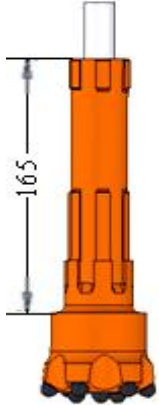
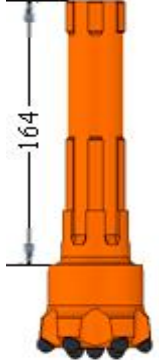
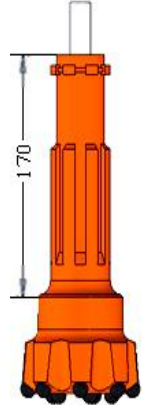
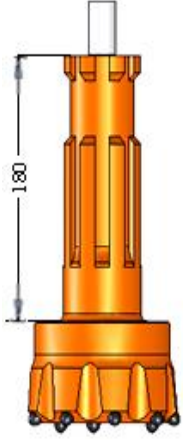
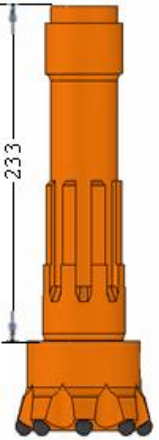
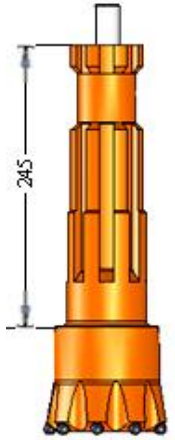
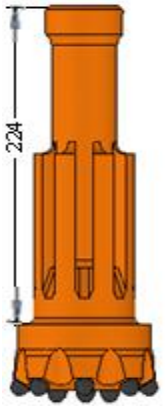
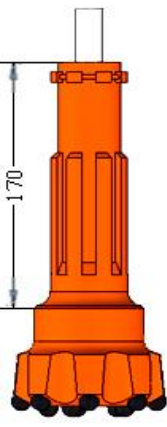



Bit shank identification chart

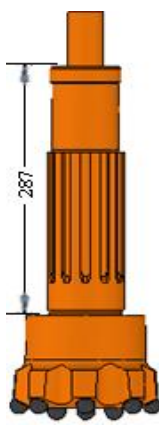
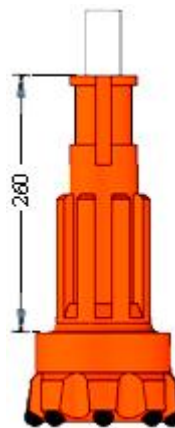
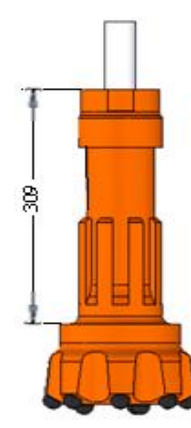
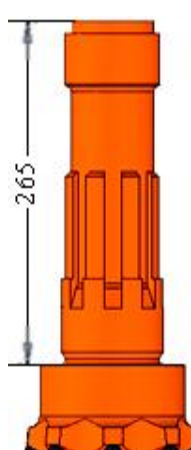
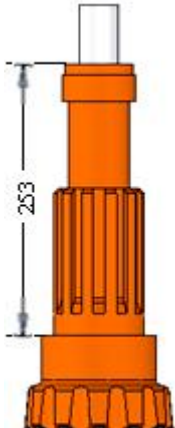
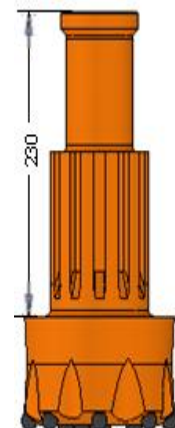
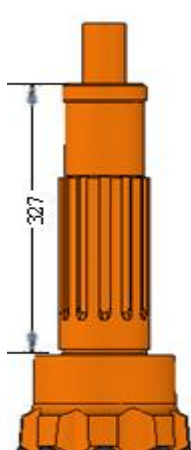
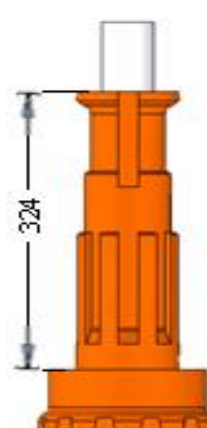
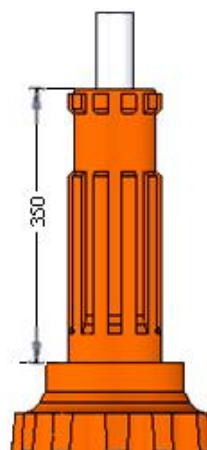
Hammer brands with with identical shank designs

2 & 3 inches DTH hammers		
 <p>Spline: 6, BR 2</p>	 <p>Spline:6 , BR3</p>	 <p>Spline: 8, Mach 303</p>
3 inches DTH hammers		
 <p>Spline: 8, DHD3.5</p>	 <p>Spline: 3, Cop 32</p>	 <p>Spline:8, Cop 34</p>
3 & 4 inches DTH hammers		
 <p>Spline: 8, Mission 30</p>	 <p>Spline: 8, Mach 44</p>	 <p>Spline: 8, DHD340 A</p>

Bit shank identification chart (continued)

4 inches DTH hammers		
<p>Spline: 7, Cop 42</p>	<p>Spline: 10, QL 40</p>	<p>Spline: 12, Mission 40</p>
4 & 5 inches DTH hammers		
<p>Spline: 12, XL 4</p>	<p>Spline: 8, SD 4</p>	<p>Spline: 8, DHD350R</p>
5 inches DTH hammers		
<p>Spline: 8, Cop 52</p>	<p>Spline: 12, QL 50</p>	<p>Spline: 12, Mission 50</p>

Bit shank identification chart (continued)

5 & 6 inches DTH hammers		
 <p>Spline: 12, XL 5</p>	 <p>Spline: 8, SD5</p>	 <p>Spline: 8 DHD360</p>
6 inches DTH hammers		
 <p>Spline: 9, Cop 62</p>	 <p>Spline: 12, QL 60</p>	 <p>Spline: 12, Mission 60</p>
6 & 8 inches DTH hammers		
 <p>Spline: 12, XL 6</p>	 <p>Spline: 8, SD6</p>	 <p>Spline: 10, DHD380</p>

Bit shank identification chart (continued)

8 inches DTH hammers		
<p>Spline: 16, QL80</p>	<p>Spline:12, Mission 80</p>	<p>Spline: 8, SD8</p>
10 & 12 inches DTH hammers		
<p>Spline: 8, SD10</p>	<p>Spline: 8, DHD 112</p>	<p>Spline: 8, SD 12</p>
12 inches DTH hammers		
<p>Spline: 10, Numa 120</p>		

Chart of various hammer brands against shank styles

Note: Some different hammers share the same shank, i.e, XL3 from Sandvik and DHD3.5 from Ingersoll Rand shanks have the same DHD3.5 style. So the following chart will show some most popular DTH hammers shank designs:

2 inches hammers	Shank style	Hammer brand	Producer	
		BR 2	BR 2	Bulroc
3 & 3.5 inches hammers	Shank style	Hammer brand	Producer	
		BR 3	BR 3	Bulroc
		Mach 303	Mach 303	Halco
	DHD3.5		DHD3.5	Ingersoll Rand/Atlas Copco
			TD35	Atlas Copco
			Hyper 31 (optional)	Bulroc
			XL 3	Sandvik
	COP 32		COP 32	Atlas Copco
			Secoroc 3	Secoroc/Atlas Copco
	COP 34	COP 34	Atlas Copco	
Mission 30	Mission 30	Sandvik		
4 inches hammers	Shank style	Hammer brand	Producer	
	Mach 44		Mach 44	Halco
			Dominator 400	Halco
	DHD340A		DHD340A	Ingersoll Rand/ Atlas Copco
			COP 44	Atlas Copco
			DHD4	Ingersoll Rand/Atlas Copco
			Secoroc 4	Secoroc/Atlas Copco
			Hyper 41 (optional)	Bulroc
			DTH 40 (optional)	Furukawa
	COP 42	COP 42	Atlas Copco	
	QL 40	QL 40	Atlas Copco	
	Mission 40	Mission 40	Sandvik	
	XL 4		XL 4	Sandvik
			Hyper 41 (optional)	Bulroc
	SD4(A34/15)		SD4(A34/15)	Sandvik
			Hyper 41 (optional)	Bulroc
			DTH40 (optional)	Furukawa
		BH 40	Boart Longyear	

Chart of various hammer brands against shank styles(continued)

	Shank style	Hammer brand	Producer
5 inches hammers	DHD350R	DHD350R	Ingersoll Rand/Atlas Copco
		DH 5	Ingersoll Rand/Atlas Copco
		COP 54	Atlas Copco
		DTH 55	Furukawa
		Secoroc	Secoco/Atlas Copco
		BH 55	Boart Longyear
		Hyper 51(optional)	Bulroc
	COP 52	COP 52	Atlas Copco
	QL 50	QL 50	Ingersoll Rand/Atlas Copco
		COP 54 gold	Atlas Copco
		Patriot 50	Numa
		Hyper 51(optional)	Bulroc
		TD50/TD55	Atlas Copco
		HP50/55	Atlas Copco
	Mission 50/55	Mission 50/55	Sandvik
	XL 5	XL 5	Sandvik
	SD5(A43/15)	SD5(A43/15)	Sandvik
DTH 55 (optional)		Furukawa	
BH 50		Boart Longyear	
Hyper 51(optional)		Bulroc	
6 inches hammers	Shank style	Hammer brand	Producer
	DHD 360	DHD360	Ingersoll Rand/Atlas Copco
		COP 64	Atlas Copco
		SF 6	Ingersoll Rand/Atlas Copco
		Challenger 6	Numa
		Patriot 6	Numa
		DTH 60(optional)	Furukawa
		Secoroc 6	Secoroc/Atlas Copco
		Hyper 63(optional)	Bulroc
		DHD6/DHD6.5	Atlas Copco
COP 62	COP 62	Atlas Copco	
QL 60	QL 60	Ingersoll Rand/ Atlas Copco	

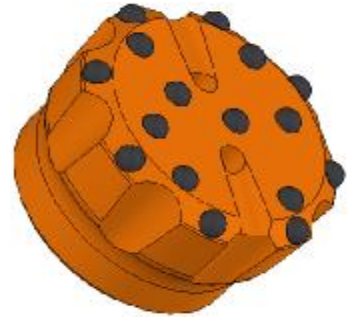
Chart of various hammer brands against shank styles(continued)

	Shank style	Hammer brand	Producer	
6 inches hammers	QL 60	COP 64 Gold	Atlas Copco	
		TD60/65/70	Atlas Copco	
		HP60/HP65	Atlas Copco	
	Mission 60	Mission 60/65	Sandvik	
	XL 6	XL 6	Sandvik	
	SD6 (53-15)	SD6 (53-15)	Sandvik	
		Hyper 63 (optional)	Bulroc	
		DTH 60 (optional)	Furukawa	
8 inches hammers	DHD380	DHD 380	Ingersoll Rand/Atlas Copco	
		Hyper 81(optional)	Bulroc	
		Challenger 80	Numa	
		Patriot 80	Numa	
		COP 84	Atlas Copco	
	QL 80	QL 80	Ingersoll Rand/Atlas Copco	
		TD80/85	Atlas Copco	
	Mission 80	Mission 80/85	Sandvik	
	SD8(63-15)	SD8(63-15)	Sandvik	
		Hyper 81(optional)	Bulroc	
		XL 8	Sandvik	
	10 inches hammers	SD10	SD10	Sandvik
			Hyper 101 (optional)	Bulroc
12 inches hammers	DHD 112	DHD 112	Ingersoll Rand/Atlas Copco	
		XL 12	Sandvik	
		Hyper 121 (optional)	Bulroc	
		Mach 132	Halco	
	SD 12	SD 12	Sandvik	
		Hyper 121 (optional)	Bulroc	
	Numa 120	Challenger 120	Numa	
		Patriot 120	Numa	
		Hyper 121 (optional)	Bulroc	

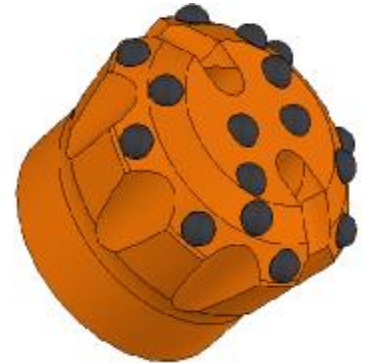
*****optional: means this brand of hammer does not have only one kind of shank style, other styles of shanks are also available for the same hammer.**

DTH button bits face styles

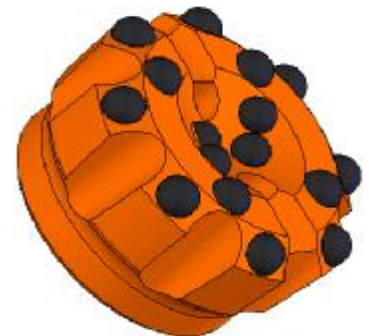
Flat face: This is an all round design usually, especially for hard and abrasive rock formation. So typically flat face with hemi-spherical buttons design are the most popular choice.



Convex face: A classic design for soft to medium hard rocks formation, but not so abrasive. Very excellent penetration rate but poor in hole deviation if rocks are hard.



Concave face: Medium hard to hard rock formations, but less abrasive and fractured. Especially for deep hole drilling, excellent control over hole deviation.



DGR face: A special design for hard or very hard rocks drilling conditions, double gauge row buttons provide very excellent wear-resistance and very longer life time. Usually only for some bigger diameter button bits.



Carbides shape of DTH buttons

**Hemispherical button:**

Universal buttons for all rock formation, best suited to hardest and very abrasive rocks formation.

**Parabolic button (semi-ballistic)**

Excellent penetration rate, but only suited to medium hard and not so very abrasive rock formation.

**Ballistic button:**

Similar to parabolic buttons, used for soft to medium hard and not so abrasive rock formation, excellent in penetration rate.

DTH button bits

2 inches DTH hammer button bits						
Shank style	Diameter in mm	Flushing holes No.	Gauge buttons	Face buttons	Approx. weight	Part Number
BR 2	76	2	6 x 13mm	3 x 13mm	3.6 kgs	BR2-76
	80	2	6 x 14mm	3 x 13mm	4.0 kgs	BR2-80
	90	2	6 x 14mm	5 x 12mm	4.2 kgs	BR3-90
3 inches DTH hammer button bits						
Shank style	Diameter in mm	Flushing holes No.	Gauge buttons	Face buttons	Approx. weight	Part number
BR 3	85	2	6 x 13mm	4 x 12mm	3.8 kgs	BR3-85
	90	2	7 x 13mm	5 x 12mm	4.0 kgs	BR3-90
	95	2	7 x 13mm	6 x 12mm	4.3 kgs	BR3-95
	100	2	7 x 13mm	6 x 12mm	4.8 kgs	BR3-100
	105	2	8 x 12mm	7 x 12mm	5.2 kgs	BR3-105
Mach 303	85	2	6 x 13mm	4 x 12mm	4.0 kgs	Mach33-85
	90	2	7 x 13mm	5 x 12mm	4.2 kgs	Mach33-90
	95	2	7 x 13mm	6 x 12mm	4.5 kgs	Mach33-95
	100	2	7 x 13mm	6 x 12mm	5.0 kgs	Mach33-100
	105	2	8 x 12mm	7 x 12mm	5.5 kgs	Mach33-105
DHD3.5	85	2	6 x 13mm	4 x 12mm	4.2 kgs	DHD3.5-85
	90	2	7 x 13mm	5 x 12mm	4.5 kgs	DHD3.5-90
	95	2	7 x 13mm	6 x 12mm	4.8 kgs	DHD3.5-95
	100	2	7 x 13mm	6 x 12mm	5.0 kgs	DHD3.5-100
	105	2	8 x 12mm	7 x 12mm	5.5 kgs	DHD3.5-105
COP 32	85	2	6 x 13mm	4 x 12mm	4.2 kgs	COP32-85
	90	2	7 x 13mm	5 x 12mm	4.5 kgs	COP32-90
	95	2	7 x 13mm	6 x 12mm	4.7 kgs	COP32-95
	100	2	7 x 13mm	6 x 12mm	5.0 kgs	COP32-100
	105	2	8 x 12mm	7 x 12mm	5.2 kgs	COP32-105
COP 34	85	2	6 x 13mm	4 x 12mm	4.2 kgs	COP34-85
	90	2	7 x 13mm	5 x 12mm	4.5 kgs	COP34-90
	95	2	7 x 13mm	6 x 12mm	4.8 kgs	COP34-95
	100	2	7 x 13mm	6 x 12mm	5.0 kgs	COP34-100
	105	2	8 x 12mm	7 x 12mm	5.5 kgs	COP34-105
Mission 30	85	2	6 x 13mm	4 x 12mm	4.3 kgs	Mission30-85
	90	2	7 x 13mm	5 x 12mm	4.6 kgs	Mission30-90
	95	2	7 x 13mm	6 x 12mm	4.9 kgs	Mission30-95
	100	2	7 x 13mm	6 x 12mm	5.2 kgs	Mission30-100
	105	2	8 x 12mm	7 x 12mm	5.8 kgs	Mission30-105

DTH button bits(continued)

4 inches DTH hammer button bits						
Shank style	Diameter in mm	Flushing holes No.	Gauge buttons	Face buttons	Approx. weight	Part number
Mach 44	105	2	7 x 14mm	6 x 13mm	8.0 kgs	Mach 44-105
	110	2	7 x 14mm	6 x 13mm	8.5 kgs	Mach 44-110
	115	2	8 x 14mm	7 x 13mm	8.8 kgs	Mach 44-115
	120	2	8 x 16mm	7 x 13mm	9.4 kgs	Mach 44-120
	127	2	8 x 16mm	7 x 13mm	10.5 kgs	Mach 44-127
DHD340A	105	2	7 x 14mm	6 x 13mm	8.5 kgs	DHD340-105
	110	2	7 x 14mm	6 x 13mm	8.8 kgs	DHD340-110
	115	2	8 x 14mm	7 x 13mm	9.0 kgs	DHD340-115
	120	2	8 x 16mm	7 x 13mm	9.9 kgs	DHD340-120
	127	2	8 x 16mm	7 x 13mm	11.0 kgs	DHD340-127
COP 42	105	2	7 x 14mm	6 x 13mm	8.2 kgs	COP 42-105
	110	2	7 x 14mm	6 x 13mm	8.5 kgs	COP 42-110
	115	2	8 x 14mm	7 x 13mm	8.9 kgs	COP 42-115
	120	2	8 x 16mm	7 x 13mm	9.5 kgs	COP 42-120
	127	2	8 x 16mm	7 x 13mm	10.8 kgs	COP 42-127
QL 40	105	2	7 x 14mm	6 x 13mm	9.0 kgs	QL 40-105
	110	2	7 x 14mm	6 x 13mm	9.2 kgs	QL 40-110
	115	2	8 x 14mm	7 x 13mm	9.5 kgs	QL 40-115
	120	2	8 x 16mm	7 x 13mm	10.3 kgs	QL 40-120
	127	2	8 x 16mm	7 x 13mm	11.5 kgs	QL 40-127
Mission 40	105	2	7 x 14mm	6 x 13mm	9.3 kgs	Mission40-105
	110	2	7 x 14mm	6 x 13mm	10.0 kgs	Mission40-110
	115	2	8 x 14mm	7 x 13mm	10.5 kgs	Mission40-115
	120	2	8 x 16mm	7 x 13mm	12.0 kgs	Mission40-120
	127	2	8 x 16mm	7 x 13mm	13.0 kgs	Mission40-127
XL 4	105	2	7 x 14mm	6 x 13mm	9.0 kgs	XL4-105
	110	2	7 x 14mm	6 x 13mm	9.5 kgs	XL4-110
	115	2	8 x 14mm	7 x 13mm	10.0 kgs	XL4-115
	120	2	8 x 16mm	7 x 13mm	11.5 kgs	XL4-120
	127	2	8 x 16mm	7 x 13mm	12.5 kgs	XL4-127
SD 4	105	2	7 x 14mm	6 x 13mm	9.0 kgs	SD4-105
	110	2	7 x 14mm	6 x 13mm	9.5 kgs	SD4-110
	115	2	8 x 14mm	7 x 13mm	10.0 kgs	SD4-115
	120	2	8 x 16mm	7 x 13mm	11.5 kgs	SD4-120
	127	2	8 x 16mm	7 x 13mm	12.5 kgs	SD4-127

DTH button bits(continued)

5 inches DTH hammer button bits						
Shank style	Diameter in mm	Flushing holes No.	Gauge buttons	Face buttons	Approx. weight	Part number
DHD350R	135	2	8 x 16mm	8 x 13mm	15.0 kgs	DHD350-135
	140	2	8 x 17mm	7 x 14mm	16.0 kgs	DHD350-140
	146	2	8 x 18mm	7 x 14mm	17.0 kgs	DHD350-146
	152	2	8 x 17mm	8 x 14mm	17.5 kgs	DHD350-152
	165	2	8 x 18mm	9 x 16mm	18.5 kgs	DHD350-165
COP 52	135	2	8 x 16mm	8 x 13mm	15.0 kgs	COP52-135
	140	2	8 x 17mm	7 x 14mm	16.0 kgs	COP52-140
	146	2	8 x 18mm	7 x 14mm	17.0 kgs	COP52-146
	152	2	8 x 17mm	8 x 14mm	17.5 kgs	COP52-152
	165	2	8 x 18mm	9 x 16mm	18.5 kgs	COP51-165
QL 50	135	2	8 x 16mm	8 x 13mm	15.5 kgs	QL50-135
	140	2	8 x 17mm	7 x 14mm	16.0 kgs	QL50-140
	146	2	8 x 18mm	7 x 14mm	16.8 kgs	QL50-146
	152	2	8 x 17mm	8 x 14mm	17.0 kgs	QL50-152
	165	2	8 x 18mm	9 x 16mm	18.0 kgs	QL50-165
Mission 50	135	2	8 x 16mm	8 x 13mm	15.5 kgs	Mission50-135
	140	2	8 x 17mm	7 x 14mm	16.0 kgs	Mission50-140
	146	2	8 x 18mm	7 x 14mm	16.5 kgs	Mission50-146
	152	2	8 x 17mm	8 x 14mm	17.0 kgs	Mission50-152
	165	2	8 x 18mm	9 x 16mm	18.0 kgs	Mission50-165
XL 5	135	2	8 x 16mm	8 x 13mm	15.0 kgs	XL5-135
	140	2	8 x 17mm	7 x 14mm	15.8 kgs	XL5-140
	146	2	8 x 18mm	7 x 14mm	16.0 kgs	XL5-146
	152	2	8 x 17mm	8 x 14mm	16.5 kgs	XL5-152
	165	2	8 x 18mm	9 x 16mm	17.5 kgs	XL5-165
SD 5	135	2	8 x 16mm	8 x 13mm	15.5 kgs	SD5-135
	140	2	8 x 17mm	7 x 14mm	16.0 kgs	SD5-140
	146	2	8 x 18mm	7 x 14mm	16.5 kgs	SD5-146
	152	2	8 x 17mm	8 x 14mm	17.0 kgs	SD5-152
	165	2	8 x 18mm	9 x 16mm	18.0 kgs	SD5-165
6 inches DTH hammer button bits						
Shank style	Diameter in mm	Flushing holes No.	Gauge buttons	Face buttons	Approx. weight	Part number
DHD360	152	2	8 x 17mm	8 x 14mm	22.0 kgs	DHD360-152
	165	2	8 x 18mm	9 x 16mm	26.0 kgs	DHD360-165
	171	2	8 x 18mm	10 x 16mm	27.0 kgs	DHD360-171
	190	3	9 x 18mm	11 x 16mm	28.5 kgs	DHD360-190

DTH button bits(continued)

6 inches DTH hammer button bits						
Shank style	Diameter in mm	Flushing holes No.	Gauge buttons	Face buttons	Approx. weight	Part number
DHD360	203	3	9 x 18mm	12 x 16mm	29.5 kgs	DHD360-203
COP 62	152	2	8 x 17mm	8 x 14mm	23.5 kgs	COP62-152
	165	2	8 x 18mm	9 x 16mm	24.5 kgs	COP62-165
	171	2	8 x 18mm	10 x 16mm	26.5 kgs	COP62-171
	190	3	9 x 18mm	11 x 16mm	28.5 kgs	COP62-190
	203	3	9 x 18mm	12 x 16mm	32.0 kgs	COP62-203
QL 60	152	2	8 x 17mm	8 x 14mm	24.0 kgs	QL60-152
	165	2	8 x 18mm	9 x 16mm	25.0 kgs	QL60-165
	171	2	8 x 18mm	10 x 16mm	27.0 kgs	QL60-171
	190	3	9 x 18mm	11 x 16mm	29.0 kgs	QL60-190
	203	3	9 x 18mm	12 x 16mm	33.0 kgs	QL60-203
Mission 60	152	2	8 x 17mm	8 x 14mm	26.0 kgs	Mission60-152
	165	2	8 x 18mm	9 x 16mm	27.0 kgs	Mission60-165
	171	2	8 x 18mm	10 x 16mm	29.0 kgs	Mission60-171
	190	3	9 x 18mm	11 x 16mm	32.0 kgs	Mission60-190
	203	3	9 x 18mm	12 x 16mm	34.0 kgs	Mission60-203
XL 6	152	2	8 x 17mm	8 x 14mm	25.5 kgs	XL6-152
	165	2	8 x 18mm	9 x 16mm	26.8 kgs	XL6-165
	171	2	8 x 18mm	10 x 16mm	28.5 kgs	XL6-171
	190	3	9 x 18mm	11 x 16mm	31.5 kgs	XL6-190
	203	3	9 x 18mm	12 x 16mm	33.0 kgs	XL6-203
SD 6	152	2	8 x 17mm	8 x 14mm	26.0 kgs	SD6-152
	165	2	8 x 18mm	9 x 16mm	27.0 kgs	SD6-165
	171	2	8 x 18mm	10 x 16mm	29.0 kgs	SD6-171
	190	3	9 x 18mm	11 x 16mm	32.0 kgs	SD6-190
	203	3	9 x 18mm	12 x 16mm	34.0 kgs	SD6-203
8 inches DTH hammer button bits						
Shank style	Diameter in mm	Flushing holes No.	Gauge buttons	Face buttons	Approx. weight	Part number
DHD380	203	2	9x18mm	12x16mm	40.0 kgs	DHD380-203
	216	2	10x18mm	17x18mm	49.0 kgs	DHD380-216
	241	2	10x18mm	17x18mm	64.0 kgs	DHD380-241
	254	3	12x18mm	19x18mm	71.0 kgs	DHD380-254
	292	3	12x18mm	30x18mm	85.0 kgs	DHD380-292
	305	4	12x18mm	30x18mm	95.0 kgs	DHD380-305

DTH button bits(continued)

8 inches DTH hammer button bits						
Shank style	Diameter in mm	Flushing holes No.	Gauge buttons	Face buttons	Approx. weight	Part number
QL 80	203	2	9x18mm	12x16mm	35.0 kgs	QL80-203
	216	2	10x18mm	17x18mm	49.0 kgs	QL80-216
	241	2	10x18mm	17x18mm	64.0 kgs	QL80-241
	254	3	12x18mm	19x18mm	71.0 kgs	QL80-254
	292	3	12x18mm	30x18mm	85.0 kgs	QL80-292
	305	4	12x18mm	30x18mm	95.0 kgs	DHD380-305
Mission 80	203	2	9x18mm	12x16mm	37.0 kgs	Mission80-203
	216	2	10x18mm	17x18mm	48.0 kgs	Mission80-216
	241	2	10x18mm	17x18mm	63.0 kgs	Mission80-241
	254	3	12x18mm	19x18mm	70.0 kgs	Mission80-254
	292	3	12x18mm	30x18mm	85.5 kgs	Mission80-292
	305	4	12x18mm	30x18mm	98.0 kgs	Mission80-305
SD 8	203	2	9x18mm	12x16mm	37.0 kgs	SD8-203
	216	2	10x18mm	17x18mm	48.0 kgs	SD8-216
	241	2	10x18mm	17x18mm	63.0 kgs	SD8-241
	254	3	12x18mm	19x18mm	70.0 kgs	SD8-254
	292	3	12x18mm	30x18mm	85.0 kgs	SD8-292
	305	4	12x18mm	30x18mm	98.0 kgs	SD8-305

Note: 1, All diameters showed as above are only our usual diameters, other diameters are also available upon request.

2, The unit weight for each size is for reference only.

3, Face design, T.C shape, buttons configuration and flushing holes number must be confirmed when order any size of DTH button bits.

4, Please be cautious when order some bigger diameter of button bits because some bigger diameters are oversized, refer to our DTH drilling products warranty for details.