

TFC Jet Pumps

Tech-Flo's newly designed jet pump (patent pending) was developed to be a competitive means of artificial lift for all types of producing oil and gas wells. With the flexibility of the jet pump system, many operational issues that affect other types of artificial lift can be eliminated.

The unique design allows for easy retrieval of the pump from straight well bores as well as deviated and horizontal wells. Retrieval of the jet pump for repair or optimization is done by manipulation of the surface valves and reverse circulation of fluid, no work over or wire line unit is required.

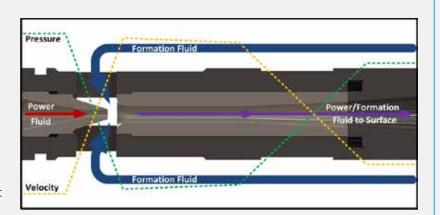
Typical applications of the Tech-Flo jet pump include conventional oil and gas production, high volume frac unloading, gas well dewatering, well tests, slimhole well production, and producing wells with bad casing. The pump can also be run in conventional or reverse flow configuration.

TFC JET PUMP SPECIFICATIONS

TFC 1.66	1" TO 2" IJ/Coil or 2.375 SSD/Cavity	Up to 1700 BPD	DD-G	000-10
TFC 2.20	1.5" to 2.375" or 2.875/3.5 SSD/Cavity	Up to 4000 BPD	AA-J	00-12
TFC 3.10	2" TO 4.5" or 4.5 SSD/Cavity	Up to 10000 BPD	AA-J	00-16

TECHNOLOGY

The Tech-Flo Jet Pump functions by utilizing the Venturi effect. The Venturi effect (shown below) is a special case of Bernoulli's principle which states that as fluid flows through a pipe with a constriction in it (nozzle) the fluid must speed up in the restriction, reducing its pressure and producing a vacuum via the Bernoulli Effect. This vacuum is what brings formation fluids into the jet pump and to the surface.



HOW IT WORKS

The jet pump utilizes the momentum of one fluid to move another fluid.

Nozzle: to increase the velocity and decrease the

pressure of the power fluid

Mixing tube (throat): where the power fluid encounters the produced fluid

Intake: where drawdown directs the produced fluid into the high velocity jet

Diffuser: where the velocity of the mixed stream is decreased, pressure is increased, and the fluid is returned to surface

BENEFITS

- No WOU or wire line needed for service
- Enhanced frac flow-backs
- Efficiently handles low to high volume production
- Extremely attractive in deviated or horizontal wells
- High solids and GLR handling capabilities
- No moving parts downhole
- Slimhole applicationsNominal

TECH-FLO CONSULTING LLC

9701 Pozos Lane Conroe, Texas 77303 **Phone:** 936.494.4330 West Texas Sales & Service South Texas Sales & Service tech-flo.net

