HIPOWER Unprocessed Gas Conditioning System
FCS - 25, 50, 100, 250, 500

General Description

The FCS-25, -50, -100, -250 and -500 portable passive dehydration systems are skid mounted on a heavy duty carbon steel frame to resist extreme handling with large forklift pockets and 360 degrees overall protection. The outdoor rated components are NEMA 3R and the pressure vessels are ASME coded. The equipment can also be designed and manufactured to meet CSA and CE code requirements as well.

This advanced equipment is designed primarily to process raw natural gas as well as to remove water, condensates and particulates from well head streams to provide a clean, dehydrated and consistent BTU for utilization in high speed natural gas engines and other Bi-Fuel applications that require a safe clean gas.

The compact modular Gas Conditioning system design allows easy access to the vessel for routine maintenance and yet protects the entire component from direct contact with forklifts, cranes, skid loaders and other types of equipment mobility devices.
Benefits

The Fuel Conditioning Systems are commonly utilized at the compressor gathering points to filter the fuel as well as to regulate the incoming pressure to an operating pressure for permanent and mobile natural gas power generation mobile sets. The system can treat contaminants, fine particles, natural gas liquids and water content in the natural gas stream. Alternative methods of dehydration are becoming increasingly important; the FCS-25, -50, -100, -250 and -500 get the job done using a low cost, Eco-friendly desiccant formula called enviro-DRI. The product absorbs the moisture and dissolves it into a brine solution that is drained to the water storage on location. Unlike the by-products of competing dehydration equipment such as the glycol unit, the by-product of the FCS units is a non-hazardous liquid material that can be retrieved by any vacuum truck. The system is designed to be refilled on a 30-60 day service cycle schedule. This state of the art modular design will effectively handle any fluctuations of various well volumes and flow rates below design specifications.

Main Components

- Pre-liquid separator.
- Dehydrators.
- Pre-regulator.
- Coalescent filter to catch impurities.
- JT Valve.
- Cold Separator.
- Contingency “Back Up” regular on the output side.

Features

- Outdoor rated NEMA 3R.
- Powder coated carbon steel protective frame.
- Large forklift pockets and heavy duty lifting eyelets.
- Industry standard (NPT) in and out piping hookups.
- Safely and easily dehydrates gas stream.
- Efficiently separates and captures valuable NGLs.
- Maximizes production and minimizes compressor downtime.
- Uses non-hazardous desiccant with zero flames.
- ASME coded pressure vessels.
- Cost effective and increases engine runtime.
- Easy to maintain and operate.
- Safe for personnel with no moving parts or fired vessels.
- Eco-Friendly “Environmental Safe” desiccant formula.
Dimensions*

Front View

Left Side View

Upper View

*Actual model size and dimensions are based upon unit ordered requirements.
## Technical Features & Details

<table>
<thead>
<tr>
<th>Unit Name</th>
<th>Gas Volume (Mcf/d)</th>
<th>Estimated Weight (Lbs)</th>
<th>Dimensions LxWxH</th>
<th>General Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCS-25 Series</td>
<td>25</td>
<td>1200</td>
<td>5’ x 4’ x 6’2”</td>
<td>All HIPOWER Models</td>
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<tr>
<td>FCS-50 Series</td>
<td>50</td>
<td>1600</td>
<td>5’ x 4’ x 6’2”</td>
<td>HRGM 25, HRGM 30, HRGM 45, HRGM 55, HRGM 65, HRGM 85</td>
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<tr>
<td>FCS-100 Series</td>
<td>100</td>
<td>2000</td>
<td>5’ x 4’ x 6’2”</td>
<td>HRGM 165, HRGM 170, HRGM 230 &amp; below</td>
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<tr>
<td>FCS-250 Series</td>
<td>250</td>
<td>3500</td>
<td>5’ x 4’ x 6’2”</td>
<td>All HIPOWER Models</td>
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<tr>
<td>FCS-500 Series</td>
<td>500</td>
<td>12,500</td>
<td>14’ x 8’ x 11’</td>
<td>All HIPOWER Models Compressor Stations</td>
</tr>
</tbody>
</table>

- **Dehydrators**
- **Pressure Safety Valves**
- **JT Valve**
- **Cold Separator**
- **Coalescing Filter**