

采油机械

PRODUCTION EQUIPMENTS

ROTAFLEX皮带抽油机

ROTAFLEX PUMPING UNITS

ROTAFLEX皮带抽油机是我公司于1992年引进美国威泽福公司专利技术生产制造的，我公司是ROTAFLEX皮带抽油机全球唯一的生产制造商。ROTAFLEX皮带抽油机是一种具有国际领先水平的长冲程、低冲次、纯机械传动的抽油机，操作简单，维护方便，使用安全，其可靠的机械性能使得该抽油机成为世界上应用最广泛的一种无游梁式抽油机。它既可以实现深抽，也可以进行大排量提液，还特别适合稠油井的开采。无外露运动部件，井距要求小，最小井距可以达到2m。其完善的配套工艺和不断的技术升级能够不断地满足各种工况的油井。其高效、安全、可靠和节能的特点，为用户带来良好的经济效益。

ROTAFLEX is a patented pumping unit authorized by Weatherford in 1992. Now Highland is the only one ROTAFLEX manufacturer globally. The 100% mechanical driven ROTAFLEX stands out internationally with its long, low stroke, simple operation, easy maintenance and safe and reliable performance, making it the most widely used beamless pumping unit in the world. ROTAFLEX is especially suitable for use with big pumps for more fluid lift, small pumps in deep wells and heavy oil recovery applications. No exposed moving part ensures safety. Less well spacing with Min. of 2m especially suit for cluster well applications. Complete package of ancillary parts and continuous updates of solutions combine to satisfy various oil well conditions. ROTAFLEX's high efficiency and safety, notable reliability and energy saving will bring out good economic benefits to customers.

胜利油田目前正在用的皮带抽油机有5500余台，国内其他各大油田如辽河、大港、新疆、青海等油田有1500余台在良好运转，在美国、墨西哥湾、阿根廷、哈萨克等地运转的皮带抽油机已达2000多台。皮带抽油机现在每年的销售量在1000台以上，其中出口占到60%。

Now a total of more than 7000 units are still in sound operation in key domestic oilfields, of which 5500 sets in Shengli and 1500 sets in Liaohe, Dagang, Xinjiang and Qinghai etc. Over 2000 sets were distributed overseas to America, Mexico, Argentina, and Kazakhstan etc. The annual output is above 1000 units, of which export accounts for 60%.

主要优点：

- 1、长冲程，低冲次：长冲程使泵充满系数高，系统效率高；低冲次可有效降低井下设备的疲劳和磨损，延长油井免修期，操作成本低；
- 2、纯机械传动，换向平稳：大负荷长寿命重载宽皮带传递动力，其弹性缓冲可减小换向冲击，使井下设备运行平稳；
- 3、要求扭矩低：由于力臂仅0.31~0.43m，极大地降低了扭矩要求，配备小功率电机和小扭矩减速机，比常规游梁机节能10~40%；
- 4、优化结构设计：盘式刹车系统确保安全；整体位移修井；折叠结构安装运输方便；整机运动部件配有安全护罩、护栏，操作维修安全方便；
- 5、采用重力对称平衡，纯机械平衡，平衡调整方便、简单；
- 6、可靠性高，无需频繁维修保养：采用耐磨轴承、长寿命皮带以及重载链条，确保整机的高可靠性；具有完善的润滑系统、可靠的刹车系统以及整机密闭特性，使机器无需频繁维修保养；
- 7、完善的采油控制系统，即可以大泵提液，也可以小泵深抽。

Benefits:

1. Long, Slow Strokes: Long stroke leads to high pump fill and increased efficiency; Low stroke means less wear on downhole equipment, resulting decreased maintenance and less operational cost;
2. 100% mechanical driven, smooth reverse: Power is transmitted by a long life heavy-duty belt, whose elastic cushion effect absorbs impact in reverse action and results in uniform reciprocal movement of the rod string;
3. Low Torque Demand: Short torque arm of only 0.31~0.43m greatly decreases torque demand. Smaller prime mover complete with smaller gear reducer can be used with energy consumption decreased by 10% to 40%;
4. Safe and Easy Operation due to Optimum Structure Design: The disc brake system ensures safe operation. Enclosed derrick can be folded down for easy transportation. The unit can be slid backward integrally for well service; All moving parts with safety guard make maintenance and operation easy and safe;
5. Symmetrical Counterweight Balance: 100% mechanical balance features convenient and simple balance adjustment;
6. High Reliability and Minimum Maintenance: The unit is designed to bear load evenly with good rigidity. The antifriction bearings, a long life belt and a heavy load roller chain are adopted to ensure unit reliability. The mechanical balance system, optimized lubrication system, automatic protective device as well as enclosed derrick can dispense the unit with frequent repair and maintenance;
7. Fairly complete production supporting system ensures the unit to be used with big pumps for more fluid lift and small pumps for deep well