



Rock Drilling Tools ***For Crawler Drill***



FRD Furukawa reserves right to change specifications without prior notice.

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FRD FURUKAWA ROCK DRILL

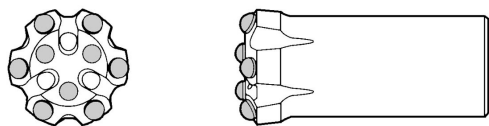


Explanations of part name (shape code)

Button bit

T45 B 70 S 6 -FF

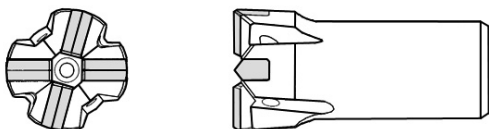
Thread shape + Size (T45: T45 thread)
Kind of bit (B: Button bit)
Bit gauge (Φ70mm)
Shape of tip (S: Spherical, B: Ballistic, C: Conical, P: Parabolic)
Quantity of gauge tip
Shape of base metal face (FF: Flat face, FFRB: Flat face reverse blow, DC: Drop center)



Cross bit (X bit)

T38 X 64 -30N RB

Thread shape + Size (T38: T38 thread)
Kind of bit (X: Cross bit and X bit)
Bit gauge (Φ64mm)
Tip material + Tip size (30: E3, 40: E4, N: Standard tip, -: Large-scale tip)
Blow shape, Tip size (RB: Reverse blow)



Extension rod

DT32H E -230

Thread shape + Size (DT32H: T38 thread, Hex 32mm, DT38H: T45 thread, Hex 45mm)
Extension rod
Length (230: 3050mm, 236: 3660mm, 240: 4000mm)



Male/Female rod

DT38R E -236 MF

Thread shape + Size (DT38R: T38 thread, Round Φ38mm, DT45R: T45 thread, Round Φ45mm, DT51R: T51 thread, Round Φ51mm)
Extension rod
Length (230: 3050mm, 236: 3660mm, 240: 4000mm)
Male/Female thread rod



Sleeve

SL -4500

Sleeve
Thread shape + Diameter (T45: T45 thread)
(3800: Φ55mm, 4500: Φ66mm, 4502: Φ63mm 5100: Φ77mm, 5101: Φ72mm)



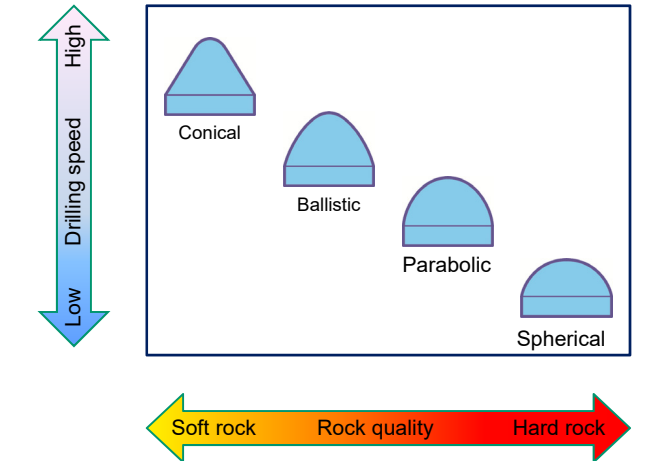
Kind of bit and application range

Kind of bit	Application range	Kind of bit	Application range
Spherical button bit	Hard rock and ultra-hard rock layers. Effective in a rock layer which causes wear in a great degree.	Conical button bit	The tip end is sharp and so the drilling efficiency is excellent. This bit demonstrates its ability especially in limestone.
Parabolic button bit	Medium hard rock and hard rock layers.	Reverse blow button bit	Used in layers including few fracture zones. Reverse blow is proper to enhance the cutting discharge efficiency.
Ballistic button bit	Soft rock and medium hard rock layers. Higher drilling speed can be obtained compared with cross bit.	Cross bit	Soft rock and medium hard rock layers Effective in layers where gauges are extremely worn.:

Face configuration

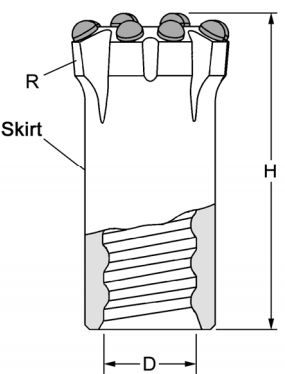
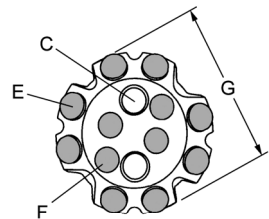
FF: Flat face	FFRB: Flat face reverse blow	DC: Drop center
Wear resistant bit for medium-hard to hard rock formations.	Wear resistant bit for soft to medium-hard rock formations.	For straighter drilling

Tip feature

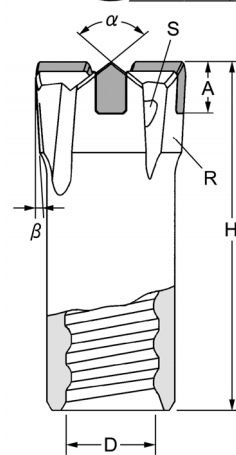
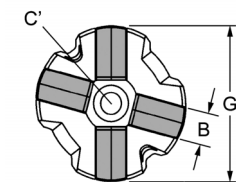


Terminology

Button bit

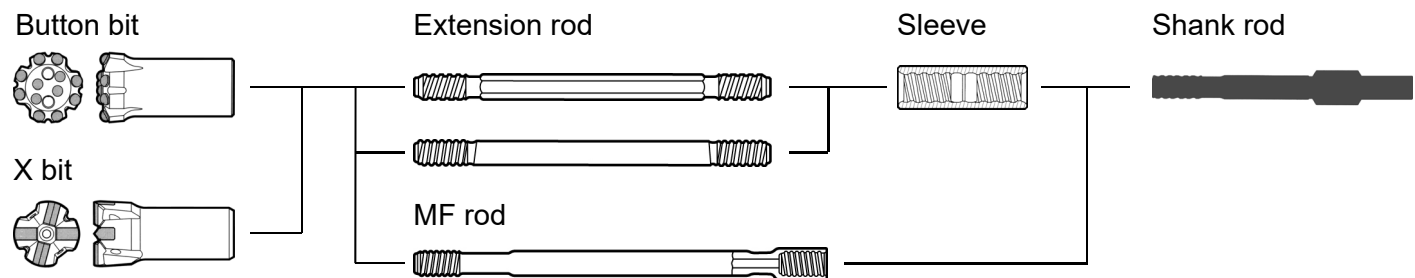


Cross bit (X bit)



- A : Tip height
- B : Tip width
- C : Face hole
- C' : Center hole
- D : Thread diameter
- E : Gauge tip
- F : Face tip
- G : Bit gauge
- H : Bit height
- R : Reaming surface
- S : Side hole
- α : Cutting angle
- β : Reaming angle

T38 Thread



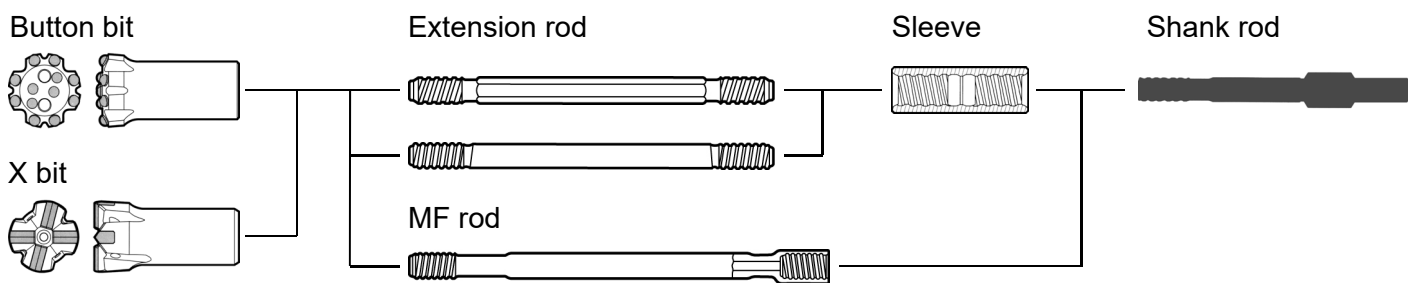
Button bit	Bit dia.D mm	Part No. (Order code)	Part name (Shape code)	Tip q' ty x Dia.		Blow hole		Mass kg
				Gauge	Face	Side	Face	
FF : Flat face Gauge tip : 8 pcs	64	091522-64109	T38B64S8-FF	8x11	4x10	-	2	1.7
	64	091622-64109	T38B64P8-FF	8x11	4x10	-	2	1.7
	64	091722-64109	T38B64B8-FF	8x11	4x10	-	2	1.7
	64	091822-64109	T38B64C8-FF	8x11	4x10	2	2	1.7
	70	091522-70107	T38B70S8-FF	8x11	4x10	-	2	2.1
	70	091622-70107	T38B70P8-FF	8x11	4x10	-	2	2.1
	70	091722-70107	T38B70B8-FF	8x11	4x10	-	2	2.1
	70	091822-70107	T38B70C8-FF	8x11	4x10	2	2	2.1
	76	091522-76105	T38B76S8-FF	8x12	4x11	-	2	2.2
	76	091622-76105	T38B76P8-FF	8x12	4x11	-	2	2.2
	76	091722-76105	T38B76B8-FF	8x12	4x11	-	2	2.2
	76	091822-76105	T38B76C8-FF	8x12	4x11	2	2	2.2
	80	091522-80101	T38B80S8-FF	8x13	4x12	-	2	2.9
	80	091622-80101	T38B80P8-FF	8x13	4x12	-	2	2.9
	80	091722-80101	T38B80B8-FF	8x13	4x12	-	2	2.9
	80	091822-80101	T38B80C8-FF	8x13	4x12	-	2	2.9
FF : Flat face Gauge tip : 6 pcs	89	091522-89103	T38B89S8-FF	8x14	5x12	-	2	3.8
	89	091622-89103	T38B89P8-FF	8x14	5x12	-	2	3.8
	89	091722-89103	T38B89B8-FF	8x14	5x12	-	2	3.8
	89	091822-89103	T38B89C8-FF	8x14	5x12	-	2	3.8
	64	091522-64115	T38B64S6-FF	6x12	3x11	-	3	1.8
	64	091622-64115	T38B64P6-FF	6x12	3x11	-	3	1.8
	64	091722-64115	T38B64B6-FF	6x12	3x11	-	3	1.8
	64	091822-64115	T38B64C6-FF	6x12	3x11	-	3	1.8
FFRB : Flat face reverse blow Gauge tip : 8 pcs	70	091522-70105	T38B70S6-FF	6x12	3x11	-	3	2.0
	70	091622-70105	T38B70P6-FF	6x12	3x11	-	3	2.0
	70	091722-70105	T38B70B6-FF	6x12	3x11	-	3	2.0
	70	091822-70105	T38B70C6-FF	6x12	3x11	-	3	2.0
	76	091522-76111	T38B76S6-FF	6x13	3x12	-	3	2.2
	76	091622-76111	T38B76P6-FF	6x13	3x12	-	3	2.2
	76	091722-76111	T38B76B6-FF	6x13	3x12	-	3	2.2
	76	091822-76111	T38B76C6-FF	6x13	3x12	-	3	2.2
	64	091522-64001	T38B64S8-FFRB	8x11	4x10	2(R)	2	2.0
	64	091622-64001	T38B64P8-FFRB	8x11	4x10	2(R)	2	2.0
	64	091722-64001	T38B64B8-FFRB	8x11	4x10	2(R)	2	2.0
	64	091822-64001	T38B64C8-FFRB	8x11	4x10	2(R)	2	2.0
	70	091522-70001	T38B70S8-FFRB	8x11	4x10	2(R)	2	2.3
	70	091622-70001	T38B70P8-FFRB	8x11	4x10	2(R)	2	2.3
	70	091722-70001	T38B70B8-FFRB	8x11	4x10	2(R)	2	2.3
	70	091822-70001	T38B70C8-FFRB	8x11	4x10	2(R)	2	2.3
	76	091522-76001	T38B76S8-FFRB	8x12	4x12	2(R)	2	2.8
	76	091622-76001	T38B76P8-FFRB	8x12	4x12	2(R)	2	2.8
	76	091722-76001	T38B76B8-FFRB	8x12	4x12	2(R)	2	2.8
	76	091822-76001	T38B76C8-FFRB	8x12	4x12	2(R)	2	2.8

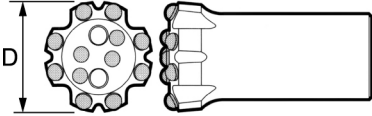
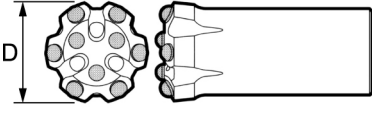
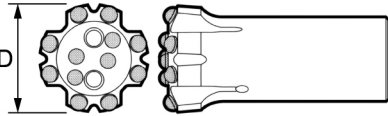
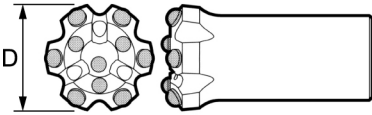
Button bit	Bit dia.D mm	Part No. (Order code)	Part name (Shape code)	Tip q' ty x Dia.		Blow hole		Mass kg
				Gauge	Face	Side	Face	
DC : Drop center Gauge tip : 6 pcs	64	091522-64301	T38B64S6-DC	6x11	3x10.1x10	-	3	1.7
	64	091622-64301	T38B64P6-DC	6x11	3x10.1x10	-	3	1.7
	64	091722-64301	T38B64B6-DC	6x11	3x10.1x10	-	3	1.7
	64	091822-64301	T38B64C6-DC	6x11	3x10.1x10	-	3	1.7
	70	091522-70301	T38B70S6-DC	6x11	3x11.1x9	-	3	2.0
	70	091622-70301	T38B70P6-DC	6x11	3x11.1x9	-	3	2.0
	70	091722-70301	T38B70B6-DC	6x11	3x11.1x9	-	3	2.0
	70	091822-70301	T38B70C6-DC	6x11	3x11.1x9	-	3	2.0
	76	091522-76301	T38B76S6-DC	6x13	3x11.1x11	-	3	2.2
	76	091622-76301	T38B76P6-DC	6x13	3x11.1x11	-	3	2.2
	76	091722-76301	T38B76B6-DC	6x13	3x11.1x11	-	3	2.2
	76	091822-76301	T38B76C6-DC	6x13	3x11.1x11	-	3	2.2
X bit	Bit dia.D mm	Part No. (Order code)	Part name (Shape code)	Tip size		Blow hole		Mass kg
				Size	Material	Side	Face	
Standard	64	091422-64103	T38X64-40	13x22	E4	4	1	2.2
	64	091422-64113	T38X64-30	13x22	E3	4	1	2.2
	64	091422-64105	T38X64-40N	12x18	E4	4	1	2.2
	64	091422-64115	T38X64-30N	12x18	E3	4	1	2.2
	64	091422-64001	T38X64-40RB	13x22	E4	2, 2	-	2.2
	64	091422-64011	T38X64-30RB	13x22	E3	2, 2	-	2.2
Reverse blow	70	091422-70001	T38X70-40RB	13x22	E4	2, 2	-	2.3
	70	091422-70011	T38X70-30RB	13x22	E3	2, 2	-	2.3
	70	091422-70101	T38X70-40	13x22	E4	4	1	2.3
	70	091422-70103	T38X70-40N	12x18	E4	4	1	2.3
	70	091422-70111	T38X70-30	13x22	E3	4	1	2.3
	70	091422-70113	T38X70-30N	12x18	E3	4	1	2.3
	76	091422-76001	T38X76-40RB	13x22	E4	2, 2	-	2.9
	76	091422-76011	T38X76-30RB	13x22	E3	2, 2	-	2.9
	76	091422-76103	T38X76-40	13x22	E4	4	1	2.9
	76	091422-76105	T38X76-40N	12x18	E4	4	1	2.9
	76	091422-76113	T38X76-30	13x22	E3	4	1	2.9
	76	091422-76115	T38X76-30N	12x18	E3	4	1	2.9
	80	091422-80101	T38X80-40	13x22	E4	4	1	3.0
	89	091422-89101	T38X89-40	13x22	E4	4	1	3.7

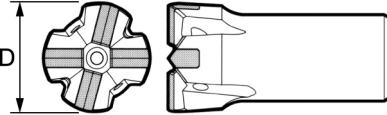
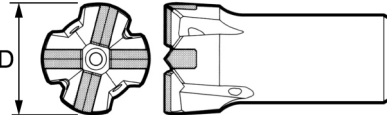
Extension rod	Part No.	Part name	Thread	Length (L) mm	Blow hole dia. mm	Mass kg
32 Hexagon	092107-11310	DT38HE-230 EXTENSION ROD	T38-T38	3,050	12.5	18.6
	092107-11400	DT38HE-240 EXTENSION ROD	T38-T38	4,000	12.5	24.1
38 Round	092100-11310	DT38RE-230 EXTENSION ROD	T38-T38	3,050	13.5	24.6
	092100-11370	DT38RE-236 EXTENSION ROD	T38-T38	3,660	13.5	29.5
	092100-11400	DT38RE-240 EXTENSION ROD	T38-T38	4,000	13.5	32.3
38 Round	092110-11310	DT38RE-230MF EXTENSION ROD	T38-T38	3,050 (3,130)	13.5	26.6
	092110-11370	DT38RE-236MF EXTENSION ROD	T38-T38	3,660 (3,740)	13.5	31.5

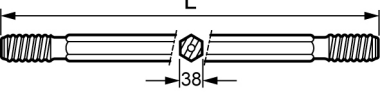
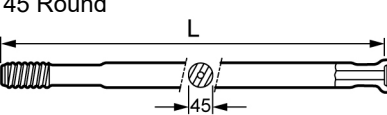
Sleeve	Part No.	Part name	Thread	Dia. (D) mm	Length (L) mm	Mass kg
Semi-bridge	089914-38001	SL-T3800	T38-T38	55	190	1.9

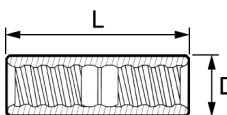
T45 Thread



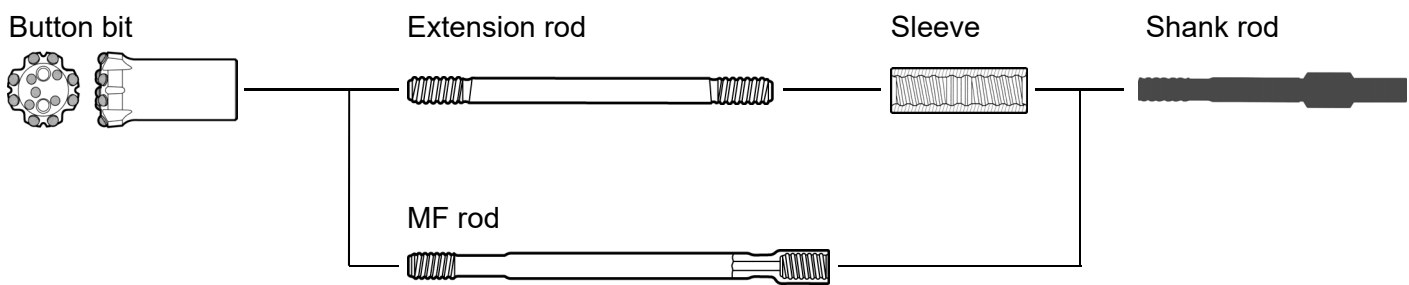
Button bit	Bit dia.D mm	Part No. (Order code)	Part name (Shape code)	Tip q' ty x Dia.		Blow hole		Mass kg
				Gauge	Face	Side	Face	
FF : Flat face Gauge tip : 8 pcs 	70	091523-70101	T45B70S8-FF	8x11	4x10	-	2	2.4
	70	091623-70101	T45B70P8-FF	8x11	4x10	-	2	2.4
	70	091723-70101	T45B70B8-FF	8x11	4x10	-	2	2.4
	70	091823-70101	T45B70C8-FF	8x11	4x10	2	2	2.4
	76	091523-76105	T45B76S8-FF	8x12	4x11	-	2	2.5
	76	091623-76105	T45B76P8-FF	8x12	4x11	-	2	2.5
	76	091723-76105	T45B76B8-FF	8x12	4x11	-	2	2.5
	76	091823-76105	T45B76C8-FF	8x12	4x11	2	2	2.5
	80	091523-80101	T45B80S8-FF	8x13	4x12	-	2	3.3
	80	091623-80101	T45B80P8-FF	8x13	4x12	-	2	3.3
	80	091723-80101	T45B80B8-FF	8x13	4x12	-	2	3.3
	80	091823-80101	T45B80C8-FF	8x13	4x12	2	2	3.3
	85	091523-85101	T45B85S8-FF	8x13	4x12	-	2	3.8
	85	091623-85101	T45B85P8-FF	8x13	4x12	-	2	3.8
	85	091723-85101	T45B85B8-FF	8x13	4x12	-	2	3.8
	85	091823-85101	T45B85B8-FF	8x13	4x12	2	2	3.8
	89	091523-89103	T45B89S8-FF	8x14	5x12	-	2	4.3
	89	091623-89103	T45B89P8-FF	8x14	5x12	-	2	4.3
	89	091723-89103	T45B89B8-FF	8x14	5x12	-	2	4.3
	89	091823-89103	T45B89C8-FF	8x14	5x12	2	2	4.3
	102	091523-02103	T45B102S8-FF	8x14	6x12	-	2	5.6
FF : Flat face Gauge tip : 6 pcs 	70	091523-70105	T45B70S6-FF	6x12	3x11	-	3	2.3
	70	091623-70105	T45B70P6-FF	6x12	3x11	-	3	2.3
	70	091723-70105	T45B70B6-FF	6x12	3x11	-	3	2.3
	70	091823-70105	T45B70C6-FF	6x12	3x11	-	3	2.3
	76	091523-76111	T45B76S6-FF	6x13	3x12	-	3	2.5
	76	091623-76111	T45B76P6-FF	6x13	3x12	-	3	2.5
	76	091723-76111	T45B76B6-FF	6x13	3x12	-	3	2.5
	76	091823-76111	T45B76C6-FF	6x13	3x12	-	3	2.5
	76	091523-76001	T45B76S8-FFRB	8x12	4x11	2(R)	2	2.7
	76	091623-76001	T45B76P8-FFRB	8x12	4x11	2(R)	2	2.7
FFRB : Flat face reverse blow Gauge tip : 8 pcs 	76	091723-76001	T45B76B8-FFRB	8x12	4x11	2(R)	2	2.7
	76	091823-76001	T45B76C8-FFRB	8x12	4x11	2(R)	2	2.7
	80	091523-80001	T45B80S8-FFRB	8x13	4x12	2(R)	2	3.5
	80	091623-80001	T45B80P8-FFRB	8x13	4x12	2(R)	2	3.5
	80	091723-80001	T45B80B8-FFRB	8x13	4x12	2(R)	2	3.5
	80	091823-80001	T45B80C8-FFRB	8x13	4x12	2(R)	2	3.5
	70	091523-70301	T45B70S6-DC	6x11	3x11,1x9	-	3	2.0
	70	091623-70301	T45B70P6-DC	6x11	3x11,1x9	-	3	2.0
DC : Drop center Gauge tip : 6 pcs 	70	091723-70301	T45B70B6-DC	6x11	3x11,1x9	-	3	2.0
	70	091823-70301	T45B70C6-DC	6x11	3x11,1x9	-	3	2.0
	76	091523-76301	T45B76S6-DC	6x13	3x11,1x11	-	3	2.2
	76	091623-76301	T45B76P6-DC	6x13	3x11,1x11	-	3	2.2
	76	091723-76301	T45B76B6-DC	6x13	3x11,1x11	-	3	2.2
	76	091823-76301	T45B76C6-DC	6x13	3x11,1x11	-	3	2.2

X bit	Bit dia.D mm	Part No. (Order code)	Part name (Shape code)	Tip size		Blow hole		Mass kg
				Size	Material	Side	Face	
Standard 	70	091423-70101	T45X70-40	13x22	E4	4	1	2.6
	70	091423-70111	T45X70-30	13x22	E3	4	1	2.6
	76	091423-76001	T45X76-40RB	13x22	E4	2, 2	1	2.7
	76	091423-76103	T45X76-40	13x22	E4	4	1	2.7
	76	091423-76113	T45X76-30	13x22	E3	4	1	2.7
	80	091423-80101	T45X80-40	13x22	E4	4	1	3.3
Reverse blow 	89	091423-89101	T45X89-40	13x22	E4	4	1	4.1
	89	091423-89111	T45X89-30	13x22	E3	4	1	4.1

Extension rod	Part No.	Part name	Thread	Length (L) mm	Blow hole dia. mm	Mass kg
38 Hexagon 	092105-22310	DT45HE-230 EXTENSION ROD	T45-T45	3,050	15.0	25.9
	092105-22370	DT45HE-236 EXTENSION ROD	T45-T45	3,660	15.0	30.9
	092105-22400	DT45HE-240 EXTENSION ROD	T45-T45	4,000	15.0	33.8
45 Round 	092100-22310	DT45RE-230 EXTENSION ROD	T45-T45	3,050	16.5	36.8
	092100-22370	DT45RE-236 EXTENSION ROD	T45-T45	3,660	16.5	43.6
	092100-22400	DT45RE-240 EXTENSION ROD	T45-T45	4,000	16.5	43.9
45 Round 	092110-22310	DT45RE-230MF EXTENSION ROD	T45-T45	3,050 (3,145)	16.5	36.8
	092110-22370	DT45RE-236MF EXTENSION ROD	T45-T45	3,660 (3,755)	16.5	43.6

Sleeve	Part No.	Part name	Thread	Dia. (D) mm	Length (L) mm	Mass kg
Semi-bridge 	089914-45001	SL-T4500	T45-T45	66	207	3.0
	089914-45003	SL-T4502	T45-T45	63	207	2.5

T51 Thread



Button bit	Bit dia.D mm	Part No. (Order code)	Part name (Shape code)	Tip q' ty x Dia.		Blow hole		Mass kg
				Gauge	Face	Side	Face	
FF : Flat face Gauge tip : 8 pcs	89	091524-89103	T51B89S8-FF	8x14	5x12	-	2	4.4
	89	091624-89103	T51B89P8-FF	8x14	5x12	-	2	4.4
	89	091724-89103	T51B89B8-FF	8x14	5x12	-	2	4.4
	89	091824-89103	T51B89C8-FF	8x14	5x12	2	2	4.4
	102	091524-02103	T51B102S8-FF	8x14	6x12	-	2	5.8
	102	091624-02103	T51B102P8-FF	8x14	6x12	-	2	5.8
	102	091724-02103	T51B102B8-FF	8x14	6x12	-	2	5.8
	102	091824-02103	T51B102C8-FF	8x14	6x12	2	2	5.8

Extension rod	Part No.	Part name	Thread	Length (L) mm	Blow hole dia. mm	Mass kg
51 Round 	092100-33370	DT51RE-236 EXTENSION ROD	T51-T51	3,660	21.5	52.0
	092100-33610	DT51RE-261 EXTENSION ROD	T51-T51	6,100	21.5	87.0
51 Round 	092110-33310	DT51RE-230MF EXTENSION ROD	T51T51	3,050 (3,150)	21.5	46.7
	092110-33370	DT51RE-236MF EXTENSION ROD	T51-T51	3,660 (3,760)	21.5	55.4

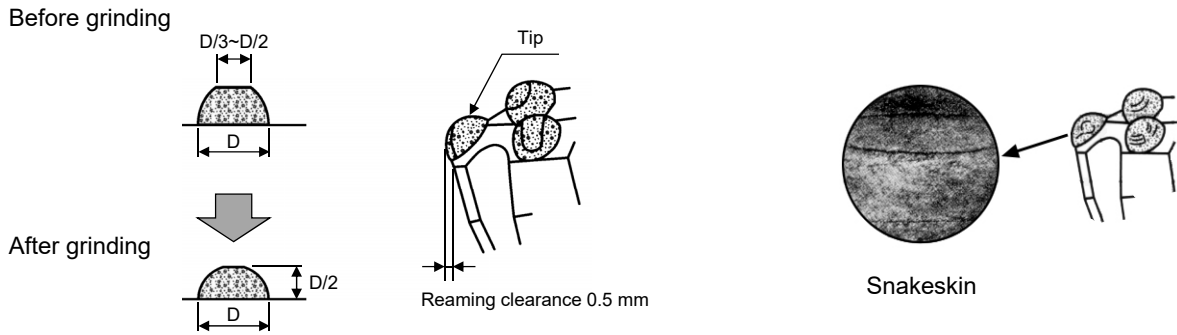
Sleeve	Part No.	Part name	Thread	Dia. (D) mm	Length (L) mm	Mass kg
Semi-bridge 	089914-51001	SL-T5100	T51-T51	77	235	5.1
	089914-51002	SL-T5101	T51-T51	72	235	4.1

Grinding of bit

As drilling continues, the tips of bits are flattened. Then, not only the drilling speed is lower but also the broken earlier than usual or can cause drifter malfunctions. To prevent these failure, it is necessary to grind the bits at a proper interval.

Time to grind the button bit

- (1) When the tips are worn to flat and its wear width are 1/3 ~ 1/2 of the tip diameter.
- (2) When the reaming clearance is extremely reduced to 0.5 mm or less.
- (3) When a netlike crack (snakeskin) has occurred at the top of tip.

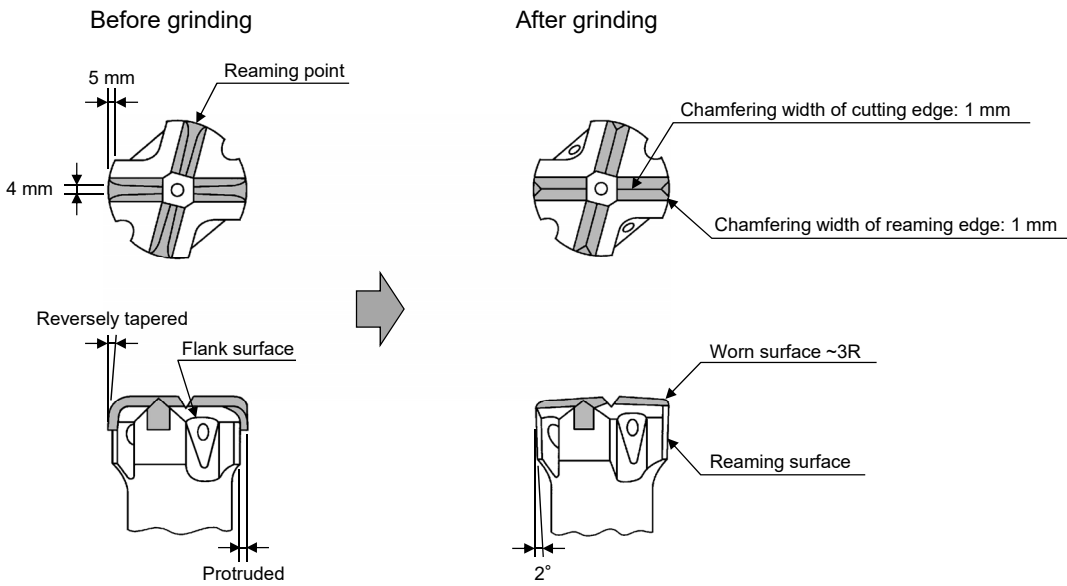


CAUTION

- (1) Use a cup grinder applicable to the tip size. As checking with a special template, grind the tips to their original shape.
- (2) Perform grinding in a wet process. Don't grind the base metal too much.
- (3) If snakeskin occurs, perform grinding until it disappears.

Time to grind the X bit (cross bit)

- (1) When the wear width reaches approx. 4mm at the 5mm inward, from the reaming point.
- (2) When the reaming surface is reversely tapered or when the tip is extremely protruded the base metal is worn.



CAUTION

- (1) The standard cutting angle is 105°
- (2) The height of edge must be uniform.
- (3) The tip ends of reaming surface must be protruded uniformly.
- (4) Grinder should be GC. Its proper particle degree is 60 ~ 80, and the cohesion is H ~ J.
- (5) When grinding manually, you should use a both-head desk grinder of 0.75 ~ 1.5kW.
- (6) Perform grinding in a dry process. Even if the bit is heated, don't cool it rapidly with water, etc.

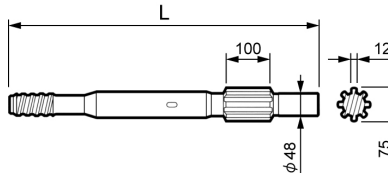
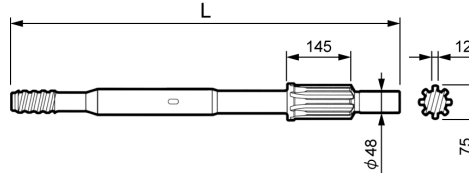
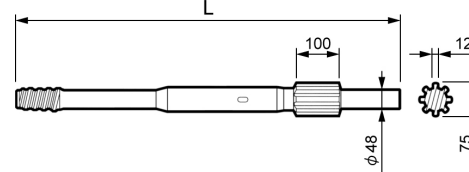
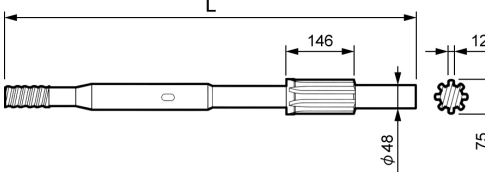
Shank Rod

Drifter model	Shank rod	Part No.	Order No.	Thread	Length (L) mm	Blow hole dia. mm	Mass kg
PD200		907820-91603	PD200H-H1600	H16	380	14	4.2
		907820-93807	PD200H-T3800	T38	380	14	4.2
		907820-93809	PD200H-T3801	T38	485	14	4.8
		907820-93811	PD200H-R3801	R38	485	14	5.2
		907820-94507	PD200H-T4501	T45	495	14	5.8
		907820-91605	PD200L-H1600	H16	380	14	3.5
		907820-93817	PD200L-R3800E	R38	380	14	3.7
		907820-93813	PD200L-T3800	T38	380	14	3.5
		907820-93815	PD200L-T3801E	T38	450	14	3.9
M110		M110-2107	M110-H1600	H16	380	11.5	3.1
HD180		007520-25001	HD180-T3800	T38	455	14	3.8
		007520-25005	HD180-T3801	T38	565	14	4.5
HD300		007620-25017	HD300-T3800	T38	655	16	6.0
		007620-25015	HD300-T4500	T45	655	16	6.6
HD500		HD500-02510	HD500-02510	T38	710	18	8.0
		HD500-02506	HD500-T4500	T45	710	18	8.3
		HD500-02503	HD500-T5100	T51	710	18	8.8

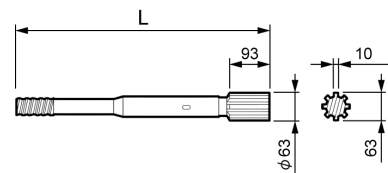
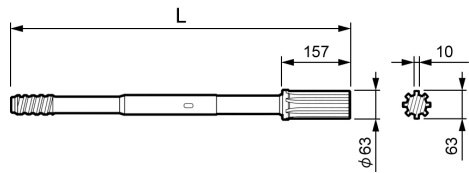
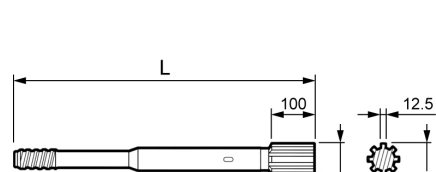
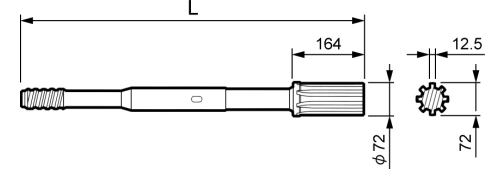
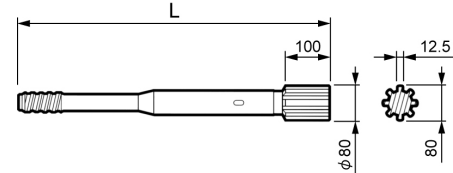
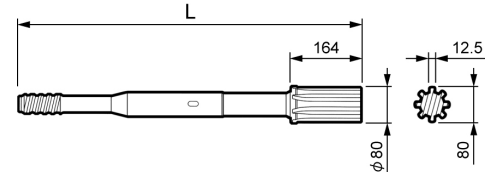
Shank Rod

Drifter model	Shank rod	Part No.	Order No.	Thread	Length (L) mm	Mass kg
HD606		HD606-02501	HD606-R3200	R32	580	3.90
		HD606-02502	HD606-T3800	T38	580	4.30
HD606 RP		HD606-02512	HD606-QT3800	T38	755	5.60
HD609		HD609-02501	HD609-T3800	T38	620	6.00
		HD609-02504	HD609-T38L	T38	690	6.50
		HD609-02502	HD609-T4500	T45	620	6.20
		HD609-02505	HD609-T45L	T45	690	6.80
HD609 RP		HD609-02521	HD609-QT3800	T38	795	8.00
		HD609-02523	HD609-QT38L	T38	865	8.40
		HD609-02522	HD609-QT4500	T45	795	8.00
		HD609-02524	HD609-QT45L	T45	865	8.50
HD612		HD612-02502	HD612-T3800	T38	670	8.00
		HD612-02507	HD612-T38L	T38	710	8.20
		HD612-02501	HD612-T4500	T45	670	8.40
		HD612-02506	HD612-T45L	T45	710	8.70
		HD612-02503	HD612-02503	T45	830	10.20
		HD612-02505	HD612-T5100	T51	670	9.10
HD612 RP		HD612-02508	HD612-T51L	T51	710	9.70
		HD612-02522	HD612-QT3800	T38	845	11.00
		HD612-02527	HD612-QT38L	T38	885	11.20
		HD612-02521	HD612-QT4500	T45	845	11.00
		HD612-02526	HD612-QT45L	T45	885	11.30
		HD612-02523	HD612-QT5100	T51	845	10.90
HD612 (with Dual damper)		HD612-02528	HD612-QT51L	T51	905	14.00
		HD612-02552	HD612-T38DD	T38	750	8.90
		HD612-02551	HD612-T45DD	T45	750	9.20
HD612 RP (with Dual damper)		HD612-02553	HD612-T51DD	T51	770	10.10
		HD612-02572	HD612-QT38DD	T38	925	11.40
		HD612-02571	HD612-QT45DD	T45	925	11.70
		HD612-02573	HD612-QT51DD	T51	945	12.60

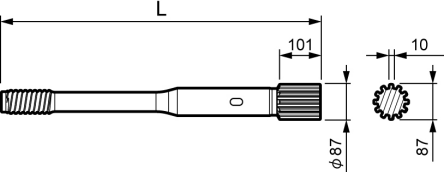
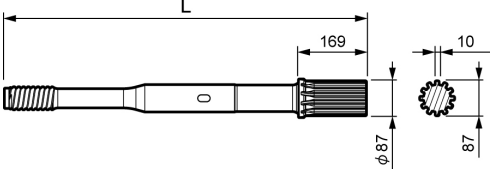
Shank Rod

Drifter model	Shank rod	Part No.	Order No.	Thread	Length (L) mm	Mass kg
HD615		HD615-02502	HD615-T4500	T45	700	11.00
		HD615-02501	HD615-T5100	T51	700	11.30
		HD615-02504	HD615-T5101	T51	880	13.00
HD615 RP		HD615-02506	HD615-T45DD	T45	880	13.40
		HD615-02505	HD615-T51DD	T51	880	13.40
HD615 (with Dual damper)		HD615-02512	HD615-QT4500	T45	880	14.00
		HD615-02511	HD615-QT5100	T51	880	14.50
		HD615-02516	HD615-QT51L	T51	960	15.20
HD615 RP (with Dual damper)		HD615-02518	HD615-QT45DD	T45	910	14.90
		HD615-02519	HD615-02519	T51	990	15.60

Shank Rod

Drifter model	Shank rod	Part No.	Order No.	Thread	Length (L) mm	Mass kg
HD709 HD818		HD709-02501 002500-250010	HD709-T3800 HD818-T38	T38 T38	590 620	6.00 6.10
		HD709-02502 002500-250020	HD709-T4500 HD818-T45	T45 T45	590 620	6.40 6.50
HD709 RP HD818 RP		HD709-02511 002500-250110	HD709-QT3800 HD818-QT38	T38 T38	785 815	9.20 9.30
		HD709-02512 002500-250120	HD709-QT4500 HD818-QT45	T45 T45	785 815	9.80 9.90
HD712 HD822 HD826		HD712-02502 002501-250020	HD712-T3800 HD822-T38	T38 T38	592 790	8.20 8.90
		HD712-02501 002501-250010	HD712-T4500 HD822-T45	T45 T45	592 790	8.70 9.50
		HD712-02503 002501-250030	HD712-T5100 HD822-T51	T51 T51	592 790	9.50 10.30
HD712 RP HD822 RP HD826 RP		HD712-02532 002501-250120	HD712-QT3800 HD822-QT38	T38 T38	787 855	9.50 12.00
		HD712-02531 002501-250110	HD712-QT4500 HD822-QT45	T45 T45	787 855	10.00 12.50
		HD712-02533 002501-250130	HD712-QT5100 HD822-QT51	T51 T51	787 855	10.80 13.00
HD715 HD828		HD715-02502 002502-250020	HD715-T4500 HD828-T45	T45 T45	592 790	9.50 11.50
		HD715-02501 HD715-02503 002502-250010	HD715-T5100 HD715-T5101 HD828-T51	T51 T51 T51	592 692 790	10.00 10.60 12.00
		002502-250030	HD828-ST58	ST58	790	13.00
HD715 RP HD828 RP		HD715-02532 002502-250120	HD715-QT4500 HD828-QT45	T45 T45	787 885	11.00 15.20
		HD715-02531 002502-250110	HD715-QT5100 HD828-QT51	T51 T51	787 885	11.50 15.80
		002502-250130	HD828-QST58	ST58	885	16.47

Shank Rod

Drifter model	Shank rod	Part No.	Order No.	Thread	Length (L) mm	Mass kg
HD836		002503-250010	HD836-ST58	ST58	794	16.02
		002503-250020	HD836-GT60	GT60	794	16.61
HD836 RP		002503-250110	HD836-QST58	ST58	900	21.03
		002503-250120	HD836-QGT60	GT60	900	21.78

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