

Artificial Lift Selection Process

Elevating returns through a comprehensive suite of technology and services.	ELECTRIC SUBMERSIBLE	GAS LIFT	HYDRAULIC JET	ROD LIFT	PROGRESSING CAVITY	HYDRAULIC PISTON	PLUNGER LIFT
Operating Depth	1,000 - 15,000 TVD	5,000' - 15,000 TVD	5,000 - 18,000 TVD	100' - 16,000 TVD	2,000' - 6,000 TVD	7,000 - 20,000 TVD	8,000 - 19'000 TVD
Operating Volume	100 - 30,000 BPD	200 - 30,000 BPD	100 - 10,000 BPD	5 - 5000 BPD	5 - 4500 BPD	10 - 1,000 BPD	1 - 300 BPD
Operating Temperature	100 - 400 F	100 - 400 F	100 - 500 F	100 - 500 F	75 - 250 F	100 - 500 F	130 - 500 F
Corrosion Handling	Good	Good to Excellent	Excellent	Good to Excellent	Fair	Good	Excellent
Gas Handling	Fair to Good	Excellent	Good	Fair to Good	Good	Fair	Excellent
Solids Handling	Fair to Good	Good	Excellent	Fair to Good	Excellent	Poor	Fair
Fluid Gravity	>10 API	>15 API	>8 API	>8 API	<35 API	>8 API	GLR Required 300 SCF/BBL
Servicing	Workover or Pulling Unit	Wireline or Workover Rig	Pump Up or Wireline	Workover or Pulling Unit	Workover or Pulling Unit	Pump Up or Wireline	Wellhead Catcher or Wireline
Prime Mover	Electric or Multy Cylinder	High Pressure Gas	Electric or Natural Gas	Gas or Electric	Gas or Electric	Electric or Natural Gas	Wells' Natural Energy
Offshore Application	Excellent	Excellent	Excellent	Limited	Good	Good	N/A
Overall System Efficiency	35% - 50%	10% - 30%	10% - 30%	45% - 60%	40% - 70%	45% - 55%	N/A