

TESCORP MVR SERIES VAPOR RECOVERY UNIT

Rotary Vane Compressor

7 1/2 to 40 Horsepower; 0 to 8 PSIG Inlet Pressure

Maximum Discharge Pressure 150 PSIG

Price Available Upon Request.

The TESCOP "MVR" SERIES is a self-contained and complete system for stock tank vapor recovery, flare gas recovery, and low suction pressure gas applications. With proven TESCOP vapor recovery controls, components, and the rugged MVR rotary vane compressor, this series of units is applicable to flow capacities of 50-250 MSCFD with discharge pressures up to 150 PSI. The MVR vapor recovery unit is a compact and fully-automated system for continuous operation in the harsh oil field environment. The unit is designed and constructed for ease of shipment and for quick installation and operation. Factory options for various applications and environments are available to meet customer's varying requirements.

The unit offers the following design features:

Single-stage, oil-flooded rotary vane compressor with:

- » Oil-injected, air-cooled elements for continuous duty
- » Mechanical seal

Premium efficiency electric motor drive with:

- » TEFC enclosure, NEMA "B" torque, 1.15 service factor
- » Inverter duty for application with "VFD" drive

Suction scrubber constructed per the following:

- » Designed and constructed per ASME Section VIII
- » 1/8" corrosion allowance
- » Condensate level controls, gauges with integral condensate blowcase

Heat exchanger assembly complete with the following:

- » Closed-loop compressor oil cooling system for continuous duty
- » Thermostatic control valve for complete temperature maintenance for varying temperatures and gas compositions

Piping materials, welding procedures, design and construction per the following:

- » ANSI B31.3 latest edition

Fully automatic vapor recovery control panel and control components:

- » TESCOP vapor recovery logic
- » Color HMI with compressor performance and annunciation
- » Load/no-load flow automatic start/stop
- » Modbus RTU RS 485 Communications

MVR unit construction:

- » All electrical components and wiring per NEC Class I, Division II, Class B,C, & D
- » Skid assembly shall conform to ASTM A-36 requirements
- » All units receive a complete mechanical/control run test with documentation

Options:

- » Weather enclosure for low temperature environments
- » Motor starters and/or VFD drives
- » Linear flow controls
- » Heat trace and insulation
- » Air cooled gas heat exchanger

