

GPX Advanced Gas Processing Unit



Engineered for gas wells up to 70% GLR

The SPECTRUM ADVANCE GPX Gas Processing Unit is a multiphase, axial flow gas handling device of compression design that allows ESP production of oil wells with a high gas to liquid ratio (GLR) of up to 70%.

Release production from harsh gas condition wells

The SPECTRUM ADVANCE GPX unit enables production from wells that were previously not considered suitable to be lifted with ESPs due to unstable production, pump surging and gas locking. The hydraulic design of the pump stage allows production in far harsher applications than conventional gas handling equipment. The GPX-G70 unit pressurizes the fluid, forcing the gas back into solution to bring it within the operating range of the pump. Each stage generates high head and is less dependent on centrifugal forces to transfer energy to the fluid, effectively pushing it into the production pump, through the production tubing, providing additional lift.

Abrasion resistant to enhance run life

The SPECTRUM ADVANCE GPX unit can be deployed in both horizontal wells and in wells with non vented/ deep set packers where the gas would otherwise accumulate. ESP run life is enhanced through the use of Abrasion Resistant (AR) bearing designs, providing better stabilization and allowing production in harsher environments where sand and abrasive material present significant radial wear and erosional risks with standard equipment.

Increase reservoir recovery

The ability to produce below the bubble point allows greater recovery from mature, low pressure reservoirs. Maintaining a lower column of fluid above the pump maximizes the drawdown creating additional inflow from the reservoir.

The SPECTRUM ADVANCE GPX unit is designed to be installed with a standard pump intake but for wells with extremely high GLR the unit can be used in conjunction with a single or tandem SPECTRUM Vortex Gas Separator.

APPLICATIONS

- High GLR wells (up to 70% free gas) that cannot be produced with gas separators
- Wells where completion configuration does not permit gas venting
- SAGD/Horizontal wells susceptible to gas accumulation
- Abrasive applications unsuited to gas separators
- Subsea oil wells
- Gas well dewatering
- Gas lift to ESP conversions
- CO₂ injection wells
- Shale oilfield applications

BENEFITS

- Produce very high GLR wells
- Achieve high drawdown & additional production
- Stable pump operation at low pump intake pressure
- Reduced cycling of ESP due to gas locking
- Improved ESP run life with stable motor loading
- AR bearing design that allows for greater gas slug handling
- Extend operating range of HPS system

FEATURES

- Axial stage design limits phase separation
- HSS & abrasion resistant design available

GPX -D40/G70

SPECTRUM Advance
GPX Advanced Gas Processing Unit

SPECIFICATIONS

Description	OD In (mm)	Length ft (m)	Weight lb (kg)	Power consumption HP		Number of stages	Shaft diameter In (mm)	Shaft limit HP					
								STD		HSS		UHSS	
				60Hz	50Hz			60Hz	50Hz	60Hz	50Hz	60Hz	50Hz
SPECTRUM ADVANCE Gas Processing Unit (GPX-G70)	5.13 (130.3)	6.3 (1.92)	272 (123.4)	50	29	16	1 (25.4)	375	313	600	500	750	625
SPECTRUM ADVANCE Gas Processing Unit (GPX-D40)	4 (101.6)	6.3 (1.92)	135 (61)	18	10.4	22	0.875 (22.2)	250	208	400	333	500	416

GAS COMPRESSOR APPLICATION MAP

