

SUB-X[®] Submerged Combustion LNG Vaporizers.



24 Sub-X[®] 120-186 MM SCFD SCVs installed at a US Gulf Coast LNG import terminal

Vaporizing LNG for over 50 years

Selas Linde North America is internationally recognized for its innovative and comprehensive vaporizer systems. We designed and supplied the very first submerged combustion system at a peak shaving regasification terminal in Alabama in 1965. We have over 420 LNG vaporizers installed worldwide.

LNG base load and peak shaving service

Presently, eight of the twelve base load import terminals in North America employ submerged combustion LNG vaporizers (Sub-X[®] SCVs). These terminals operate both multi burner and single burner units, typically rated at 100 to 186 MM SCFD (90 to 175 tons/hr.) LNG vaporization. They are designed to operate 24/7 year round at nearly 100% efficiency.

LNG peak shaving facilities, on the other hand, operate intermittently, supplying North America's natural gas pipelines year round as required. Nearly half of the more than 80 peak shaving facilities employ Sub-X[®] SCVs, ranging in size from 10 to 100 MM SCFD operating at 93% efficiency.

Design advantages

- Quick startup
- Fast response time
- Superior turn down
- High heat flux with low approach temperature
- Average thermal efficiency ranging from 93% to 100%
- Weir, sparger, and tube bundle designs provide high turbulence/recirculation, resulting in temperature uniformity
- No ice buildup on tubes
- Rapid start up and shut down without process upset
- Water bath mitigates process fluctuations during transition periods
- No flame impingement on LNG coils
- Heat exchange medium is water, eliminating the hazards and handling of ethylene glycol or other fluids
- High turndown capability
- Pre-piped and pre-wired stainless steel tank configurations available
- Compact footprint
- Easily integrated with supplemental heat sources

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