FLARECATCHER 10000-65

SPECIFICATIONS SHEET

- **10,000 MCF / day processing capacity**
- **Proprietary Deep Refrigeration™ – Cools Gas to -65°C**
- **Pipeline quality lean gas output (Cummins MN 70+)**
- **Rapidly deployed & redeployed**
- **Scalable via paralleled units**
- **Ethane is removed (tunable down to as low as 2%)**
- **Fully Autonomous with 24/7/365 remote monitoring**

Description

The **Flarecatcher 10000-65** is a modular gas processing plant that processes liquid-rich associated gas at the wellsite, at central processing facilities, or at gas plants. It produces Y-Grade Natural Gas Liquids (NGLs) and pipeline quality lean gas. The Flarecatcher reduces or eliminates flaring, enabling monetization of associated gas & reducing environmental footprint.

Raw associated gas is first dehydrated through use of precooling and a three-phase separator. Any remaining water is then removed through use of a molecular sieve. An economized cascade mechanical refrigerator cools the gas to -50°C and a JT expansion cools the gas further to **-65°C** liquefying C3+ components. A sophisticated separation system then dissociates the gas into three streams: stabilized **Y-grade NGLs** (to be transported to market), **lean methane** (pipeline quality), and low-value rejected ethane (consumed onboard or flared).

Flarecatcher 10000-65 Characteristics

GAS PROCESSING CAPACITY	Can be configured for 10,000 MSCFD of 1,300 BTU / cu ft gas input, with conditioning to pipeline spec dry gas Can be configured for 7,000 MSCFD of 1,550 BTU / cu ft gas input, with conditioning to pipeline spec dry gas
PRESSURE RATINGS	450 PSI MAWP 150 – 400 PSI typical inlet operating pressure
DEHYDRATION	304SS vessels Molecular Sieve 4A (dries gas to -100°C dewpoint) 304 SS gas-to-gas heat-exchanger Metal-seated control valves
REFRIGERATION	Semi-hermetic screw compressors cooling in three steps (3°C, -35°C, -50°C). JT expansion cools further to -65°C Oil-separators, filter-driers, suction-accumulators used to improve reliability and performance Plate-heat-exchangers 304SS Air-cooled condensing units with floating-coils
SEPARATION	Stainless steel construction Cyclonic-separator: Outputs lean gas (pipeline quality) and feeds condensed liquid to stripping column Stripping column: Random-fill design to maximize C3+ capture in NGL Reboiler: Electric immersion heaters 300 kWe to control ethane content in NGL Transfer Pump: Mag-coupled regenerative turbine pump
FILTRATION	Inlet gas strainers to remove particulate contamination Coalescing gas filters pre-and-post dehydration vessels
CONTROLS	Wireless cellular communications protocol used with satellite back-up Opto22 controllers, mGuard security firewall All control valves pneumatically actuated (via onboard instrument air) Control valves equipped with limit-switches to report valve position Instrumented to measure temperatures, pressures, and flow in all critical areas
SKID DIMENSIONS	3 separate skids: 1x 42-ft long x 11.5-ft wide x 12-ft tall, 1x 42-ft long x 11.5-ft wide x 25-ft tall, 1 x 40-ft long x 8.5-ft wide x 10-ft tall Est. Weight: 175,000 lbs.
POWER REQUIREMENTS	~1,650 kWe, 480V 3phase 60Hz Power can be provided via grid power or by use of a natural gas genset which can be fueled by the conditioned gas
SAFETY	UL 508 Electrical; Class-1 Division-2 Group-D / ATEX Zone 2 ASME Stamped Pressure Vessels Pressure relief valves and rupture-disks used. Automatic blow-down system to quickly and safely empty system of all liquid hydrocarbons Redundant instrumentation used in critical areas Compliant with US EPA OOOO/VVa

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Made in the USA