Callidus Modular Flare Gas Recovery

PRE-ENGINEERED FLARE GAS RECOVERY SYSTEMS

Reducing flare emissions
How can Callidus Flare Gas Recovery Systems save for you?

Losses to the flare, including process gases, fuel gas, steam, nitrogen and natural gas, represent the largest source of loss in a refinery or chemical plant. The cost of these losses can add up quickly. The Callidus Modular Flare Gas Recovery System collects process gases from the flare header before it reaches the flare, compresses them and allows them to be reused within the facility's fuel gas system. In some cases, the recovered gases can also be used as a refinery feedstock. The Callidus Modular Flare Gas Recovery System helps refinery owners save in several different ways, including:

Environment

Worldwide, efforts to reduce emissions have become increasingly important. By capturing flare gas before it is burned by the flare, we can significantly reduce the amount of emissions produced on an annual basis. Customers may be eligible for emissions credits when using this technology.

Public image

No one likes to see or hear a flare system, especially the communities surrounding your facility. By installing Callidus FGRS, owners can significantly decrease the number of flaring events that occur annually, limiting the risk of major or emergency cases.

Cost

By capturing and compressing recovered flare gases, Callidus FGRS provides a ready supply of gas that can be used in your facility’s fuel gas system or as a refinery feedstock. This allows you to reduce the amount of gas purchased from outside, or increase your supply of salable gas to Callidus Technologies, a leading provider of flare systems, offers flare gas recovery technology in conjunction with its broad range of flare system capabilities. With a heritage of technical expertise, we take pride in providing economical flares with high destruction efficiency, high smokeless capacity, low noise and low radiation for a broad range of flare applications. The Callidus team has hundreds of years of combined flare design experience and has been involved in the fabrication, installation, start-up, and service of thousands of flare systems worldwide.

Dedicated to achieving zero flaring, Callidus’ Flare Gas Recovery Systems (FGRS) address the growing concerns regarding flare emissions, while also saving money. We call it “Saving made simple.”
create a higher revenue stream. Also, by minimizing the number of flaring events, you significantly reduce steam consumption, which saves you more money.

**Equipment life**
Fewer flaring events means that the flare tip is less exposed to the negative effects of combustion, extending the flare tip life. This means fewer spare parts orders and a longer period between tip replacements.

**Callidus Modular Flare Gas Recovery Systems (FGRS)**
The Callidus Modular Flare Gas Recovery System consists of several major components. The primary component of the system is the compressor unit. Callidus uses proven, liquid ring technology, which is capable of addressing a wide range of process compositions typical in flare applications. The Callidus FGRS also integrates seamlessly into an existing flare system.

**System Safety**
Installing any flare gas recovery system without evaluating the impact on the flare system can result in poor performance and potentially hazardous conditions. Since the flare gas recovery system is pulling gas from the flare header, it could potentially create a vacuum condition within the flare system and pull air in from the flare tip. To prevent this from happening, Callidus recommends conducting a liquid seal evaluation with every Flare Gas Recovery System application. Callidus has extensive experience designing and supplying deep liquid seals, which enable the installation and correct operation of the Callidus FGRS, without compromising flare system performance. As a world leader in flare system equipment, Callidus uses a proprietary liquid seal design to avoid liquid seal turbulence, which can result in flare pulsing.

**Custom made simple**
Modular Flare Gas Recovery Systems are pre-engineered, skid-mounted packages for faster delivery and startup. Modules are single skid-mounted units that can be combined to provide increased recovery capacity. Pre-engineered piping kits provide interconnection between modules. Single skid modules allow for faster installation and reduced field assembly costs. Multi-module configurations provide maintenance efficiency as units share common parts.

With Callidus’ deep understanding of controls, our Flare Gas Recovery Systems are designed to integrate and communicate with your existing controls platforms. Our typical configuration uses PLC based controls to monitor and control the system components. However, the system can also communicate and integrate with existing customer distributed control systems.

**Callidus sizing service**
Callidus Technologies offers an FGRS sizing service, which monitors and tracks flare header activity to better match your process conditions and make recommendations for the appropriate module configuration. We use state-of-the-art flow data logging to periodically record data which can then be used to determine which configuration is best for your application. The testing and monitoring services have zero impact on your existing system.

**Powerful savings**
Achieving your zero flaring goal has never been so simple. Reducing emissions, saving money and extending the life of your flare equipment – all with a pre-engineered, Callidus Modular Flare Gas Recovery System. It’s, ‘Saving made simple’. For more information please call or email us today.
Test facilities

Callidus test facilities in the U.S. and China are used for combustion technology research and development as well as for customer demonstrations. Our array of test systems allows us to closely match actual field operating conditions, providing results which will more accurately predict actual measured performance.

Global coverage

Callidus global headquarters is located in Tulsa, Oklahoma, USA, with regional sales offices and independent sales support around the world. Meeting our customers’ expectations and setting the standard for the combustion industry have always been our company goals. Each burner, flare, thermal oxidizer and catalyst system we design and manufacture is built with those goals in mind.

For more information

For more information, please visit www.callidus.com to find a local sales representative.

Corporate Headquarters:
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Phone: +1 918 496 7599

Single Module Specifications

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<th>Capacity (ACFM)</th>
<th>670</th>
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</thead>
<tbody>
<tr>
<td>Gas Inlet Pressure (inch WC)</td>
<td>6+</td>
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<tr>
<td>Gas Outlet Pressure (psig)</td>
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<tr>
<td>Dimensions (feet L x W x H)</td>
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<tr>
<td>Weight (lbs dry)</td>
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<tr>
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<tr>
<td>Piping</td>
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<table>
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<td>Mass flow lb/hr</td>
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