Special Pump—Two-stage Anti-gas Rod Pump

The two-stage anti-gas rod pump designed and developed by Weima adopts a slender upper plunger connect with a larger diameter lower plunger in series to divide the lower pump barrel into upper and lower two working chambers. The annular area of lower working chamber is much larger than the upper working chamber. After the oil and gas mixture enters into the upper working chamber from the lower working chamber, the volume compresses and the pressure increases; when the plunger moves upward again, the upper working chamber compresses again and the pressure increases, close the middle valve and open the upper oil outlet valve to achieve crude oil extraction.

The size ratio of the annular area of the upper and lower working chambers can be designed according to oil and gas ratio. When the oil-gas ratio is large, its size ratio will also increase.

As when the plunger is descending, the upper oil outlet valve of the pump is closed, so the liquid column at the upper part of the plunger helps the plunger to descend, and the force of the sucker rod string is better.

Specifications (Can be chosen Thin Wall Barrel or Heavy Wall Barrel, with code of H or W)

Tubing Specification		2-7/8”	3-1/2”	3-1/2”
Pump Diameter		1-3/4”&1-1/4”	2-1/4”&1-1/4”	2-1/4”&1-1/2”
Product No.	Bottom mechanical sealed	25-175/125RHBM(FQ)	30-225/125RHBM(FQ)	30-225/150RHBM(FQ)
	Bottom cup sealed	25-175/125RHBC(FQ)	30-225/125RHBM(FQ)	30-225/150RHBM(FQ)

Bottom mechanical sealed

Bottom cup sealed