

## GAS CYLINDER HANDLING

*An efficient way to maximize gas yield from storage cylinders*

### Application

The temperature of gas within a gas cylinder plays an important role in the efficiency of gas removal. As gas is expelled, the pressure drops within the cylinder. This pressure drop causes the temperature inside the cylinder to decrease, which makes it increasingly difficult for the gas to vaporize and be expelled. Often cylinders appear empty and get discarded or refilled prematurely when the cylinder does not have enough pressure to evacuate 100% of its contents. The result is wasted gas, extended production times, and increased production costs.

If the cylinder temperature gets cold enough due to rapid expulsion of gas, freezing conditions can occur. If the cylinder freezes over, gas cannot be expelled and the cylinder must be warmed before production can resume. Because freezing occurs due to gas being rapidly expelled, this occurs in warm and cold environments. In cold environments, cylinders are more likely to experience reduced temperatures and cylinder warmers become increasingly important.



### Solution

BriskHeat's gas cylinder warmers are ideal for maximizing gas yielded from a storage cylinder by ensuring contents remain at an elevated temperature for optimal efficiency. To maximize efficiency, the temperature of a gas cylinder is typically maintained just over 100°F (38°C). It is recommended that cylinder warmers are installed and operating during production.

The easy-to-install, plug-and-play BriskHeat cylinder warmers fit snugly around the cylinder to maintain a warm temperature of the contents. This assures the gas can be efficiently discharged. Built-in insulation minimizes heat loss to increase thermal efficiency. A self-regulating technology heating element ensures that the cylinder will not overheat and maintains an optimal operating temperature. BriskHeat gas cylinder warmers reduce operating costs by increasing gas efficiency and reducing downtime.

Ordinary and Hazardous-area rated models are available.

### Additional Uses

Variations of these units can be used for freeze protection on other small tanks and cylinders such as propane tanks. HVAC contractors and technicians use surface heaters to maximize gas yield from refrigerant recovery cylinders.

#### Industries

Analytical Instrumentation/ Laboratory	Gas Handling
Chemical Processing/ Extractions	Heavy Industry/Mining Manufacturing
Gas & Oil	Semiconductor, Flat Panel, & Photovoltaic/Solar

#### Types of Users

Facilities Maintenance Process Engineers	Production Managers HVAC Installers/Repair
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#### Gases Known to Benefit from This Process

SF6	Nitrogen	BCl3	HF
Propane	Oxygen	WF6	