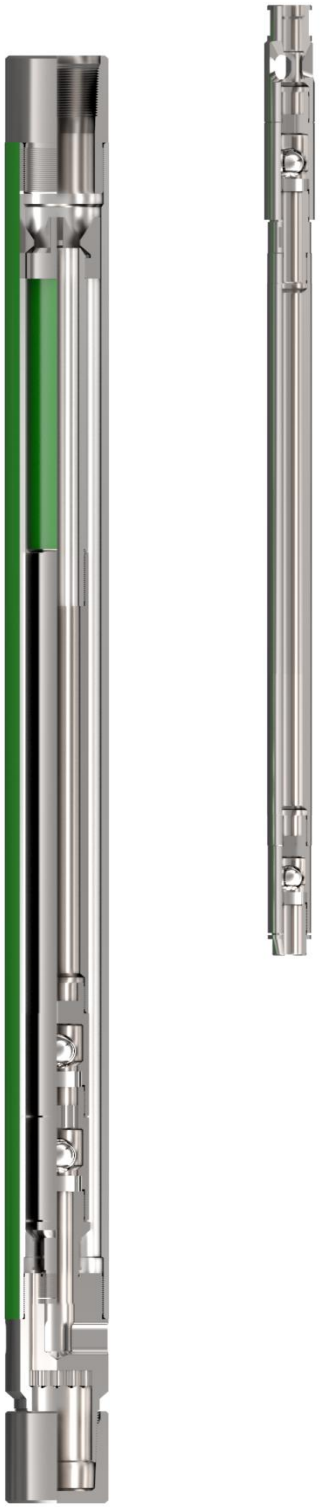
Special Pump-Long Plunger Sand Setting Pump



In wells with sand, grit often wears the plunger and the working surface of the pump barrel, which results in an increase in the fit clearance, a reduction in pump efficiency, and even a serious pump stuck in severe cases. In addition, for open sand content wells, ordinary pumps bury phenomenon is serious. In this regard, Weima designed and developed a long plunger sand setting pump that can be used in wells with high sand content and interstitial wells with sand content of less than 3%.

Characteristics:

1. High pump efficiency. The traveling valve cage of the pump is always exposed outside the barrel, the oil production resistance is small and the plunger descending resistance is small, so heavy oil extraction can be carried out;

2. The matching structure of the short pump barrel and the long plunger. The plunger always contacts the pump barrel, so that the grit in the string is not easy to enter into the fit clearance between the pump barrel and the plunger;

3.Lateral liquid inlet with sand settling tail pipe structure;

4.The pump is connected to the sand-settling tail pipe under the pump, the length is 100-200m, and the lower part is provided with a sealing wire plug;

5.Not suitable for wells with high oil-gas ratio.

The selection of fittings materials, various heat treatment processes and surface treatment processes can be applied to meet the requirements of well conditions for product strength, corrosion resistance and wear resistance.

Product Specification：

Tubing Size	2-7/8”	2-7/8”	3-1/2”	4-1/2”
Pump Diameter	1-1/2”	1-3/4”	2-1/4”	2-3/4”
Barrel OD	3.625”	3.625”	4.500”	5.563”
Sucker Rod thread	3/4”	7/8”	7/8”	1”
Connecting Tubing Thread	2-7/8”-8EU	2-7/8”-8EU	3-1/2”-8EU	4-1/2”-8EU
Code	25-150FS	25-175FS	30-325FS	40-375FS

Displacement:

The calculation formula of displacement is as follows:

$$P = C \times S \times N$$

P： Daily displacement, BPD;

S： Stroke length, in;

N： Frequency of strokes per minute, times/min;

C： Pump constant, as follows:

Pump Diameter	1-1/2”	1-3/4”	2-1/4”	2-3/4”
Pump Constant	0.262	0.357	0.590	0.881