

# TESCORP DUPLEX VAPOR RECOVERY SYSTEMS

Single- or Two-Stage Compressors



The TESCORN "DUPLEX" SYSTEM is a proven design with installations throughout the oil field and petrochemical industries. TESCORN specializes in providing constant flow, 100 percent redundant systems for applications that are critical to facility operations. The duplex unit is a completely self-contained compression system for application to stock tank vapor recovery, flare gas recovery, or process gas requirements. Designed and constructed for specific critical applications, TESCORN incorporates its standard VRU systems in a redundant, duplex configuration to be either 100 percent standby or 200 percent emergency flow units.

**The unit offers the following design and optional features:**

**Single- or two-stage configuration units with:**

- Gas intercooling/aftercooling by either air-cooled or water-cooled heat exchangers
- Manual or automatic compressor isolation valves
- Redundant drives and motors
- Redundant control functions for each compressor
- Common control panel with automatic lead/lag logic, alternator for equal operation time

**Premium efficiency electric motor drive with:**

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

**Suction/insterstage/discharge scrubbers are constructed per the following:**

- Designed, constructed, stamped and National Board Certified per ASME Section VIII
- 1/8" corrosion allowance
- 316 SS mist eliminator
- Condensate level controls, gauges, pump (s) rated for flow and pressure

**Heat exchanger assembly complete with the following:**

- Common or individual Inter-Cooler/After-Cooler assemblies with isolation valves
- Closed loop compressor water jacket or oil cooling system for continuous duty
- Full flow motor driven coolant pump (s)

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

- ANSI B31.3 latest edition

**Vapor recovery control panel is designed per NEC Class I, Division II, Class B, C & D with:**

- TESCORN "duplex" vapor recovery logic, controls, and indicators
- Linear flow control logic with proportional bypass valve
- DCS communication logic

**Options:**

- Sour or corrosive gas protections (NACE)
- Controls and panels per customer preference
- Motor starters and/or VFD drives
- Automatic or manual isolation valves and actuators
- Automatic isolation and gas purge of inoperative side of unit

*Price available upon request.*

*Application graphs and drawings available separately.*