	3	5X11	8X12	35°	2	1	2.6	1431-76T45-511/812-45-YK5	
76	3	3X11, 1X11	6X13	35°	3	1	2.4	1433-76T45-411/613-45-YK5	
76	3	4X11, 1X11	8X11	35°	4	-	2.6	1432-76T45-511/811-45-YK5	
76	3	4X11, 1X11	8X12	35°	4	-	2.6	1432-76T45-511/812-45-YK5	
89	3 1/2	4X13	8X13	40°	2	-	4.6	1431-89T45-413/813-45-YK5	
89	3 1/2	6X11	8X12	35°	2	-	4.6	1431-89T45-611/812-45-YK5	
89	3 1/2	3X11, 2X11	6X13	35°	3	1	4.1	1433-89T45-511/613-45-YK5	
89	3 1/2	4X11, 1X11	8X12	35°	4	-	4.6	1433-89T45-511/812-45-YK5	
89	3 1/2	4X13, 1X13	8X13	35°	4	-	4.6	1432-89T45-513/813-45-YK5	

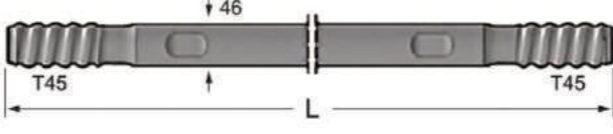


## Bench drilling


T45


Drill bit	Diameter		NoXbutton diameter			Flushing hole		Weight approx kg	P/N
	mm	inch	Front	Gauge	Angle	Front	Side		
<b>Spherical buttons</b>									
Retrac button bit 	70	2 3/4	4X11	8X11	40°	2	-	2.5	1531-70T45-411/811-45-QYK5
	70	2 3/4	3X11, 1X9	6X11	35°	3	-	2.5	1533-70T45-411/611-45-QYK5
	70	2 3/4	4X10, 1X10	8X11	35°	4	-	2.5	1632-70T45-510/811-45-QYK5
	76	3	4X11	8X11	40°	2	-	3.2	1531-76T45-411/811-45-QYK5
	76	3	5X11	8X12	35°	2	1	3.2	1531-76T45-511/812-45-QYK5
	76	3	3X11, 1X11	6X13	35°	3	-	3.2	1533-76T45-411/613-45-QYK5
	76	3	4X11, 1X11	8X11	35°	4	-	3.2	1632-76T45-511/811-45-QYK5
	76	3	4X11, 1X11	8X12	35°	4	-	3.2	1632-76T45-511/812-45-QYK5
	89	3 1/2	4X13	8X13	40°	2	-	5.4	1531-89T45-413/813-45-QYK5
	89	3 1/2	6X11	8X12	35°	2	-	5.4	1531-89T45-611/812-45-QYK5
	89	3 1/2	3X11, 2X11	6X13	35°	3	1	5.4	1533-89T45-511/613-45-QYK5
	89	3 1/2	4X11, 1X11	8X12	35°	4	-	5.4	1533-89T45-511/812-45-QYK5
89	3 1/2	4X13, 1X13	8X13	35°	4	-	5.4	1632-89T45-513/813-45-QYK5	
102	4	5X14	8X14	40°	2	-	6.8	1531-102T45-514/814-45-QYK5	
102	4	6X13	8X16	40°	2	1	6.8	1531-102T45-613/816-45-QYK5	
102	4	3X13, 2X13	6X14	35°	3	1	6.8	1533-102T45-513/614-45-QYK5	
102	4	4X13, 1X13	8X14	35°	4	-	6.8	1533-120T45-513/814-45-QYK5	
102	4	4X13, 2X13	8X13	35°	4	1	6.8	1533-102T45-613/813-45-QYK5	
<b>Parabolic buttons</b>									
	70	2 3/4	3X11, 1X9	6X11	35°	3	-	2.5	1533-70T45-411/611-45-YK5
	70	2 3/4	4X10, 1X10	8X11	35°	4	-	2.5	1632-70T45-510/811-45-YK5
	76	3	4X11	8X11	40°	2	-	3.2	1531-76T45-411/811-45-YK5
	76	3	5X11	8X12	35°	2	1	3.2	1531-76T45-511/812-45-YK5
	76	3	3X11, 1X11	6X13	35°	3	1	3.2	1533-76T45-411/613-45-YK5
	76	3	4X11, 1X11	8X11	35°	4	-	3.2	1632-76T45-511/811-45-YK5
	76	3	4X11, 1X11	8X12	35°	4	-	3.2	1632-76T45-511/812-45-YK5
	89	3 1/2	4X13	8X13	40°	2	-	5.4	1531-89T45-413/813-45-YK5
	89	3 1/2	6X11	8X12	35°	2	-	5.4	1531-89T45-611/812-45-YK5
	89	3 1/2	3X11, 2X11	6X13	35°	3	1	5.4	1533-89T45-511/613-45-YK5
	89	3 1/2	4X11, 1X11	8X12	35°	4	-	5.4	1533-89T45-511/812-45-YK5
	89	3 1/2	4X13, 1X13	8X13	35°	4	-	5.4	1632-89T45-513/813-45-YK5
<b>Spherical buttons</b>									
Dome bit for reaming 	127	5	1X13	18X13	35°	3	1	6.0	1441-127T45-113/1813-45-QYK5
	152	6	2X14	18X14	35°	3	1	10.6	1441-152T45-214/1814-45-QYK5
<b>Parabolic buttons</b>									
127	5	1X13	18X13	35°	3	1	6.0	1441-127T45-113/1813-45-YK5	
152	6	2X14	18X14	35°	3	1	10.6	1441-152T45-214/1814-45-YK5	

## Bench drilling

T45

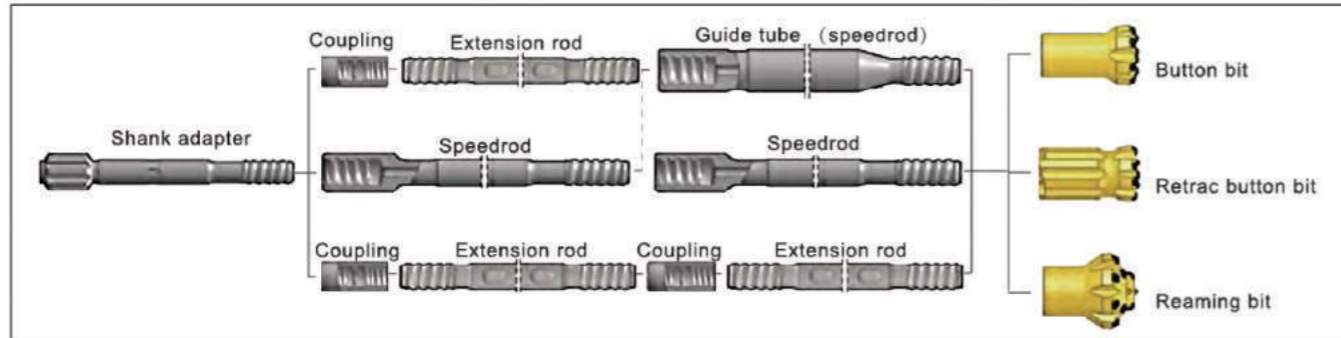
Drill rod	Length		Diameter		Weight approx kg	P/N
	mm	Foot	mm	inch		
Extension rod, T45-Round46-T45 Flushing hole 17mm. Wrench flat 38mm. 	1830	6'	46	1 3/4	21.6	23R46-T45-1830-23
	2435	8'	46	1 3/4	28.3	23R46-T45-2435-23
	3050	10'	46	1 3/4	35.2	23R46-T45-3050-23
	3660	12'	46	1 3/4	42.1	23R46-T45-3660-23
	4270	14'	46	1 3/4	48.9	23R46-T45-4270-23
	5530	18'	46	1 3/4	63.0	23R46-T45-5530-23
	6095	20'	46	1 3/4	69.3	23R46-T45-6095-23
MF- rod, T45-Round46-T45 Flushing hole 17mm. 	1525	5'	46	1 3/4	21.2	24R46-T45/65-1525-23
	1830	6'	46	1 3/4	24.6	24R46-T45/65-1830-23
	3050	10'	46	1 3/4	38.2	24R46-T45/65-3050-23
	3660	12'	46	1 3/4	45.0	24R46-T45/65-3660-23
	4270	14'	46	1 3/4	51.9	24R46-T45/65-4270-23
	5530	18'	46	1 3/4	66.0	24R46-T45/65-5530-23
Guide speedrod, T45-Round52-T45 Flushing hole 21.5mm. 	3050	10'	52	2	46.6	24R52-T45/65-3050-23
	3660	12'	52	2	55.8	24R52-T45/65-3660-23
	4270	14'	52	2	63.8	24R52-T45/65-4270-23
	5530	18'	52	2	81.5	24R52-T45/65-5530-23
	6095	20'	52	2	89.4	24R52-T45/65-6095-23

Guide tube	Length		Diameter		Weight approx kg	P/N
	mm	Foot	mm	inch		
Guide tube D64 76-89mm D76 89-102mm D64 for bits from 76-89mm and D76 for bits from 89-102mm 	1220	4'	64	2 1/8	12.6	24G64-T45/64-1220-23
	1525	5'	64	2 1/8	14.0	24G64-T45/64-1525-23
	1830	6'	64	2 1/8	17.4	24G64-T45/64-1830-23
	3050	10'	64	2 1/8	28.3	24G64-T45/64-3050-23
	3660	12'	64	2 1/8	32.8	24G64-T45/64-3660-23
	1830	6'	76	3	40.0	24G64-T45/76-1830-23
	3660	12'	76	3	77.8	24G64-T45/76-3660-23

Coupling	Length		Diameter		Thread	Weight approx kg	P/N
	mm	inch	mm	inch			
Coupling sleeves 	210	8 1/4	63	2 33/64	T45	3.0	31-T45-63-210-23
	210	8 1/4	66	2 37/64	T45	3.3	31-T45-66-210-23

# Bench drilling

T51



Drill bit	Diameter		NoXbutton diameter			Flushing hole		Weight approx kg	P/N	
	mm	inch	Front	Gauge	Angle	Front	Side			
<b>Spherical buttons</b>										
Button bit	89	3 1/2	4X13	8X13	40°	2	-	4.9	1431-89T51-413/813-45-QYK5	
	89	3 1/2	5X13	8X13	35°	2	1	4.9	1431-89T51-513/813-45-QYK5	
	89	3 1/2	3X11, 2X11	6X13	35°	4	-	4.9	1433-89T51-511/613-45-QYK5	
	89	3 1/2	4X11, 1X11	8X13	35°	4	-	4.9	1433-89T51-511/813-45-QYK5	
	89	3 1/2	4X13, 1X13	8X13	35°	4	-	4.9	1432-89T51-513/813-45-QYK5	
	102	4	4X14	8X14	40°	2	-	5.8	1431-102T51-414/814-45-QYK5	
	102	4	6X13	8X16	35°	2	1	5.8	1431-102T51-613/816-45-QYK5	
	102	4	3X13, 2X13	6X14	35°	3	1	5.2	1433-102T51-513/614-45-QYK5	
	102	4	4X13, 1X13	8X14	35°	4	-	5.8	1433-102T51-513/814-45-QYK5	
	102	4	4X13, 2X13	8X13	35°	4	1	5.8	1433-102T51-613/813-45-QYK5	
Retrac button bit	115	4 1/2	6X14	8X14	35°	2	-	6.8	1431-115T51-614/814-45-QYK5	
	115	4 1/2	6X14	8X16	35°	2	-	6.8	1431-115T51-614/816-45-QYK5	
	115	4 1/2	4X13, 2X13	8X14	35°	4	-	6.8	1433-115T51-613/814-45-QYK5	
	115	4 1/2	4X13, 3X13	8X14	35°	4	-	6.8	1433-115T51-713/814-45-QYK5	
	115	4 1/2	4X14, 2X14	8X16	35°	4	-	6.8	1433-115T51-614/816-45-QYK5	
	127	5	8X14	8X16	35°	2	1	7.5	1431-127T51-814/816-45-QYK5	
	127	5	4X16, 2X13	8X16	35°	4	-	7.5	1433-127T51-616/816-45-QYK5	
	127	5	4X14, 3X14	8X14	35°	4	-	7.5	1433-127T51-714/814-45-QYK5	
	<b>Parabolic buttons</b>									
	Dome bit for reaming	89	3 1/2	5X13	8X13	35°	2	1	4.9	1431-89T51-513/813-45-YK5
89		3 1/2	3X11, 2X11	6X13	35°	4	-	4.9	1433-89T51-511/613-45-YK5	
89		3 1/2	4X11, 1X11	8X13	35°	4	-	4.9	1433-89T51-511/813-45-YK5	
89		3 1/2	4X13, 1X13	8X13	35°	4	-	4.9	1432-89T51-513/813-45-YK5	
102		4	4X14	8X14	40°	2	-	5.8	1431-102T51-414/814-45-YK5	
102		4	6X13	8X16	35°	2	1	5.8	1431-102T51-613/816-45-YK5	
102		4	3X13, 2X13	6X14	35°	3	1	5.2	1433-102T51-513/614-45-YK5	
102		4	4X13, 1X13	8X14	35°	4	-	5.8	1433-102T51-513/814-45-YK5	
102		4	4X13, 2X13	8X13	35°	4	1	5.8	1433-102T51-613/813-45-YK5	
115		4 1/2	6X14	8X16	35°	2	-	6.8	1431-115T51-614/816-45-YK5	
115	4 1/2	4X13, 2X13	8X14	35°	4	-	6.8	1433-115T51-613/814-45-YK5		
115	4 1/2	4X13, 3X13	8X14	35°	4	-	6.8	1433-115T51-713/814-45-YK5		
115	4 1/2	4X14, 2X14	8X16	35°	4	-	6.8	1433-115T51-614/816-45-YK5		

# Bench drilling

T51

Drill bit	Diameter		NoXbutton diameter			Flushing hole		Weight approx kg	P/N	
	mm	inch	Front	Gauge	Angle	Front	Side			
<b>Spherical buttons</b>										
Retrac button bit	89	3 1/2	4X13	8X13	40°	2	-	5.3	1531-89T51-413/813-45-QYK5	
	89	3 1/2	5X13	8X13	35°	2	1	5.3	1531-89T51-513/813-45-QYK5	
	89	3 1/2	3X11, 2X11	6X13	35°	4	-	5.3	1533-89T51-511/613-45-QYK5	
	89	3 1/2	4X11, 1X11	8X13	35°	4	-	5.3	1533-89T51-511/813-45-QYK5	
	89	3 1/2	4X13, 1X13	8X13	35°	4	-	5.3	1632-89T51-513/813-45-QYK5	
	102	4	4X14	8X14	40°	2	-	7.3	1531-102T51-414/814-45-QYK5	
	102	4	6X13	8X16	35°	2	1	7.3	1531-102T51-613/816-45-QYK5	
	102	4	4X13, 1X13	8X14	35°	4	-	7.3	1533-102T51-513/814-45-QYK5	
	102	4	4X13, 2X13	8X13	35°	4	1	7.3	1533-102T51-613/813-45-QYK5	
	102	4	4X13, 1X13	8X14	35°	4	1	7.3	1533-102T51-513/814-45-QYK5	
Parabolic buttons	115	4 1/2	6X14	8X14	35°	2	-	9.8	1531-115T51-614/814-45-QYK5	
	115	4 1/2	6X14	8X16	35°	2	-	9.8	1531-115T51-614/816-45-QYK5	
	115	4 1/2	4X13, 2X13	8X14	35°	4	-	9.8	1533-115T51-613/814-45-QYK5	
	115	4 1/2	4X13, 3X13	8X14	35°	4	-	9.8	1533-115T51-713/814-45-QYK5	
	115	4 1/2	4X14, 2X14	8X16	35°	4	-	9.8	1533-115T51-614/816-45-QYK5	
	127	5	8X14	8X16	35°	2	1	12.0	1531-127T51-814/816-45-QYK5	
	127	5	4X16, 2X13	8X16	35°	4	-	12.0	1533-127T51-616/816-45-QYK5	
	127	5	4X14, 3X14	8X14	35°	4	-	12.0	1533-127T51-714/814-45-QYK5	
	<b>Spherical buttons</b>									
	Dome bit for reaming	89	3 1/2	5X13	8X13	35°	2	1	5.3	1531-89T51-513/813-45-YK5
89		3 1/2	3X11, 2X11	6X13	35°	4	-	5.3	1533-89T51-511/613-45-YK5	
89		3 1/2	4X11, 1X11	8X13	35°	4	-	5.3	1533-89T51-511/813-45-YK5	
89		3 1/2	4X13, 1X13	8X13	35°	4	-	5.3	1632-89T51-513/813-45-YK5	
102		4	4X14	8X14	40°	2	-	7.3	1531-102T51-414/814-45-YK5	
102		4	6X13	8X16	35°	2	1	7.3	1531-102T51-613/816-45-YK5	
102		4	4X13, 1X13	8X14	35°	4	-	7.3	1533-102T51-513/814-45-YK5	
102		4	4X13, 2X13	8X13	35°	4	1	7.3	1533-102T51-613/813-45-YK5	
102		4	4X13, 1X13	8X14	35°	4	1	7.3	1533-102T51-513/814-45-YK5	
115		4 1/2	6X14	8X16	35°	2	-	9.8	1531-115T51-614/816-45-YK5	
115	4 1/2	4X13, 2X13	8X14	35°	4	-	9.8	1533-115T51-613/814-45-YK5		
115	4 1/2	4X13, 3X13	8X14	35°	4	-	9.8	1533-115T51-713/814-45-YK5		
115	4 1/2	4X14, 2X14	8X16	35°	4	-	9.8	1533-115T51-614/816-45-YK5		
<b>Spherical buttons</b>										
152	6	2X14	18X14	35°	3	1	10.6	1441-152T51-214/1814-45-QYK5		
<b>Parabolic buttons</b>										
152	6	2X14	18X14	35°	3	1	10.6	1441-152T51-214/1814-45-YK5		

## Bench drilling

T51

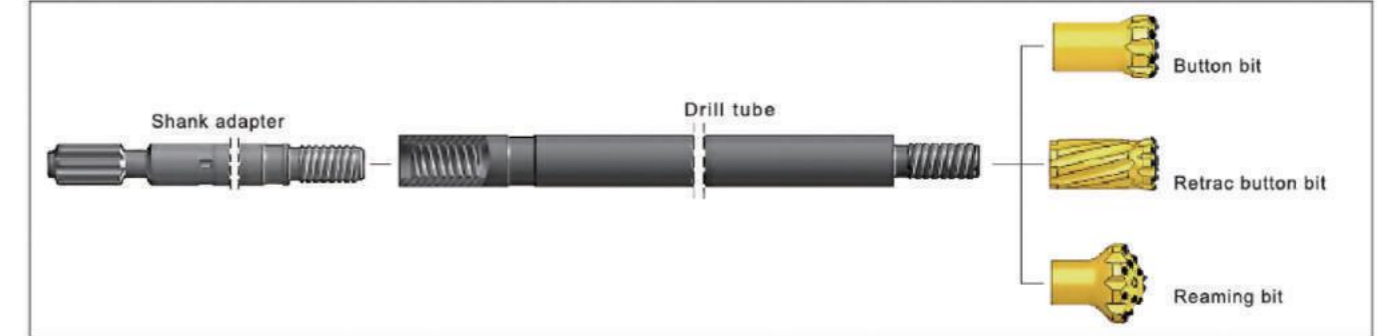
Drill rod	Length		Diameter		Weight approx kg	P/N
	mm	Foot	mm	inch		
Extension rod, T51-Round52-T51 Flushing hole 21.5mm. Wrench flat 45mm.	3050	10'	52	2	45.3	23R52-T51-3050-23
	3660	12'	52	2	54.1	23R52-T51-3660-23
	4270	14'	52	2	63.0	23R52-T51-4270-23
	4880	16'	52	2	71.8	23R52-T51-4880-23
	5530	18'	52	2	81.2	23R52-T51-5530-23
	6095	20'	52	2	89.4	23R52-T51-6095-23
MF- rod, T51-Round52-T51 Flushing hole 21.5mm.	1525	5'	52	2	26.2	24R52-T51/72-1525-23
	1830	6'	52	2	30.6	24R52-T51/72-1830-23
	3050	10'	52	2	48.3	24R52-T51/72-3050-23
	3660	12'	52	2	57.1	24R52-T51/72-3660-23
	4270	14'	52	2	66.0	24R52-T51/72-4270-23
	4880	16'	52	2	74.8	24R52-T51/72-4880-23
	5530	18'	52	2	84.2	24R52-T51/72-5530-23
	6095	20'	52	2	92.4	24R52-T51/72-6095-23

Guide tube	Length		Diameter		Weight approx kg	P/N
	mm	Foot	mm	inch		
Guide rod D76 89-102 D87 102-127 D76 for bits from 89-102mm and D87 for bits from 102-127mm	1830	6'	76	3	42.0	24G76-T51/76-1830-23
	3660	12'	76	3	81.0	24G76-T51/76-3660-23
	3660	12'	87	3 1/2	86.0	24G87-T51/87-3660-23

Coupling	Length		Diameter		Thread	Weight approx kg	P/N
	mm	inch	mm	inch			
Coupling sleeves	225	8 7/8	71	2 51/64	T51	4.6	31-T51-71-225-23
	225	8 7/8	76	3	T51	4.8	31-T51-76-225-23
	235	9 1/4	72	2 7/8	T51	4.7	31-T51-72-235-23
	235	9 1/4	77	3 1/32	T51	4.9	31-T51-77-235-23

## Bench drilling

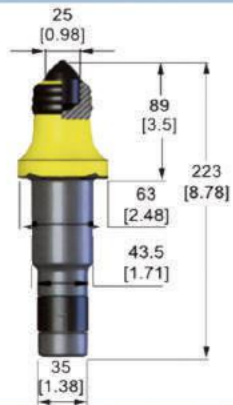
ST58



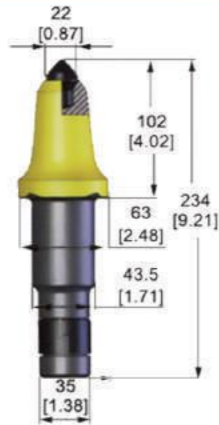
Drill bit	Diameter		NoXbutton diameter			Flushing hole		Weight approx kg	P/N	
	mm	inch	Front	Gauge	Angle	Front	Side			
Button bit	Spherical buttons									
	89	3 1/2	6X12	8X12	35°	2	1	4.1	1431-89ST58-612/812-45-QYK5	
	89	3 1/2	6X13	8X13	35°	2	1	4.1	1431-89ST58-613/813-45-QYK5	
	89	3 1/2	4X13, 1X13	8X13	35°	4	-	4.1	1432-89ST58-513/813-45-QYK5	
	89	3 1/2	4X12, 2X12	8X12	35°	4	-	4.1	1433-89ST58-612/812-45-QYK5	
	95	3 3/4	4X13, 1X13	8X14	35°	4	-	4.6	1433-95ST58-513/814-45-QYK5	
	102	4	6X14	8X14	35°	2	-	6.0	1431-102ST58-614/814-45-QYK5	
	102	4	6X13	8X16	35°	2	1	6.0	1431-102ST58-613/816-45-QYK5	
	115	4 1/2	6X14	8X16	35°	2	-	7.0	1431-115ST58-614/816-45-QYK5	
	Retrac button bit	Parabolic buttons								
89		3 1/2	6X12	8X12	35°	2	1	4.1	1431-89ST58-612/812-45-YK5	
89		3 1/2	6X13	8X13	35°	2	1	4.1	1431-89ST58-613/813-45-YK5	
89		3 1/2	4X13, 1X13	8X13	35°	4	-	4.1	1432-89ST58-513/813-45-YK5	
89		3 1/2	4X12, 2X12	8X12	35°	4	-	4.1	1433-89ST58-612/812-45-YK5	
95		3 3/4	4X13, 1X13	8X14	35°	4	-	4.6	1433-95ST58-513/814-45-YK5	
102		4	6X14	8X14	35°	2	-	6.0	1431-102ST58-614/814-45-YK5	
102		4	6X13	8X16	35°	2	1	6.0	1431-102ST58-613/816-45-YK5	
115		4 1/2	6X14	8X16	35°	2	-	7.0	1431-115ST58-614/816-45-YK5	
Retrac button bit		Spherical buttons								
	89	3 1/2	6X12	8X14	35°	2	1	5.1	1531-89ST58-612/814-45-QYK5	
	89	3 1/2	4X13, 1X13	8X13	35°	4	-	5.1	1632-89ST58-513/813-45-QYK5	
	102	4	7X12	8X14	35°	2	1	6.5	1531-102ST58-712/814-45-QYK5	
	115	4 1/2	6X14	8X16	35°	2	-	8.5	1531-115ST58-614/816-45-QYK5	
	Retrac button bit	Parabolic buttons								
		89	3 1/2	6X12	8X14	35°	2	1	5.1	1531-89ST58-612/814-45-YK5
		89	3 1/2	4X13, 1X13	8X13	35°	4	-	5.1	1632-89ST58-513/813-45-YK5
		102	4	7X12	8X14	35°	2	1	6.5	1531-102ST58-712/814-45-YK5
		115	4 1/2	6X14	8X16	35°	2	-	8.5	1531-115ST58-614/816-45-YK5

## Conical pick tools 43mm/35mm(1.70"/1.38") step shank

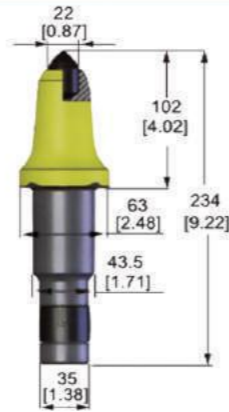
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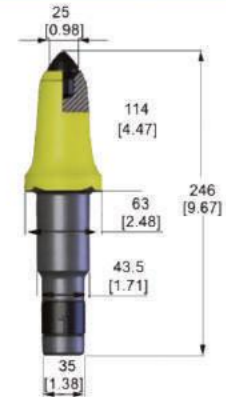
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◆JZ102/43-U170/M22-42B-3



◆JZ114/43-U170/Z25-42B-3



## Conical pick tools 35mm(1.38") shank

◆JZ89/35-U95/Z25-42N-3



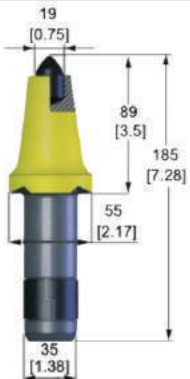
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◆JZ89/35-U95/Z22/Z4-42N-3



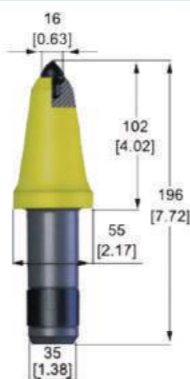
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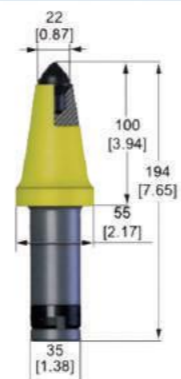
◆JZ89/35-U94/M19-42B-3



◆JZ102/35-U92/M16-42-3



◆JZ100/35-U92/M22-42-3



## Conical pick tools 30mm(1.18") shank

◆JZ70/30-U84/M19-42B-3



◆JZ80/30-U84/Z16-42-3



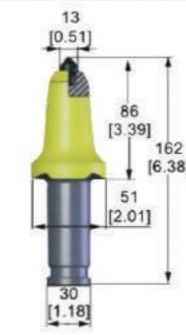
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◆JZ70/30-U84/M19-42B-3



◆JZ80/30-U84/Z16-42-3

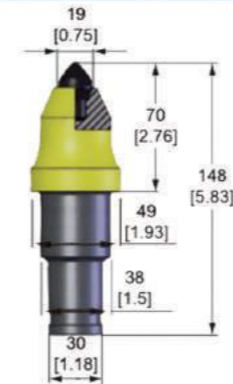


◆JZ64/25-U76/Z16-42-3

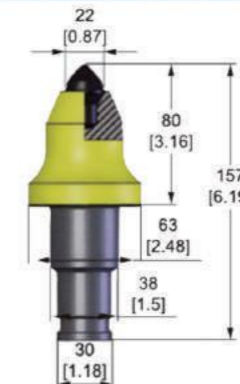


## Crusher pick tools 38mm/30mm(1.5"/1.18") step shank

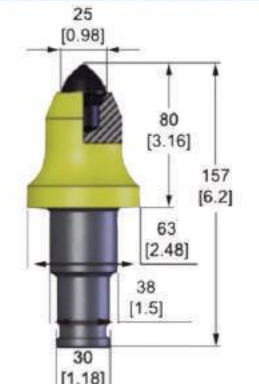
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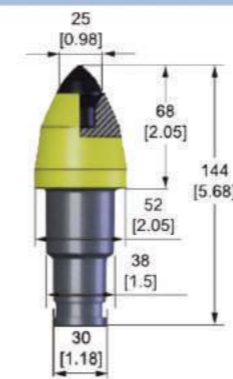
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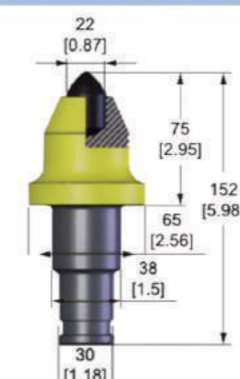
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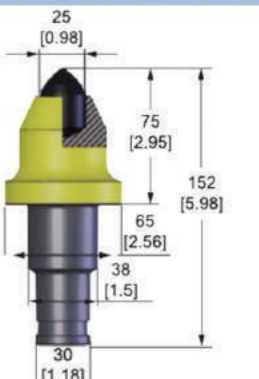
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◆JZ75/38-S160/Z22-42-3



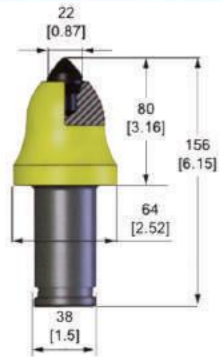
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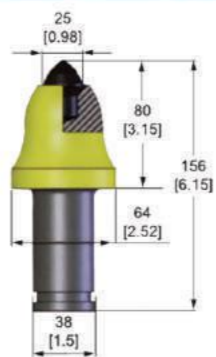
## Crusher pick tools

38mm(1.5") shank

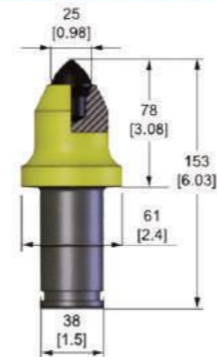
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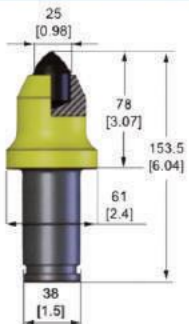
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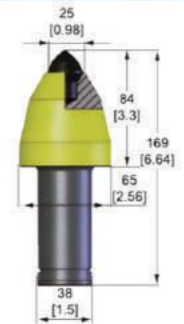
◆JZ78/38-S150/M25-42-3



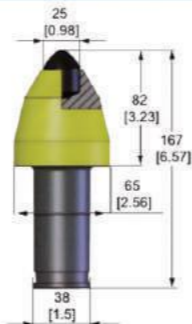
◆JZ78/38-S150/Z25-42-3



◆JZ84/38-JMS260/Z25-42-3



◆JZ82/38-JMS260/Z25-42-3



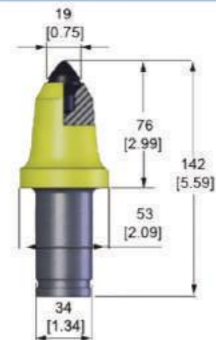
## Crusher pick tools

34mm(1.34") shank

◆JZ78/34-S100/M22-42-3



◆JZ76/34-S100/M19-42-3



◆JZ74/34-S100/M16-42-3

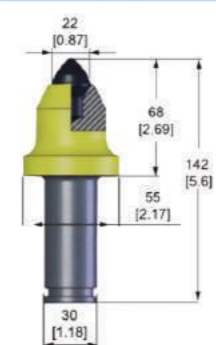


30mm(1.18") shank

◆JZ68/30-U120/M19-42-3



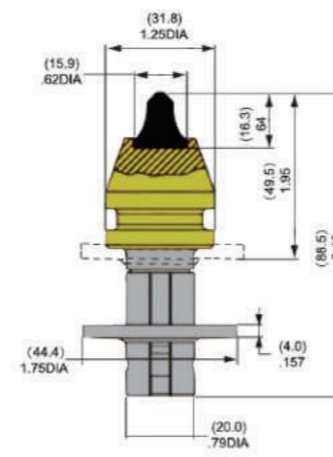
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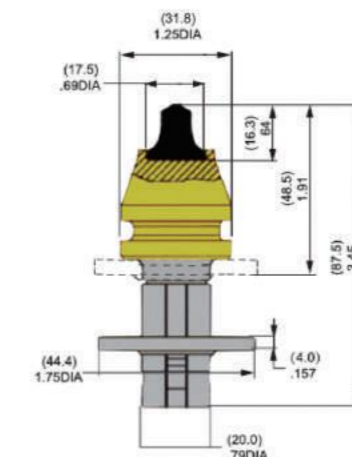
## Road milling tools

20mm(.76") shank

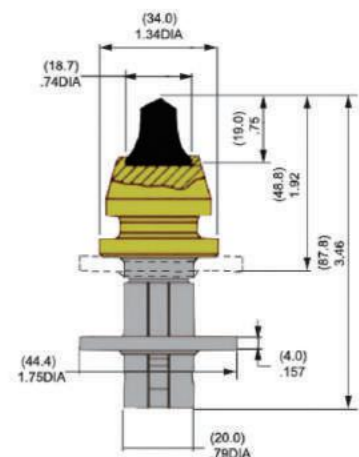
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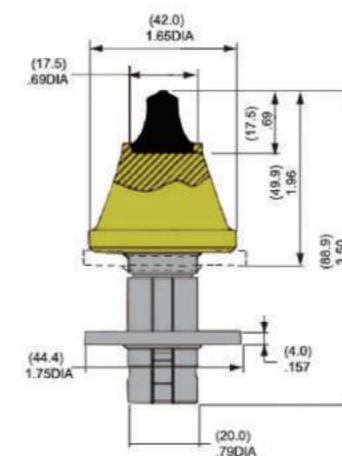
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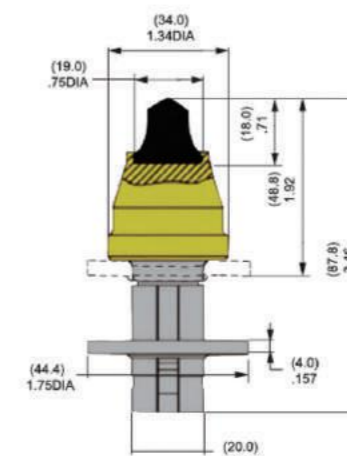
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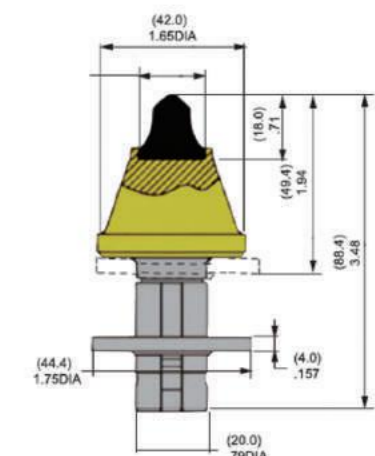
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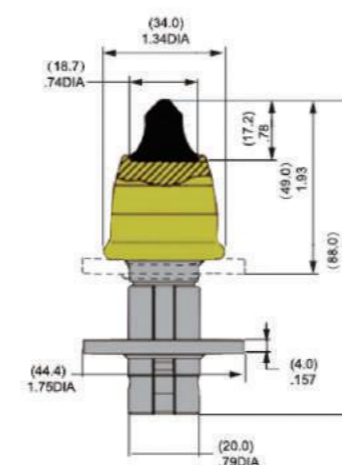
◆DM2022



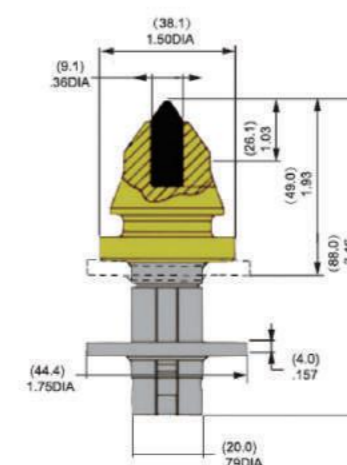
◆DM622



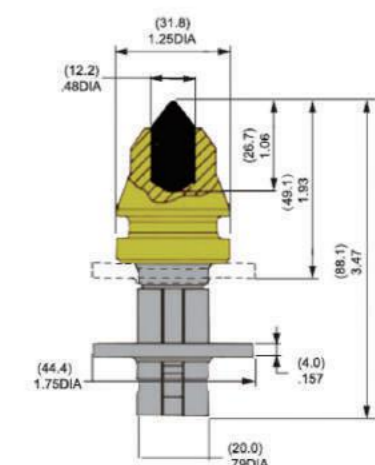
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◆DC35

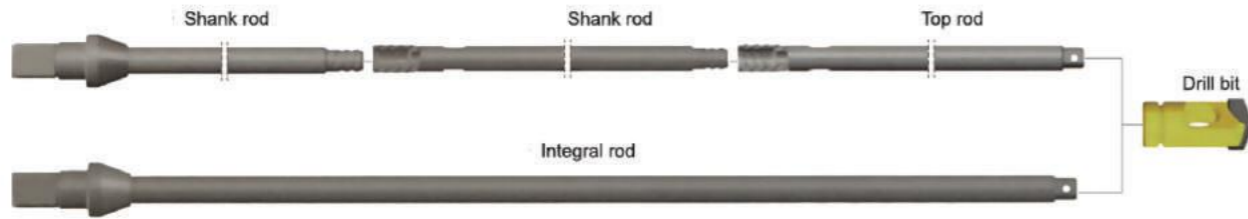


◆DC622



## Drilling tools for bolting

F 28mm powder eject in tube drilling



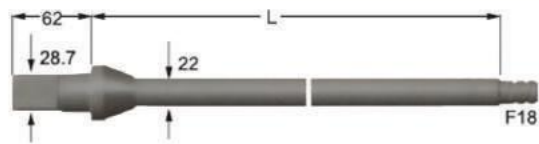
◆QNT27-H16



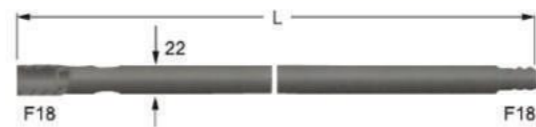
◆QNT30-H16



◆QNG22-F28/F18-L



◆QNG22-F18N/F18-L



◆QNG22-F18N/H16-L



◆QNG22-F28/H16-L



◆MGJ29-F28/H-L

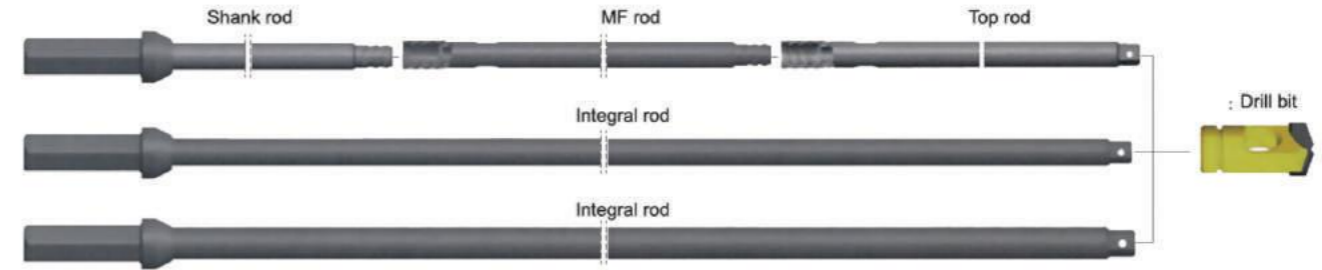


◆MSJ29-F28/D-L



## Drilling tools for bolting

H 28mm powder eject in tube drilling



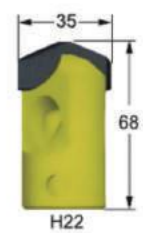
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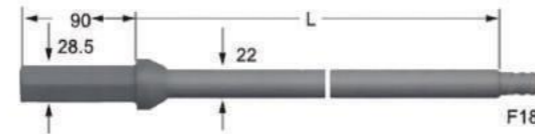
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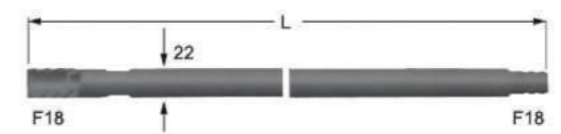
◆QNT35-H22



◆QNG22-H28/F18-L



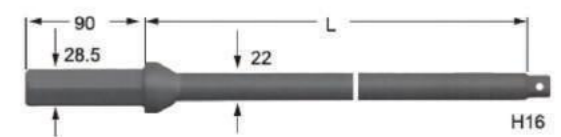
◆QNG22-F18N/F18-L



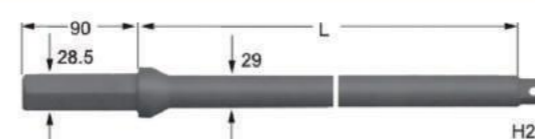
◆QNG22-F18N/H16-L



◆QNG22-H28/H16-L



◆QNG29-H28/H22-L



◆MGJ29-H28/H-L



◆MSJ29-H28/D-L

