PRODUCT DATASHEET

Flare Gas Recovery Unit (FGRU)

Liquid-ring compressor skid for flare gas recovery





DETAIL – SEPARATOR VESSEL

OVERVIEW

The Tech Inc. Flare Gas Recovery Unit (FGRU) takes gas heading for the flare and returns it to the fuel gas system or process instead of burning it. The skid is built on liquid-ring compressors, in which a spinning ring of liquid seals the compression. These machines are the industry standard for flare gas because they handle wet, dirty and changing gas.

MODELS AND CONFIGURATIONS

- **TI-FGRU-LR1** – two liquid-ring compressors, each sized for 100% of design flow (2 × 100%).
- **TI-FGRU-LR3** – a larger unit with three liquid-ring trains, each sized for 50% of design flow (3 × 50%).

TYPICAL DESIGN DATA

Compressor type	Liquid-ring, designed to API 681 or client specification
Train arrangement	2 × 100% (TI-FGRU-LR1) or 3 × 50% (TI-FGRU-LR3)
Capacity	Sized to the flare header base load, or to client specification
Discharge	To fuel gas or process, with pressure to client specification
Service liquid	Selected to suit the gas, or to client specification
Materials	To suit the gas composition, including sour service, or to client specification
Vessels	Designed to ASME VIII or client specification
Controls	PLC with header pressure control and compressor staging

APPLICATIONS

Refineries, gas processing plants, oil and gas production facilities, petrochemical plants, and terminals.

KEY ADVANTAGES

- **Gas back into use** – recovered gas offsets fuel gas or returns to process
- **Less flaring** – lower emissions, less smoke and less flare noise
- **Handles wet gas** – liquid-ring compressors tolerate liquids and dirt in the feed
- **Cool compression** – the service liquid absorbs the heat of compression
- **Redundancy** – 2 × 100% or 3 × 50% trains keep recovery running during maintenance

Designed and built by Tech Inc. · **Part of the Davey Group since 1990**

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