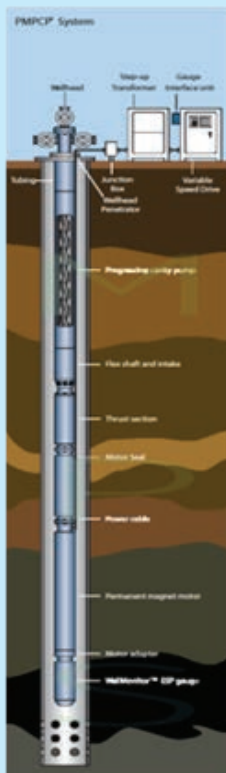


Magnetic Pumping SOLUTIONS

Magnetic Pumping Solutions

The Dene, Ropley,
Alresford SO24 0BG, United Kingdom



PERMANENT MAGNET MOTOR DRIVEN ESP / PCP SYSTEMS

For enquiries, please contact

BSS Technologies

Plot No: TP010524,
National Industries Park, Jebel Ali
Tel : + 971 4886 7015
Fax : +971 4886 7013
Email : magnetic@bsstechnologies.com

www.bsstechnologies.com

1119R11

MAGNETIC PUMPING SOLUTIONS

Magnetic Pumping Solutions is a privately owned US company that develops, manufactures, tests, installs and services permanent magnet motor driven artificial lift systems. All engineering and development work is carried out in the UK. The company has installed centrifugal pumps (ESP) running on permanent magnet motors, referred to as PMESP® and Progressive Cavity pumps referred to as PMPCP® for use in oilfield applications. Systems have been deployed and are presently operating in the USA, Europe, Middle East and Asia.

Permanent Magnet Motor Driven Downhole Pumping Systems

20 - 2000 HP Rating

10 to 60,000 BPD Flow Range

50 - 6000 RPM Speed Range for driving ESPs and PCPs

Benefits:

- High Efficiency compared to Induction Motors, In excess of 95%
- Green Technology with 20 to 75% power saving from existing technology
- Shorter and Cooler running systems that enhance Reliability and Run-Life
- Improved ESP and PCP performance in wells with High GOR or Slug Flow
- Advanced Gas handling capabilities with special automated algorithms
- Single section PM motors with no tandem connections
- Potentially one size smaller Cable and smaller transformer providing added cost saving and smaller footprint.

Applications

- High productivity wells where run life and performance of the pumping system is Critical
- Gassy wells
- Wells with low producing fluid rates
- Wells in which an ESP system may be installed below the perforations
- Wells with high bottom hole temperatures and scale issues
- High HP wells where the power saving is a significant factor
- High dogleg severity applications
- Fields with high cost electrical power or limited power availability

PM Control - PMVSD®

- The Permanent Magnet Motor and the special Variable Speed Drive (PMVSD®) are the core components of the MPS PM driven artificial lift systems.
- To reach the maximum efficiency while operating a PMM, the surface control logic in the PMVSD® will always be tracking the actual position of the rotor in the downhole motor to ensure that the stator magnetic field controlled by the PMVSD® is maintained at the optimum levels with respect to the rotor magnetic flux generated by the permanent magnets.
- MPS is applying a proprietary control technique to always maximize motor efficiency and generated torque at various operating conditions.

