



## Sundyne BMC Process Gas Compressors Increasingly Deployed as Gas Boosters in Co-Generation Power-Plants



### Demand for Clean & Affordable Energy Increases the Popularity of Gas Turbine Power Generation in Industrial & Commercial Co-Gen Power Plants

Co-gen power plants require gas pressures in the range of 250-750 psig to operate their turbines in an optimal fashion. Interstate gas pipelines transport gas at different pressures – ranging anywhere from 30 to 125 psig. In order to boost incoming gas pressures to levels required by turbines, many co-gen facilities at refineries, chemical plants, hospitals, universities and other industrial plants are deploying Sundyne fuel gas boosters.

operating modes; a small footprint; simplified installation and short delivery times.

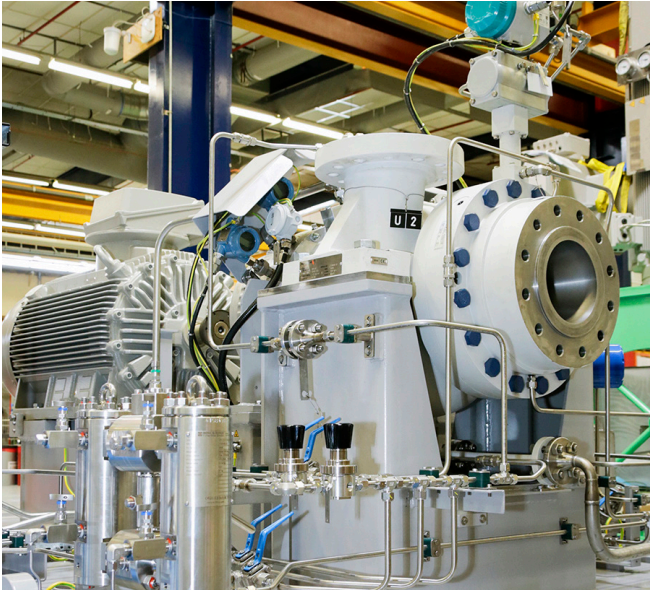
To address these requirements, Sundyne compressors feature the following:

**High efficiency:** Sundyne's high speed digital control system integrates all the compressor control functionality in a single system – including surge protection, load-sharing capabilities, compressor-switching and discharge pressure control. This system has been designed to provide the highest efficiency and reliability, and it can be configured to control compressors in multiple configurations, including: variable inlet guide vanes, suction throttling, variable speed and/or gas recirculation.

**Safety:** Unlike alternative sealing arrangements such as labyrinth, carbon rings or single seal configurations – Sundyne's Tandem Dry Gas Seals configuration is the only sealing arrangement to provide a fully controlled gas emission system. This oil-free operation avoids fuel gas contamination and assures greater process stability. Sundyne's oil-free design eliminates concerns related to oil contamination. For fuel gas boosting applications, oil content should be less than 1 ppm to guarantee optimal gas combustion in the turbine. Compared to alternative technologies, such as oil-flooded screw compressors, Sundyne's technology eliminates oil contamination without relying on filtration or separation systems.



The fuel gas booster is one of the most important pieces of equipment in co-gen power plants, because if the fuel gas compressor fails, the entire power plant stops. Common requirements for fuel gas boosters include: high efficiency across variable suction pressures and several gas turbine



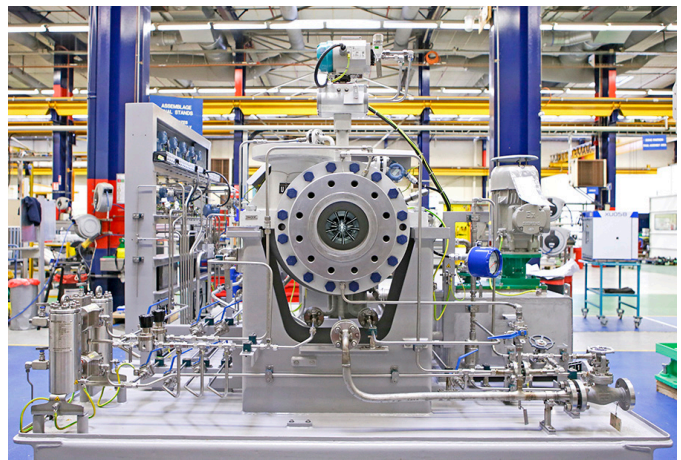
**Pulsation-free, Smooth Gas Flow:** Fuel gas boosting compressors need to continuously deliver a steady supply of fuel gas at pressures needed for optimal gas turbine operation, under all load conditions. Sundyne's centrifugal technology is specifically designed to deliver smooth, pulse-free flow.

**Small Footprint:** 75% smaller than volumetric compressor technology, Sundyne's single-skid packages eliminate the need for large foundations and lengthy installations, making them ideally suited for smaller co-gen facilities (or offshore units) where space and manpower are limited.

**Minimal Maintenance:** and maximum uptime are key requirements for profitable power generation. Sundyne

compressors are designed for five-year minimum uninterrupted operation.

**Shorten Delivery Times:** Sundyne fully-integrated compressor trains include auxiliary systems such as: air/water cooled gas heat exchangers; nitrogen generators; valve skids, and all the associated monitors & controllers. As a result, third-party packages are not required, which shortens delivery times. While many Sundyne gas compressors are built "fit-for-purpose" – Sundyne also manufactures units to meet stringent API 617 standards



Ever-growing demand for cleaner and more affordable energy is increasing the popularity of gas turbine power generation in industrial and commercial power plants – and most of these plants prefer centrifugal compression to boost fuel gas from pipeline pressures to the higher pressures they require.

With more than 50 years of technological development and investment, Sundyne gas compressors are specifically tuned to handle fuel gas boosting applications in any type of plant.



To learn more about Sundyne Fuel Gas Boost Compressors visit [sundyne.com](http://sundyne.com)



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