



# 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

<b>GAS PROCESSING CAPACITY</b>	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
<b>PRESSURE RATINGS</b>	550 PSI MAWP 150 – 500 PSI typical inlet operating pressure
<b>DEHYDRATION</b>	304SS vessels Molecular Sieve 4A (dries gas to -100°C dewpoint) 304 SS gas-to-gas heat-exchanger Metal-seated control valves
<b>REFRIGERATION</b>	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
<b>SEPARATION</b>	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
<b>FILTRATION</b>	Inlet gas strainers to remove particulate contamination Coalescing gas filters pre-and-post dehydration vessels
<b>CONTROLS</b>	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
<b>SKID DIMENSIONS</b>	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.
<b>POWER REQUIREMENTS</b>	~2,240 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
<b>SAFETY</b>	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