



Semi-Elliptical COROD® Continuous Rod

The Weatherford semi-elliptical COROD® continuous rod is a uniquely shaped rod product that is designed to optimize reciprocating-rod-lift (RRL) applications. It is a superior alternative to conventional sucker rods. The semi-elliptical shape, formed to fit the curvature of the tubing string, results in less tubing contact pressure than with continuous rods and conventional sucker rods. Unlike conventional sucker rods, which are coupled every 25 or 30 ft (7.9 or 9.1 m), semi-elliptical COROD continuous rod requires couplings only at the top and bottom of the rod string. This innovation creates a laminar flow regime, reduces pin and coupling failures, and minimizes the potential for costly well interventions.

Semi-elliptical COROD continuous rod is manufactured in seven sizes at 1/16 in. increments, allowing you to custom design your rod string to any length. A lower overall string weight and a balanced string design significantly reduce the load on the surface-pumping unit gearbox and the horsepower requirements. As a result, a smaller pumping unit can reach greater pumping depths and achieve higher pumping rates than with conventional sucker rods and round continuous rods. Weatherford offers a full array of field servicing options for quick, efficient installation and well servicing needs.



Sucker rod with slim-hole coupling



COROD continuous rod



Semi-elliptical COROD continuous rod

Applications

- Reciprocating-rod-lift applications, specifically light crude, cold heavy oil production with sand (CHOPS), cyclic steam, steam flood, and steam-assisted gravity drainage (SAGD) wells

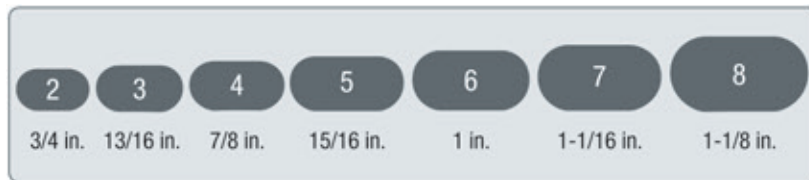


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Features, Advantages, and Benefits

- The uniform body design reduces contact loading between the rod and tubing, resulting in less wear and part replacements.
- The ribbon-like shape of the rod promotes predictable bending along one place, eliminating rod damage caused by a coiling or springing effect.
- The formed, semi-elliptical design minimizes surface discontinuities, increasing the life of your rod string in RRL applications.
- The rod maintains a minor diameter of less than 3/4 in., which prevents the rod from undergoing stresses exceeding its yield strength when coiled onto transport reels.

Specifications



Available sizes of semi-elliptical COROD continuous rod.

Dimensional Properties

COROD No.	Nominal Size		Weight (min)*		Area (min)		Major Diameter		Minor Diameter	
	SI	Imperial	kg/m	lb/ft	mm ²	in. ²	mm (±0.5)	in. (±0.020)	mm (±0.5)	in. (±0.020)
8	28.6	18/16	5.03	3.38	641.3	0.994	39.9	1.570	18.9	0.745
7	27.0	17/16	4.49	3.01	572.0	0.887	36.3	1.430	18.9	0.745
6	25.4	16/16	3.98	2.67	506.7	0.785	32.0	1.260	18.8	0.740
5	23.8	15/16	3.50	2.35	445.3	0.690	28.3	1.115	18.5	0.730
4	22.2	14/16	3.05	2.04	387.9	0.601	25.5	1.005	17.8	0.700
3	20.6	13/16	2.63	1.76	334.5	0.518	23.9	0.940	16.5	0.650
2	19.1	12/16	2.24	1.50	285.0	0.442	22.1	0.870	15.2	0.600

*Weights calculated based on steel density of 7.850 g/cm³