ROD GUIDES

SUCKER ROD PRODUCT LINE - HFLT AND RAPTR

Liberty Lift rod guides use advanced geometries and high-performance polymers to extend run life in demanding rod lift applications. Our designs handle high flow rates, corrosive fluids, elevated temperatures, solids, and deviated well paths. The HFLT and RAPTR models are two distinct guide options, each built for specific operational needs.

HFLT

The HFLT rod guide is built for high-flow or high-corrosion wells while staying versatile across most applications. Its long, narrow, tapered vanes limit flow disruption through the production stream, reducing turbulence and flow-induced corrosion. Inhibitors stay on the rod body longer, improving protection and extending run life.

RAPTR

The RAPTR rod guide features broad, curved vanes with enhanced EWV (erodible wear volume), providing a larger bearing surface. The vane design allows smoother rotation when paired with a rod rotator, resulting in more uniform wear and longer service life. A longer, gradual taper to the rod body also reduces corrosion at the leading edge.

ROD GUIDE SPECIFICATIONS

*Max continuous temperature depends on water cut; consult for recommendations.

W	BASE POLYMER	CONTINUOUS USE TEMPERATURE	DESCRIPTION
~~PPAU~~	PPA	280°F (138°C)*	No glass fibers for use in coated or lined tubing applications.
~~PPAF~~	PPA	400°F (204°C)*	30% glass fiber reinforced for increase wear life.
~~PPS~~	PPS	400°F (204°C)	40% glass fiber reinforced, very high chemical resistance. For use in most applications. Most versatile plastic in the industry.
~~PK20~~	PK	260°F (127°C)	20% glass fiber reinforced with silicon added to reduce frictional drag, good for most applications within the rated temperature. Can be used in lined or coated tubing applications.

DIMENSIONS

[t]Diameters can vary with selection of material.

GUIDE STYLE	EWV LENGTH	TOTAL LENGTH	TUBING SIZES AVAILABLE	TUBING OD	GUIDE OD[t]
HFLT	7"	8.5"	2-3/8", 2-7/8"	2.375"	1.86"
RAPTR	6"	7.5"	2-7/8"	2.875"	2.32"

PPAU

PPAU (polyphthalamide unfilled) has been used in the industry for many years specifically for its low abrasiveness. With no glass fibers, this thermoplastic can be used in coated or lined tubing applications.

PPAF

PPAF (polyphthalamide filled) a proven oilfield thermoplastic, this material can be used in many applications. Due to the hygroscopic nature of this material, high water cut wells should be avoided.

PK20

Polyketone is the newest plastic to be introduced to the oilfield. This blend has 20% glass with 2% silicon. It has excellent chemical, water and wear resistance, but is limited to wells less than 260°F. It's low coefficient of friction can be beneficial in wells with high side loads.

PPS

PPS (Polyphenylene sulfide) is the workhorse of the rod guide industry. It has excellent chemical, water and wear resistance. Its high temperature rating is not influence by the water cut and can be used in most applications.