

Application story



Polymer Injection for Enhanced Oil Recovery (EOR) (8)

Location	Barmer, Rajasthan, India (Installation: January 2023)	Hydra-Cell model	Q155HFGGTTTTBW
Type of application	Injecting Polymer	Flow rate	9.3 M3/Hr
Liquid	Polymer	Pressure	125 bar
Application details	Polymers play a significant role in enhanced oil recovery (EOR) due to their viscoelastic properties and macromolecular structure. With mobility ratio less than 1 this enables a stable displacement front to be formed which minimises and/or eradicates viscous fingering (a hydrodynamic phenomenon in which a less viscous fluid displaces a more viscous fluid, forming finger-like patterns). This results in enough of the injectant that mobilises and pushes the oil toward the production well. As per customer requirement pumps needs to handle the polymer with viscosity up to 3500 cP and viscosity degradation across the pump less than 2%. Which is very critical task and due to the low shear disc type valve and valve seat design pump has achieved the viscosity degradation below 1.5% over the operating range of Pump This pump is on continuous duty.		
Advantages of Hydra-Cell pump on this application	Seal-less design enables: • Reliable handling of high viscosity shear sensitive Liquid with viscosity degradation less than 2%. • Reliable handling of non-lubricating liquid at high temperature.		

www.hydra-cell.co.uk

Wanner Engineering -
World Headquarters & Manufacturing
Minneapolis USA
t: (612) 332-5681
e: sales@wannereng.com

Wanner International
Hampshire UK
t: +44 (0) 1252 816847
e: sales@wannerint.com

Wanner Pumps
Shanghai CHINA
t: +86-21-6876 3700
e: sales@wannerpumps.com

Wanner Pumps
Kowloon HONG KONG
t: +852 3428 6534
e: sales@wannerpumps.com