Spiral-Wate Drill Collar

Simplified safer handling

From Floor to Borehole — Spiral-Wate™ Drill Collars Makes Tripping Safer, Faster, and More Reliable

The Spiral-Wate™ Drill Collar (DC) is designed to simplify operations and enhance safety on the rig floor. Built with the field proven Spiral-Wate™ HWDP design on its box connection side, it allows for seamless use with standard drill pipe elevators; no elevator changes required.

The 18° taper with a generous transition radius minimizes stress concentrations, reducing the risk of fatigue cracking initiation at the shoulder. This smoother geometry also aligns with recent API recommendations to avoid the sharp 90° elevator recesses.

By eliminating the need for lift subs use, Spiral-Wate™ DCs reduce manual handling and storage requirements on the rig floor — streamlining operations and improving safety.

Fewer tools. Less handling. Greater safety.

Extensive testing confirmed that the change in hoisting geometry introduces minimal stiffness variation, ensuring reliable directional control during drilling.

Spiral-Wate™ DC: The smart choice for efficient and safer tripping.

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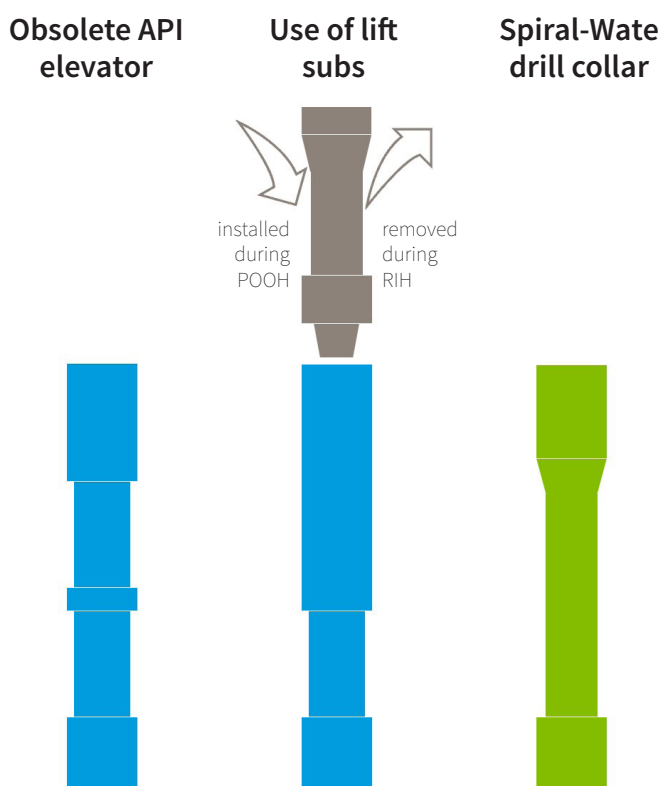

	Obsolete API elevator	Use of lifts subs	Spiral-Wate™ DC
Uses DP elevator		✓	✓
Uses DP slips			✓
Enhanced fatigue resistance		✓	✓
No need for dog collar		✓	✓
Speed of hoisting	Ref.	Better	Best
Improved floor safety	Ref.	Better	Best

Spiral-Wate™ Drill Collars are available with multiple connection types to suit your operational needs. Choose from standard API Rotary Shouldered Connections for direct compatibility with conventional drill collars, or opt for our premium double-shouldered connections—*GPDS™ SRT™ or DC™*—for enhanced fatigue resistance and reduced material loss during repair.

Connection type is selected based on drill collar size—refer to the table below for available configurations.

Elevator size (in.)	Drill collar size (in)	Internal diameter (in)	Connection type and size	Make-up torque (ft-lb)	Adjusted weight (lbs/ft)	Displacement		Capacity	
						(Gal/ft)	(bbl/ft)	(Gal/ft)	(bbl/ft)
4	4 7/8	2 1/4	GPDS™ 38 SRT™	19,300	43	0.654	0.0156	0.204	0.0049
4	4 3/4	2 1/4	NC 38	12,100	41	0.619	0.0147	0.204	0.0049
4 1/2	5	2 1/4	GPDS™ 38 SRT™	20,300	48	0.733	0.0174	0.204	0.0049
4 1/2	5	2 1/4	NC 38	15,500	48	0.733	0.0174	0.204	0.0049
5	6 5/8	2 13/16	GPDS™ 50 SRT™	46,100	81	1.223	0.0291	0.318	0.0076
5	6 1/2	2 13/16	NC 46	24,600	79	1.202	0.0286	0.318	0.0076
5	6 1/2	2 13/16	NC 50	32,800	79	1.202	0.0286	0.318	0.0076
5	6 3/4	2 13/16	NC 50	38,700	84	1.272	0.0303	0.318	0.0076
5 1/2	6 5/8	2 13/16	GPDS™ 50 SRT™	46,100	84	1.275	0.0304	0.318	0.0076
5 1/2	6 1/2	2 13/16	NC 46	24,600	83	1.254	0.0299	0.318	0.0076
5 1/2	6 1/2	2 13/16	NC 50	32,800	83	1.254	0.0299	0.318	0.0076
5 1/2	6 3/4	2 13/16	NC 50	38,700	87	1.324	0.0315	0.318	0.0076
5 1/2	7 1/4	2 13/16	GPDS™ 55 SRT™	61,700	101	1.530	0.0364	0.318	0.0076
5 1/2	7 1/4	2 13/16	NC 50	42,600	101	1.530	0.0364	0.318	0.0076
5 1/2	8	2 13/16	6 5/8 REG	70,400	123	1.867	0.0445	0.318	0.0076
5 7/8	6 3/4	2 13/16	NC 50	38,700	90	1.366	0.0325	0.318	0.0076
5 7/8	7 1/4	2 13/16	GPDS™ 55 SRT™	61,700	104	1.573	0.0375	0.318	0.0076
5 7/8	7 1/4	2 13/16	NC 50	42,600	104	1.573	0.0375	0.318	0.0076
5 7/8	8	2 13/16	DC™ 58	68,000	126	1.909	0.0455	0.318	0.0076
5 7/8	8	2 13/16	6 5/8 REG	70,400	126	1.909	0.0455	0.318	0.0076
5 7/8	8 1/4	2 13/16	6 5/8 REG	70,400	134	2.029	0.0483	0.318	0.0076
6 5/8	8	2 13/16	DC™ 58	68,000	132	2.002	0.0477	0.318	0.0076
6 5/8	8	2 13/16	6 5/8 REG	70,400	132	2.002	0.0477	0.318	0.0076
6 5/8	8 1/4	2 13/16	6 5/8 REG	70,400	140	2.122	0.0505	0.318	0.0076
6 5/8	9 1/2	3	DC™ 69	105,100	179	2.717	0.0647	0.362	0.0086
6 5/8	9 1/2	3	7 5/8 REG	117,000	179	2.717	0.0647	0.362	0.0086

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