

Core Barrels

Single Tube "WG" Design Core Barrels

Single tube core barrels are the simplest, least expensive and most rugged of the core barrel family and consist of a head section, core recovery tube, reamer shell, and cutting bit with core lifter. All head connections are "W" Design drill rod threads.

In operation, water flows through the head, around the core and directly out of the waterways in the bit. Recommended uses include coring in homogeneous hard rock, (where the core does not wash away or crumble easily) and penetrating rock layers above the strata where high core recovery is not essential. Single tube barrels are often used as a started barrel when beginning coring operations.

Core Barrel — Nominal Dimensions								
Size	Hole Diameter		Core Diameter		Tube O.D.		Tube I.D.	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm
EWG	1-1/2	38.1	7/8	21.5	1-7/16	36.5	15/16	23.8
AWG	1-7/8	47.6	1-1/8	30.0	1-13/16	46.0	1-9/32	32.5
BWG	2-3/8	60.3	1-5/8	42.0	2-9/32	57.9	1-3/4	44.04
NWG	2-15/16	71.4	2-1/8	54.7	2-29/32	73.8	2-1/4	57.01
HWG	3-15/16	100.0	3	76.2	3-3/4	95.2	3-1/8	79.3

Single Tube Core Barrels									
Assembly Includes: Core Barrel Head, Barrel and Thread Protector.									
Size	2 Ft. (609 m)			5 Ft. (1.524 m)			10 Ft. (3.048 m)		
	Part No.	Lbs.	kg	Part No.	Lbs.	kg	Part No.	Lbs.	kg
EWG	20699-1	6.0	2.7	20699-2	15.0	7.0	20699-3	30	13.5
AWG	20700-1	8.0	3.7	20700-2	20.0	9.1	20700-3	40	18.0
BWG	20701-1	11.0	4.9	20701-2	30.1	14.0	20701-3	60	27.0
NWG	20702-1	14.0	6.2	20702-2	43.0	19.0	20702-3	86	38.0
HWG	20703-1	16.0	7.2	20703-2	46.0	21.0	20703-3	92	42.0

Spare Parts						
For Single Tube Core Barrels						
Description	EWG Part No.	Weight		AWG Part No.	Weight	
		Lbs.	kg		Lbs.	kg
"W" Head	101589	1.0	0.45	101590	1.5	0.68
Barrel — 2 Ft.	101573-1	7.0	3.17	101574-1	9.0	4.07
Barrel — 5 Ft.	101573-2	17.0	7.70	101574-2	19.0	8.60
Barrel — 10 Ft.	101573-3	34.0	15.4	101574-3	38.0	17.2
Thread Protector	101645	*	*	101646	*	*
Optional Parts						
Blank Reaming Shell	101584	*	*	101585	1.0	0.45
Core Lifter	100164	*	*	100193	*	*
Blank Bit	101637	*	*	101638	*	*

* Less than one pound or .45 kg.

Spare Parts										
For Single Tube Core Barrels										
Size:	Description	BWG		NWG		HWG				
		Part No.	Weight	Part No.	Weight	Part No.	Weight			
		Lbs.	kg	Lbs.	kg	Lbs.	kg			
	"W" Head	101591	2.5	1.13	101592	3.0	1.35	101593	3.5	1.58
	Barrel — 2 Ft.	101575-1	14.0	6.34	101576-1	16.0	7.24	101577-1	18.0	8.15
	Barrel — 5 Ft.	101575-2	24.0	10.8	101576-2	26.0	11.7	101577-2	28.0	12.6
	Barrel — 10 Ft.	101573-3	48.0	21.7	101576-3	52.0	23.5	101577-3	56.0	25.3
	Thread Protector	101647	*	*	101648	*	*	—	—	—
Optional										
	Blank Reaming Shell	101586	2.0	0.90	101587	2.0	0.90	101588	2.5	1.13
	Core Lifter	100211	*	*	100243	*	*	101596	*	*
	Blank Bit	101639	1.0	0.45	101640	1.0	0.45	101594	*	*

* Less than one pound or .45 kg.



STANDARD

Core Barrels

Swivel Type Double Tube "WG" Core Barrels

The advantage of the swivel barrel over the rigid type double tube core barrel is that the inner tube is mounted on antifriction bearings and remains virtually stationary while the outer barrel and bit rotate. There is less tendency to grind core with swivel type barrels. It is popular over the range of standard Diamond Core Drill manufacturers Association sizes for "EWG" through "HWG". All connections are "W" Design drill rod threads.

The swivel type, double tube core barrel is the generally accepted tool for obtaining core in fractured, broken formations. It is fairly rugged, and gives high recovery when used properly. All core barrel heads are hard faced.



"WG" Core Barrel — Nominal Dimensions												
Size	Hole Diameter		Core Diameter		Outer Tube O.D.		Outer Tube I.D.		Inner Tube O.D.		Inner Tube I.D.	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
EWG	1-1/2	38.1	7/8	21.5	1-7/16	36.5	1-3/16	30.2	1-1/16	27.0	15/16	23.8
AWG	1-7/8	47.6	1-1/8	30.0	1-13/16	46.0	1-17/32	38.9	1-13/32	35.7	1-1/4	31.7
BWG	2-3/8	60.3	1-5/8	42.0	2-9/32	57.9	2	57.9	1-7/8	47.6	1-23/32	43.6
NWG	2-15/16	71.4	2-1/8	54.7	2-29/32	73.8	2-5/8	73.8	2-1/2	63.5	2-1/4	57.1
HWG	3-29/32	99.2	3	76.2	3-3/4	95.3	3-3/8	85.7	3-1/4	82.6	3-1/16	77.8

Swivel Type — "WG" Double Tube Core Barrels													
Hard Face Heads						For Abrasive Formations							
Assembly Includes Core Barrel Head, Outer Tube, Inner Tube and Thread Protector						With Chrome Plated Outer Tube							
Size	5 Ft. (1.52 M)			10 Ft. (3.048)			5 Ft. (1.52M)			10 Ft. (3.048M)			
	Part No.	Weight		Part No.	Weight		Part No.	Weight		Part No.	Weight		
		Lbs.	kg		Lbs.	kg		Lbs.	kg		Lbs.	kg	
EWG	20711-11	15.0	6.8	20711-12	30.0	13.6	20711-50	15.0	6.8	20711-51	30.0	13.6	
AWG	20712-11	25.0	11.3	20712-12	50.0	22.6	20712-50	25.0	11.3	20712-50	50.0	22.6	
BWG	20713-11	35.0	15.8	20713-12	60.0	27.2	20713-50	35.0	15.8	20713-51	60.0	27.2	
NWG	20714-11	55.0	24.9	20714-12	105.0	47.5	20714-50	55.0	24.9	20714-51	150.0	47.5	
HWG	20715-8	76.4	34.7	20715-7	145.9	66.2	—	—	—	—	—	—	

Spare Parts — Swivel Type "WG" Double Tube Core Barrel															
Description	EWG			AWG			BWG			NWG			HWG		
	Part No.	Weight		Part No.	Weight		Part No.	Weight		Part No.	Weight		Part No.	Weight	
		Lbs.	kg		Lbs.	kg		Lbs.	kg		Lbs.	kg		Lbs.	kg
Head Assembly "W"	20398-5	1.8	.81	20399-5	5.0	2.3	20400-8	8.8	4.0	20401-6	15.0	6.8	20716-1	20.8	9.4
Outer Head "W"	300130	1.0	.45	300224	2.8	1.2	300219	6.0	2.7	300094	8.8	3.9	301631	12.2	5.5
Inner Head	100098	*	*	100066	1.0	.45	100002	1.0	.45	100034	2.0	.90	101630	2.8	1.3
Thrust Bearing	90000-25	*	*	90000-4	*	*	90000-4	*	*	90000-8	1.0	.45	90077-206	1.4	.63
Bushing	150035-5†	*	*	100004	*	*	100004	*	*	100036	1.0	.45	NA	—	—
	150035-6†	*	*	—	—	—	—	—	—	—	—	—	—	—	—
Locknut	100099	*	*	100003	*	*	100003	*	*	100035	*	*	90400-06	*	*
Rollpin	90107-105	*	*	90107-105	*	*	90107-105	*	*	90107-251	*	*	NA	—	—
Outer Tube 5 Ft.	101602-2	9.0	4.0	101603-2	12.0	5.4	101604-2	1.8	.81	101605-2	23.0	10.4	101606-7	31.9	14.5
Outer Tube 10 Ft.	101602-3	18.0	8.2	101603-3	23.8	10.8	101604-3	35.0	15.8	101605-3	46.0	20.8	101606-6	63.9	29.0
Inner Tube 5 Ft.	301617-2	4.0	1.8	301618-2	8.0	3.6	301619-2	8.0	3.6	301620-2	17.0	7.7	301621-7	23.6	10.7
Inner Tube 10 Ft.	301617-3	8.0	3.6	301618-3	14.0	6.4	301619-3	16.0	7.24	301620-3	34.0	15.4	301621-6	47.2	21.4
Thread Protector	101658	*	*	101659	*	*	101660	*	*	101661	*	*	101971-2	*	*
Optional															
Core Litter	100164	*	*	100193	*	*	100211	*	*	100243	*	*	101596	*	*
Blank Bit	101637	*	*	101638	*	*	101639	*	*	101640	1.0	.45	101594	1.4	.63
Blank Reaming Shell	101597	*	*	101598	*	*	101599	*	*	101600	*	*	101601	*	*
Roller	100115	*	*	100082	*	*	100020	1.0	.45	100053	1.8	.81	101628	2.5	1.1
Ext. Coupling "W"	100114-5	2.8	1.3	100081	3.0	1.4	100019	5.0	2.2	100052	10.0	4.5	101627	13.9	6.3

* Less than one pound or .45 kg. Note: † Steel and Bronze Spacers Required for EWG Only.

Spare Parts for Swivel Type Double Tube Core Barrel															
For Abrasive Formations — 18" of Reaming Shell End (With Chrome Plated Outer Tube)															
Description	EWG			AWG			BWG			NWG			HWG		
	Part No.	Weight		Part No.	Weight		Part No.	Weight		Part No.	Weight		Part No.	Weight	
		Lbs.	kg		Lbs.	kg		Lbs.	kg		Lbs.	kg		Lbs.	kg
Outer Tube 5 Ft.	101663	9.0	4.0	101665	12.0	5.4	101667	18.0	8.1	101669	23.0	10.4	—	—	—
Outer Tube 10 Ft.	101664	18.0	8.2	101666	23.8	10.7	101668	36.0	16.3	101670	46.0	20.8	—	—	—



STANDARD

Core Barrels

“WM” Design Double Tube Core Barrels

The “WM” Design Barrel is an effective tool for recovering cores from friable and caving strata. The construction of the barrel is similar to the swivel type double tube core barrel except the core lifter is contained in a lifter case attached to the inner barrel.

This allows the skirt of the lifter case to extend to the bottom of the diamond bit and protects the core from water washing except at the face of the bit. The “M” Barrel is very useful for extremely sensitive coring requirements and where other type of barrels are not effective.

"WM" Core Barrel — Nominal Dimensions												
Size	Hole Diameter		Core Diameter		Outer Tube O.D.		Outer Tube I.D.		Inner Tube O.D.		Inner Tube I.D.	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
EWM	1-1/2	38.1	7/8	21.5	1-7/16	36.5	1-3/16	30.2	1-1/16	27.0	15/16	23.8
AWM	1-7/8	47.62	1-1/8	30.0	1-13/16	46.0	1-17/32	38.9	1-13/32	35.7	1-1/4	31.7
BWM	2-3/8	60.3	1-5/8	42.0	2-9/32	57.9	2	50.8	1-7/8	47.6	1-23/32	43.6
NWM	2-1/5/16	71.4	2-1/8	54.7	2-29/32	73.8	2-5/8	66.7	2-1/2	63.5	2-1/4	57.1

"WM" Design — Double Tube Core Barrels													
Hard Face Heads						For Abrasive Formations							
Assembly Includes Hardfaced Core Barrel Head, Outer Tube Lifter Case, Inner Tube and Thread Protector.						With Chrome Plated Outer Tube							
Size	5 Ft. (1.52m)			10 Ft. (3.048m)			5 Ft. (1.52m)			10 Ft. (3.048m)			
	Part No.	Weight		Part No.	Weight		Part No.	Weight		Part No.	Weight		
		Lbs.	kg		Lbs.	kg		Lbs.	kg		Lbs.	kg	
EWM	20319-68	16.0	7.2	20319-70	29.0	13.1	20319-80	16.0	7.2	20319-81	29.0	13.1	
AWM	20320-68	25.0	11.3	20320-70	44.0	19.9	20320-80	25.0	11.3	20320-81	44.0	19.9	
BWM	20321-68	37.0	16.8	20321-70	61.0	27.6	20321-80	37.0	16.8	20321-81	61.0	27.6	
NWM	20322-68	67.0	30.3	20322-70	103.0	46.7	20322-80	67.0	30.3	20322-81	103.0	46.7	

"WM" Design Double Tube Core Barrels — Spare Parts												
Description	EWM			AWM			BWM			NWM		
	Part No.	Weight		Part No.	Weight		Part No.	Weight		Part No.	Weight	
		Lbs.	kg		Lbs.	kg		Lbs.	kg		Lbs.	kg
Outer Head Assembly "W"	20398-5	1.8	.81	20399-5	5.0	2.2	20400-8	8.8	4.0	20401-6	15.0	6.8
Outer Head "W"	300130	1.0	.45	300224	3.0	1.4	300219	6.0	2.7	300094	9.8	4.4
Inner Head	100098	*	*	100066	1.0	.45	100002	1.0	.45	100034	3.0	1.4
Thrust Bearing	90000-25	*	*	90000-4	*	*	900004	*	*	90000-8	1.0	.45
Bushing	150035-5†	*	*	—	—	—	—	—	—	—	—	—
	150035-6†	*	*	100004	*	*	100004	*	*	100036	1.0	.45
Locknut	100099	*	*	100003	*	*	100003	*	*	100035	*	*
Rollpin	90107-105	*	*	90107-105	*	*	90107-105	*	*	90107-251	*	*
Outer Tube 5 Ft.	100101	8.0	3.6	100068	12.0	5.4	100006	17.0	7.7	1000039	22.0	10.0
Outer Tube 10 Ft.	100102	13.0	5.8	100069	24.0	10.8	100007	34.0	15.4	100040	44.0	20.0
Inner Tube 5 Ft.	300106	3.0	1.4	300073	8.0	3.6	300011	10.8	4.5	300044	17.8	8.0
Inner Tube 10 Ft.	300107	6.0	2.7	300074	15.0	6.8	300012	18.0	8.1	300045	35.0	15.9
Thread Protector	101671	*	*	101672	*	*	101673	*	*	101674	1.0	.45
Lifter Case	100111	*	*	100078	*	*	100016	*	*	100049	*	*
Center Pin	NA	—	—	—	—	—	—	—	—	100037	*	*
Optional												
Core Lifter	100112	*	*	100079	*	*	100017	*	*	100050	*	*
Bit	—	—	—	—	—	—	—	—	—	—	—	—
Roller	100115	*	*	100082	*	*	100020	1.0	.45	100053	1.8	.81
Ext. Coupling	100114-5	2.8	1.3	100081	3.0	1.4	100019	5.0	2.2	100052	10.0	4.5
Blank Reaming Shell	100110	*	*	100077	*	*	100015	1.5	.67	100048	2.0	.90
For Abrasive Formations												
Outer Tube 5 Ft.	100119	8.0	1.26	100086	12.0	5.4	100024	17.0	7.7	100057	22.0	9.9
Outer Tube 10 Ft.	100120	13.0	5.8	100087	24.0	10.9	100025	34.0	15.4	100058	44.0	20.0

* Less Than One Pound or .45 kg. Note: † Steel and Bronze Spacers Required For EWM Only. NA—Not Applicable



STANDARD

Core Barrels

Large Diameter Design Core Barrels

A whole series of large diameter, swivel type, double tube core barrels have been developed and accepted as standards by the Diamond Core Drill Manufacturers Association. This series includes those sizes that are larger than "HWG" design.

Construction features are much the same as for "M" design barrels but because of the larger sizes involved, these tools are more sturdy.

A good axiom to remember is, "The larger the hole, the better the chance of a good core." Large design barrels are in use wherever extremely difficult coring materials are encountered or where actual large physical volume of core is required for tests and analysis.

Sizes of these barrels are shown below. First numeral indicates core size, the second the size of the hole. Note that the two larger sizes are equipped with sludge barrels to help keep a clean hole.

Large Design Core Barrel — Nominal Dimensions												
Size	Hole Diameter		Core Diameter		Outer Tube O.D.		Outer Tube I.D.		Inner Tube O.D.		Inner Tube I.D.	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
2-3/4" x 3-7/8"	3-7/8	98.4	2-11/16	68.3	3-5/8	92.0	3-1/4	82.5	3	76.2	2-25/32	70.6
4" x 5-1/2"	5-1/2	139.6	3-15/16	100.8	5-1/4	133.3	4-3/4	120.0	4-1/2	113.7	4-1/8	104.7
6" x 7-3/4"	7-3/4	196.8	5-15/16	151.6	7-1/4	184.4	6-3/4	171.4	6-1/2	165.1	6-1/8	155.5

Large Design — Core Barrel Assembly									
Includes Core Barrel Head, Outer Tube, Inner Tube, Plain Reamer Shell and Thread Protector.									
Size	5 Ft. (1.52M)				10 Ft. (3.048M)				Core Barrel Head Box Connection
	Part No.	Weight		Part No.	Weight				
		Lbs.	kg		Lbs.	kg			
2-3/4" x 3-7/8"	20644-1	78.0	35.3	20644-2	130.0	58.9	NW Rod		
4" x 5-1/2"	20646-1	230-0	104-0	20646-2	335.0	152.0	2-7/8" API Reg.		
6" x 7-3/4"	20648-1	335.0	152.0	20648-2	490-0	222.0	3-1/2" API Reg.		

Note: On 4" x 5-1/2" and 6" x 7-3/4" Sizes, the Assembly Includes Sludge Barrel.

Large Design Core Barrel — Bottom Assemblies											
Bottom Assembly No. 1											
Item No.	Description	2-3/4" x 3-7/8"				4" x 5-1/2"			6" x 7-3/4"		
		Part No.	Weight		Part No.	Weight		Part No.	Weight		
			Lbs.	kg		Lbs.	kg		Lbs.	kg	
1	Inner Tube Extension	100830	1.0	.45	100836	4.0	1.8	100846	7.0	3.1	
2	Core Lifter	100831	*	*	100837	*	*	100843	1.0	.45	
3	Blank Bit	100832	1.0	.45	100838	4.0	1.8	100844	6.0	2.7	
Optional Bottom Assembly No. 2											
1	Inner Tube Extension	100830	1.0	.45	100836	4.0	1.8	100846	7.0	3.1	
2	Core Lifter	100831	*	*	100837	*	*	100843	1.0	.45	
3	Blank Bit (Bottom Discharge)	100833	1.0	.45	100839	3.0	1.4	100845	7.0	3.1	
Optional Bottom Assembly No. 3											
1	Inner Tube Extension	100834	1.0	.45	100840	4.0	1.8	100842	7.0	3.1	
2	Basket Lifter (Not Illustrated)	300835	*	*	300841	*	*	300847	1.0	.45	
3	Blank Bit	100832	2.0	.90	100838	4.0	1.8	100844	6.0	2.7	
Optional Bottom Assembly No. 4											
1	Inner Tube Extension	100834	1.0	.45	100840	4.0	1.8	100842	7.0	3.1	
2	Basket Lifter (Not Illustrated)	300835	*	*	300841	*	*	300847	1.0	.45	
3	Blank Bit (Bottom Discharge)	100833	2.0	.90	100839	4.0	1.8	100845	7.0	3.1	

* Less than one pound or .45 kg.



STANDARD

Core Barrels

Large Diameter Design Spare Parts



Large Diameter Design Core Barrel — Spare Parts										
Item No.	Description	2-3/4" x 3-7/8"			4" x 5-1/2"			6" x 7-3/4"		
		Part No.	Weight		Part No.	Weight		Part No.	Weight	
			Lbs.	kg		Lbs.	kg		Lbs.	kg
1	Sludge Barrel	—	—	—	100915	41.0	17.8	100919	50.0	21.8
2	Sub-NW Rod Box to 2-7/8" API Reg. Pin	—	—	—	110047-21	14.0	6.1	—	—	—
2	Sub-NW Rod Box to 3-1/2" API Reg. Pin	—	—	—	—	—	—	110047-22	20.0	8.7
3	Outer Tube Cap, NW Box	300803-2	13.0	5.6	—	—	—	—	—	—
3	Outer Tube Cap	—	—	—	300812-1	34.0	18.8	300821-1	80.0	34.8
4	Bearing Housing Cap	100805	1.0	.45	100814	1.0	.45	100823	3.0	1.3
5	Inner Tube Cap	100806	3.0	1.3	100815	9.0	3.9	100824	16.0	7.0
6	Key	90205	*	*	90801-41	*	*	3/16x5/16x1-1/4 lg.	*	*
7	Outer Tube — 10 Ft.	10807-2	70.0	30.4	10816-2	136.0	60.0	300825-2	192.0	83.5
8	Inner Tube — 5 Ft.	300808-1	19.0	8.3	300817-1	48.0	20.8	300826-1	61.0	26.5
8	Inner Tube — 10 Ft.	300808-2	39.0	17.0	300817-2	95.0	41.3	300826-2	120.0	52.2
9	Wash Tube	100809	1.8	.78	100818	3.0	1.3	100827	5.0	2.2
10	Drop Ball	90212-23	*	*	90212-23	*	*	90212-24	*	*
11	Pipe Plug	90831-1	*	*	90831-1	*	*	90831-1	*	*
12	Seal (Upper)	90363-45	*	*	90363-89	*	*	90363-154	*	*
13	Seal (Lower)	90363-107	*	*	90363-174	*	*	90363-217	*	*
14	Ball Bearing	90078-205	*	*	90094-307	3.0	1.3	90094-310	4.0	1.7
15	Lock Nut	100810	*	*	100819	*	*	10828	*	*
16	Lock Washer	90399-05	*	*	90399-07	*	*	90399-09	*	*
17	Hex Nut (Not Shown)	90264-16	*	*	—	—	—	—	—	—
18	Cap Screw	90239-212	*	*	90239-255	*	*	90239-284	*	*
19	Lock Washer	90343-5	*	*	90343-6	*	*	90343-7	*	*
20	Reaming Shell Blank	100811	4.0	1.7	100820	9.0	4.0	100829	19.0	8.3
21	Set Screw (Not Shown)	—	—	—	—	—	—	90402-29	*	*
—	Head Assembly (Less Sludge Barrel - Box Connection)	20645-1 NW Rod	23.0	10.0	20647-1 2-7/8" API	60.0	26.1	20649-1 3-1/2" API	125.0	54.4
—	Thread Protector	10046	1.5	.65	100604	2.0	.87	100603	2.5	1.1

* Less than one pound or .45 kg.



STANDARD

Core Barrels

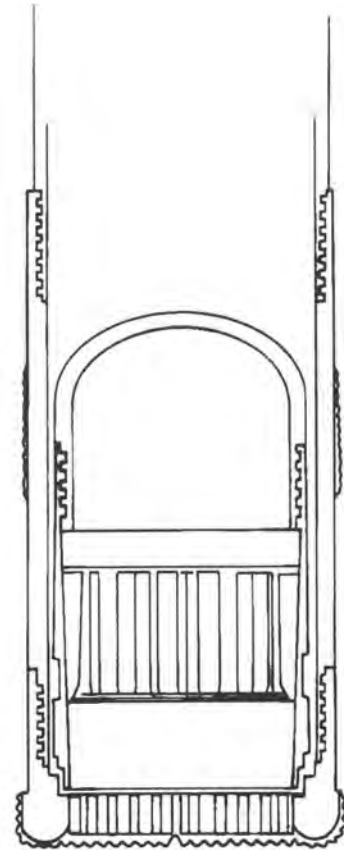
Core Barrel Specifications

"WG" Design — Single Tube Core Barrels						
Nominal Dimensions						
Size		Single Tube		Set Reaming Shell	Set Bit	
		O.D.	I.D.		O.D.	I.D.
EWG	Inch	1.437	0.937	1.485	1.470	0.845
	mm	36.5	23.8	37.7	37.3	21.4
AWG	Inch	1.812	1.281	1.890	1.875	1.185
	mm	46.0	32.5	48.0	47.6	30.0
BWG	Inch	2.281	1.750	2.360	2.345	1.655
	mm	57.9	44.4	59.9	59.5	42.0
NWG	Inch	2.906	2.250	2.980	2.965	2.155
	mm	73.8	57.1	75.6	75.3	54.7
HWG	Inch	3.750	3.125	3.907	3.890	3.000
	mm	95.2	79.3	99.2	98.8	76.2

The "G" Design core barrels replace the "X" design core barrels.
The "X" Design core barrels are now obsolete.

"WG" Design — Double Tube Core Barrels						
Nominal Dimensions						
Size		Double Tube		Set Reaming Shell	Set Bit	
		Outer Tube	Inner Tube			
		O.D.	I.D.		O.D.	O.D.
EWG	Inch	1.437	0.937	1.485	1.470	0.845
	mm	36.5	23.8	37.7	37.3	21.4
AWG	Inch	1.812	1.250	1.890	1.875	1.185
	mm	46.0	31.7	48.0	47.6	30.0
BWG	Inch	2.281	1.718	2.360	2.345	1.655
	mm	57.9	43.6	59.9	59.5	42.0
NWG	Inch	2.906	2.250	2.980	2.965	2.155
	mm	73.8	57.1	75.6	75.3	54.7
HWG	Inch	3.750	3.062	3.907	3.890	3.000
	mm	95.2	77.7	99.2	98.8	76.2

"WM" Design — Core Barrels						
Nominal Dimensions						
Size		Outer Tube	Inner Tube	Set Reaming Shell	Set Bit	
					O.D.	O.D.
EWM	Inch	1.437	0.937	1.485	1.470	0.845
	mm	36.5	23.8	37.7	37.3	21.4
AWM	Inch	1.812	1.250	1.890	1.875	1.185
	mm	46.0	31.7	48.0	47.6	30.0
BWM	Inch	2.281	1.718	2.360	2.345	1.655
	mm	57.9	43.6	59.9	59.5	42.0
NWM	Inch	2.906	2.250	2.980	2.965	2.155
	mm	73.8	57.1	75.6	75.3	54.7



Large Diameter Design — Core Barrels				
Nominal Dimensions				
Size		Outer Tube	Inner Tube	Set Reaming Shell
I.D. x O.D.		O.D.	I.D.	O.D.
2-3/4 x 3-7/8	Inch	3.625	2.781	3.875
	mm	92.0	70.6	98.4
4 x 5-1/2	Inch	5.250	4.125	5.495
	mm	133.3	104.7	139.5
6 x 7-3/4	Inch	7.250	6.125	7.750
	mm	184.1	155.5	196.8

Size		Set Bit		Casing Size
I.D. x O.D.		O.D.	I.D.	
2-3/4 x 3-7/8	Inch	3.840	2.690	HX or HW
	mm	97.5	68.3	
4 x 5-1/2	Inch	5.435	3.970	SW
	mm	138.0	100.8	
6 x 7-3/4	Inch	7.655	5.970	ZW
	mm	194.4	151.6	

Standard core barrel lengths are 5 ft. (1.52m) and 10 ft. (3.05m).