

Products

The Paddle-Drive system is an environmentally friendly product that saves money! It eliminates the emission of harmful gases from gas driven chemical injection pumps and gas driven glycol units. (See pictures below specifications) It is a dependable unit that works on all natural gas wells with very little pressure drop.

S-2500 "Paddle-Drive" Fitting (pat.pend.)

S-2500 GENERAL DESCRIPTION:

The new "Paddle-Drive" (patent pending) mechanical turbine impeller converts the power in a pipeline of natural gas into reciprocating shaft motion with very little pressure loss. The back-and-forth shaft can be coupled to an injection system such as the Texsteam, CVS, or Arrow to pump chemicals such as methanol, TEG, EG, surfactants, de-emulsifiers, de-scaling agents, solvents and oxygen scavengers, and other corrosion inhibitors into the natural gas stream piping. The model S-2500 can be "field-installed" to be adjustable from 2-6 strokes per minute* and can also be used to drive small air compressors directly.

The unique "H-fitting" drive unit can drastically reduce vented gas and eliminate the need for LP tanks or high-cost utility extensions to the wellhead. The "Paddle-Drive" can be used to increase profitability in low E3M3 gas wells by drastically lowering operating expenses. The unit is environmentally friendly and qualifies for "Green Credits". Production flow rates can be as low as 37 MFD with custom units* even less.

S-2500 PRODUCT SPECIFICATIONS:

- 1) High pressure pipe fitting rated up to 2,500 psi*.
- 2) Approximately 5 PSI pressure drop across fitting.
- 3) Meets NACE MR 01 75 standards.
- 4) Sour gas service—Hydrogen sulfide, carbon dioxide, water.
- 5) Marking to MSS SP 25 standards.
- 6) Field Maintainable/Replacement parts available.
- 7) ABSA registration in Alberta---CRN approval pending.
- 8) 1" female NPT access port*.
- 9) Stroke lengths can be set to ¾" or 2"*
- 10) 2-10 strokes per minute*.
- 11) Shaft output fitting 3" NPT*.
- 12) Inlet/Outlet fittings 1" female NPT*.
- 13) Extremely low maintenance/impact-resistant.
- 14) Media temperature range -20 to 180 degrees F.*
- 15) One year warranty on parts and materials.

*Custom models can include: higher stroke frequency, longer stroke lengths, output shaft options, lower pressure rating, lower gas volumes, reducing nozzles, other temperature classes, other material classes, API-6A compliance, CSA B51-03 compliance, mounting kits, and special piping connections. DC electricity generation is under development for controllers, communication devices, and cathodic protection applications also. Contact Pro Design Engineering sales department for details at 763-682-3293.

WE CAN DO CUSTOM UNITS - CALL FOR QUOTATION 763-682-3293

{gallery}products{/gallery}Image one:

Overall view showing gas flow through the inlet/outlet elbolets, weldolet with reciprocating shaft, and weldolet for access port.

Image two:

Close-up side view showing access port and shaft.

Image three:

Looking from the turbine impeller end with end cap removed.

Image four:

View showing the reciprocating motion of the shaft.