



Hydrocarbon Recover & Fuel Gas Systems

OTSO JT Systems are used to recover valuable hydrocarbon liquids or to protect gas engines receiving raw or pipeline gas. These systems are ideal for high pressure remote service where centralized gas gathering facilities are not available and / or practical.

JT Systems consist of a gas/gas heat exchanger, an expansion valve or choke, and a cold separator. The system condenses and removes the heavier hydrocarbon fractions in the inlet gas stream thereby reducing gas richness. This provides hydrocarbon dew point control through the auto-refrigeration effect via expansion of the inlet gas stream.

ANTICIPATED RECOVERY

Volume of hydrocarbon recovered is a function of gas composition, temperature, and pressure drop across the auto-refrigeration valve. These factors will determine expected recovery. OTSO will issue expected hydrocarbon recovery data or anticipated new gas methane number after process conditions are received.

The graphs below depict how the quantities of recoverable liquid vary with the inlet gas temperature and pressure drop. These examples are based on gases with C₃+ liquid compositions of 1.29, 2, and 4 gallons per thousand scf at 1,000 psi inlet pressure.

