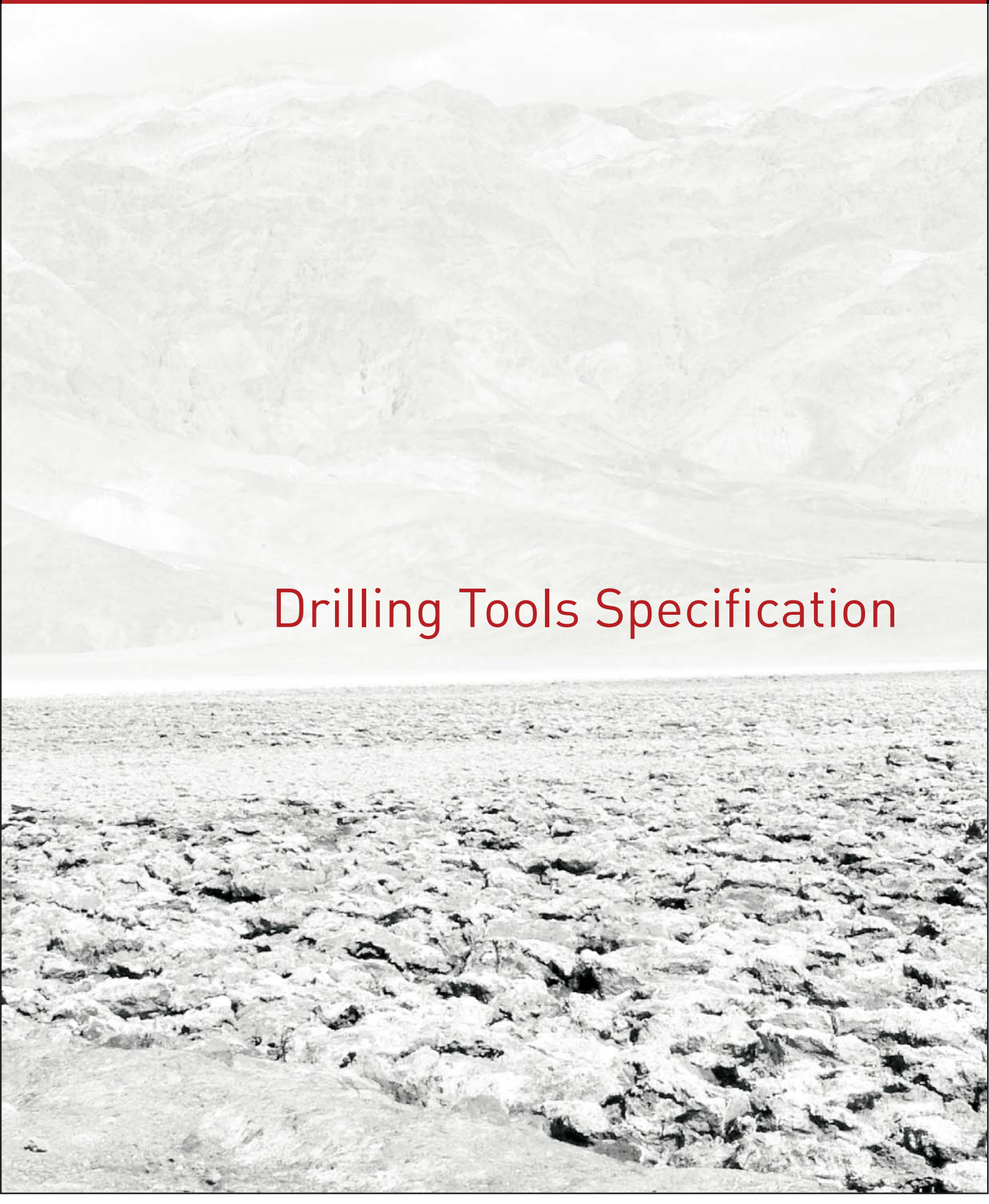


FORWARD

Drilling Tools Specification



C Type (Q) Rods

BC (BQ)

Metric system

Type	External diameter (mm)	Internal diameter (mm)	Weight (kg/3m)	Thread type (mm)	Thread length (mm)	Lumen capacity (liter/100m)
BC, 3 m	55.60	46.10	18.00	8.5	44.45	167.00
BC, 1.5 m						
BC, 1 m						

British system

Type	External diameter (inch)	Internal diameter (inch)	Weight (pound / 10 foot)	Thread type (inch)	Thread length (inch)	Lumen capacity (gallon /100foot)
BC, 10 inch	2.19	1.81	42.00	0.33	1.75	13.00
BC, 5 inch						
BC, 2 inch						
BC, 1 inch						

NC (NQ)

Metric system

Type	External diameter (mm)	Internal diameter (mm)	Weight (kg/3m)	Thread type (mm)	Thread length (mm)	Lumen capacity (liter/100m)
NC, 3 m	69.90	60.30	23.40	8.5	44.45	286.00
NC, 1.5 m						
NC, 1 m						

British system

Type	External diameter (inch)	Internal diameter (inch)	Weight (pound / 10 foot)	Thread type (inch)	Thread length (inch)	Lumen capacity (gallon /100foot)
NC, 10 inch	2.75	2.38	52.40	0.33	1.75	23.00
NC, 5 inch						
NC, 2 inch						
NC, 1 inch						

HC (HQ)

Metric system

Type	External diameter (mm)	Internal diameter (mm)	Weight (kg/3m)	Thread type (mm)	Thread length (mm)	Lumen capacity (liter/100m)
HC, 3 m	88.90	77.80	34.50	8.5	44.45	475.00
HC, 1.5 m						
HC, 1 m						

British system

Type	External diameter (inch)	Internal diameter (inch)	Weight (pound / 10 foot)	Thread type (inch)	Thread length (inch)	Lumen capacity (gallon /100foot)
HC, 10 inch	3.50	3.06	76.90	0.33	1.75	38.00
HC, 5 inch						
HC, 2 inch						
HC, 1 inch						

PC (PQ)

Metric system

Type	External diameter (mm)	Internal diameter (mm)	Weight (kg/3m)	Thread type (mm)	Thread length (mm)	Lumen capacity (liter/100m)
PC, 3 m	114.30	103.20	52.20	10.20	63.00	810.80
PC, 1.5 m						
PC, 1 m						

British system

Type	External diameter (inch)	Internal diameter (inch)	Weight (pound / 10 foot)	Thread type (inch)	Thread length (inch)	Lumen capacity (gallon /100foot)
PC, 10 inch	4.50	4.06	117.00	0.40	2.47	65.30
PC, 5 inch						
PC, 2 inch						
PC, 1 inch						

BRC Type (BRQ) Rods

BRC (BRQ)

Metric system

Type	External diameter (mm)	Internal diameter (mm)	Weight (kg/3m)	Thread type (mm)	Thread length (mm)	Lumen capacity (liter/100m)
BRC, 3 m	55.60	46.10	18.00	8.50	41.91	167.00
BRC, 1.5 m						
BRC, 1 m						

British system

Type	External diameter (inch)	Internal diameter (inch)	Weight (pound / 10 foot)	Thread type (inch)	Thread length (inch)	Lumen capacity (gallon /100foot)
BRC, 10 inch	2.19	1.81	42.00	0.33	1.65	13.00
BRC, 5 inch						
BRC, 2 inch						
BRC, 1 inch						

NRC (NRQ)

Metric system

Type	External diameter (mm)	Internal diameter (mm)	Weight (kg/3m)	Thread type (mm)	Thread length (mm)	Lumen capacity (liter/100m)
NRC, 3 m	69.90	60.30	23.40	8.5	41.95	286.00
NRC, 1.5 m						
NRC, 1 m						

British system

Type	External diameter (inch)	Internal diameter (inch)	Weight (pound / 10 foot)	Thread type (inch)	Thread length (inch)	Lumen capacity (gallon /100foot)
NRC, 10 inch	2.75	2.38	52.40	0.33	1.65	23.00
NRC, 5 inch						
NRC, 2 inch						
NRC, 1 inch						

HRC (HRQ)

Metric system

Type	External diameter (mm)	Internal diameter (mm)	Weight (kg/3m)	Thread type (mm)	Thread length (mm)	Lumen capacity (liter/100m)
HRC, 3 m	88.90	77.80	34.50	8.5	41.91	475.00
HRC, 1.5 m						
HRC, 1 m						

British system

Type	External diameter (inch)	Internal diameter (inch)	Weight (pound / 10 foot)	Thread type (inch)	Thread length (inch)	Lumen capacity (gallon /100foot)
HRC, 10 inch	3.50	3.06	76.90	0.33	1.65	38.00
HRC, 5 inch						
HRC, 2 inch						
HRC, 1 inch						

PRC (PRQ)

Metric system




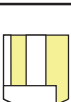





Type	External diameter (mm)	Internal diameter (mm)	Weight (kg/3m)	Thread type (mm)	Thread length (mm)	Lumen capacity (liter/100m)
PRC, 3 m	114.30	103.20	52.20	10.20	60.20	810.80
PRC, 1.5 m						
PRC, 1 m						

British system

Type	External diameter (inch)	Internal diameter (inch)	Weight (pound / 10 foot)	Thread type (inch)	Thread length (inch)	Lumen capacity (gallon /100foot)
PRC, 10 inch	4.50	4.06	117.00	0.40	2.37	65.30
PRC, 5 inch						
PRC, 2 inch						
PRC, 1 inch						

Specifications of Diamond Core Bit

Bit selection reference														
Formation hardness	Rock	Abrasive-ness	Bit Matrix Range											
			45-50 1	40-45 2	30-35 3	25-30 4	25-30 5	25-30 6	25-30 7	20-25 8	20-25 9	16-20 10	19-16 11	8-10 12
Soft	Clay, shale, very soft, sandstone, marl argilite, volcanic tuff, etc.	High												
		Medium	●	●	●	●								
		Low			●	●	●							
Medium-hard	Limestone, rhyolite lava, andesite, marble, hard sandstone, limonite, dolomite, schist, etc.	High	●	●	●	●	●							
		Medium			●	●	●	●						
		Low				●	●	●	●					
Hard	Basalt, gneiss, granodiorite amphibolite, pegmatite, diabase, etc.	High					●	●	●	●				
		Medium						●	●	●	●			
		Low							●	●	●	●		
Very hard	Hard granite, quartzitic, xonglomerate, quarizite hard slate, rhyolite, etc.	High	●	●	●					●	●	●	●	
		Medium			●	●					●	●	●	●
		Low										●	●	●

Diamond bit crown shapes		
Full round		Higher diamond content in the bit face, higher penetration rate, and suitable for drilling hard rocks
Semi-round		Even diamond distribution in the bit face, suitable for drilling medium-hard and hard rocks.or a little broken and loosen formations
Fiat		For impregnated diamond bit only, suitable for drilling hard abrasive rocks
Bottom discharge design		Suitable for drilling sedimentary or metamorphic formations containing more powder mineral with high core recovery percentage, and no excessive core wash out
Stepped		Suitable for drilling medium-hard, broken or interbedded formations, hoie deviation can be prevented.
Tapered		Suitable for drilling soft and medium-hard formations with high penetration rate
Serrated profile		Suitable for drilling hard dense formations with high penetration rate
Staggered concentric profile		Suitable for drilling hard dense formations with high penetration rate under low bit weight
Gear wheel		Suitable for drilling hard dense formations with high penetration rate

Circle wrenches

Manufactured with advanced technique, diamond circle wrenches can avoid damage to rods and bit. They especially fit to screw up and off wire-line coring rods.

Description: BQ, NQ, HQ, PQ
Remarks: we can produce according to your requirements.



Pipe cutters



Oil For Rod Thread

Brand rod thread is developed by our newest technology, which is applicable to drill rod thread's lubricating and airproofing. It is especially suitable for wire line core drill rod and adapters. It's main functions:

1. Lubricating. This character can lessen the attrition of threads and reduce the resistance of screwing and unloading the threads.
2. Filming. This character can airproof, protect threads and prevent leaking.



Wire-line Double Core Barrel Assembly

BC (BQ) NC (NQ) HC (NQ)

No	Code	Name	Qty1
1	BC-NC-HC-01	Spearhead point	1
2	BC-NC-HC-02	Compression spring	1
3	BC-NC-HC-03	Detent plunger	1
4	BC-NC-HC-04	Spring pin7/16X1	1
5	BC-NC-HC-05	Spearhead base	1
6	BC-NC-HC-06	Latch retracting case	1
7	BC-NC-HC-07	Spring pin	2
8	BC-NC-HC-08	3/8 bolt	1
9	BC-NC-HC-09	Washer	1
10	BC-NC-HC-010	Latch compression spring	1
11	BC-NC-HC-011	Upper latch body	1
12	BC-NC-HC-012	Latch	2
13	BC-NC-HC-013	Link	2
14	BC-NC-HC-014	Spring pin	1
15	BC-NC-HC-015	Stainless steel ball	2
16	BC-NC-HC-016	Landing indicator bushing	1
17	BC-NC-HC-017	Landing shoulder	1
18	BC-NC-HC-018	Lower latch body	1
19	BC-NC-HC-019	Washer nord-lock	1
20	BC-NC-HC-020	Hex. nut	1
21	BC-NC-HC-021	Spindle	1

No	Code	Name	Qty1
22	BC-NC-HC-022	Shut-off valve hard	2
23	BC-NC-HC-023	Valve adjusting washer	2
24	BC-NC-HC-024	Thrust bearing	1
25	BC-NC-HC-025	Spindle bearing	1
26	BC-NC-HC-026	Hanger bearing	1
27	BC-NC-HC-027	Compression spring	1
28	BC-NC-HC-028	Grease fitting	1
29	BC-NC-HC-029	Inner tube cap	1
30	BC-NC-HC-030	Check valve body	1
31	BC-NC-HC-031	Landing ring	1
32	BC-NC-HC-032	Stover lock nut	1
33	BC-NC-HC-033	Inner tube	1
34	BC-NC-HC-034	Core lifter case	1
35	BC-NC-HC-035	Core lifter	1
36	BC-NC-HC-036	Stop ring	1
37	BC-NC-HC-037	Locking coupling	1
38	BC-NC-HC-038	Adapter coupling	1
39	BC-NC-HC-039	Inner tube tabilizer	1
40	BC-NC-HC-040	Reaming shell	1
41	BC-NC-HC-041	Outer tube	1
42	BC-NC-HC-042	Diamond bit	1

Specifications and categories of reaming shells

Type	Category	Bit size (mm)
Reaming	Double-tube reaming shell	P56, P59, P75, P76, P91, P110, P130
	Single-tube reaming shell	D56, D59, D75, D76, D91, D110, D130, D150, D171, D223
	Wire line reaming shell	S56, S59, S75, S95, BC, NC, HC, PC, T2-76, T2-86

Diamond Reaming Shells

Diamond reaming shells are important tools to be used with bits. Its main functions are maintaining borehole gauge, improving drill string stability and protecting lower drill string from excessive wear.

Helical type reaming shell provides a good passage for drill fluids. The matrix is wearproof and its service life is long.



Surface Set Diamond Core Bits

Surface set diamond core bits can be used with any type of core barrels. By varying the diamond grade, size, quality and matrix hardness and crown shapes, and the users can satisfactorily drill and core hard and homogeneous formations. To avoid excessive matrix wear at the leading edge of each segment. Tungsten carbide inserts are fitted on each side of the waterway. This kind of bits cannot be used in broken or loosen formations.



Casing Shoe

In most drilling jobs during hole opening the casing shoe is chosen, we produce the most reliable casing shoe makes the hole opening more smoothly, we offer solid, proven standard casing shoe and heavy casing shoe, you can ensure that users with minimal equipment loss to reach the bedrock. The choice of the casing shoe is determined mainly by the soil properties and the thickness of cover layer. We provide a full range of standard size casing shoe.



Wire-Line Double Core Barrel Assembly

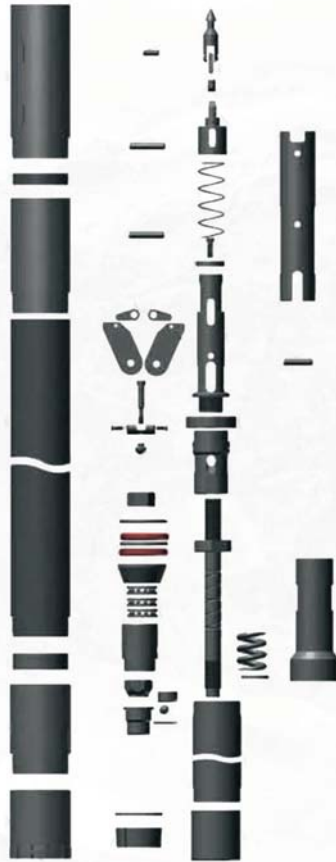
PC (PQ)

No	Code	Name	Qty1
1	PC-01	Spearhead point	1
2	PC-02	Compression spring	1
3	PC-03	Spring pin	1
4	PC-04	Spring pin	1
5	PC-05	Spearhead base	1
6	PC-06	Latch retracting case	1
7	PC-07	Spring pin	2
8	PC-08	Self locking nut	1
9	PC-09	Washer	1
10	PC-010	Latch compression spring	1
11	PC-011	Upper latch body	1
12	PC-012	Link	2
13	PC-013	Latch	2
14	PC-014	Spring pin	1
15	PC-015	Landing shoulder	1
16	PC-016	Lower latch body	1
17	PC-017	Stainless steel ball	1
18	PC-018	Landing indicator bushing	1
19	PC-019	Nut 1/4-20unc	1
20	PC-020	Spindle hollow	1
21	PC-021	Shut-off valve hard	2
22	PC-022	Valve adjusting washer	2

No	Code	Name	Qty1
23	PC-023	Washer tapered	1
24	PC-024	Thrust bearing	1
25	PC-025	Spindle bearing	1
26	PC-026	Thrust bearing	1
27	PC-027	Compression spring	1
28	PC-028	Sell locking nut	1
29	PC-029	Inner tube cap	1
30	PC-030	M6 grease fitting	1
31	PC-031	Stainless steel ball	1
32	PC-032	Inner tube cap	1
33	PC-033	Inner tube	1
34	PC-034	Stop ring	1
35	PC-035	Core lifter	1
36	PC-036	Core lifter case	1
37	PC-037	Locking coupling	1
38	PC-038	Adapter coupling	1
39	PC-039	Landing ring	1
40	PC-040	Outer tube	1
41	PC-041	Inner tube stabilizer	1
42	PC-042	Reaming shell	
43	PC-043	Impregnated bit	1

Wire-Line Drill Tools

Wire-line drill tool can lift drill core from drill rods without picking up bit. All the tools include principal parts of the drill tools, overshot assembly, drill rods, holding dog and circle wrench etc. Their advantages are higher penetration, higher core recovery ratio. Longer bit life and lower labor intensity, and the advantages get more clear with the increasing hole depth.



BC (BQ) Head assembly



NC (NQ) Head assembly



PC (PQ) Head assembly



HC (HQ) Head assembly



BC (BQ) NC (NQ) HC (HQ) PC (PQ) Overshot assembly



FORWARD

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