

Sauer Compressors launches Haug.Sirius NanoLoc compressor

Company's latest
machine designed to
handle pressures up to
6530 psig (450 barg).

By **DJ Slater**

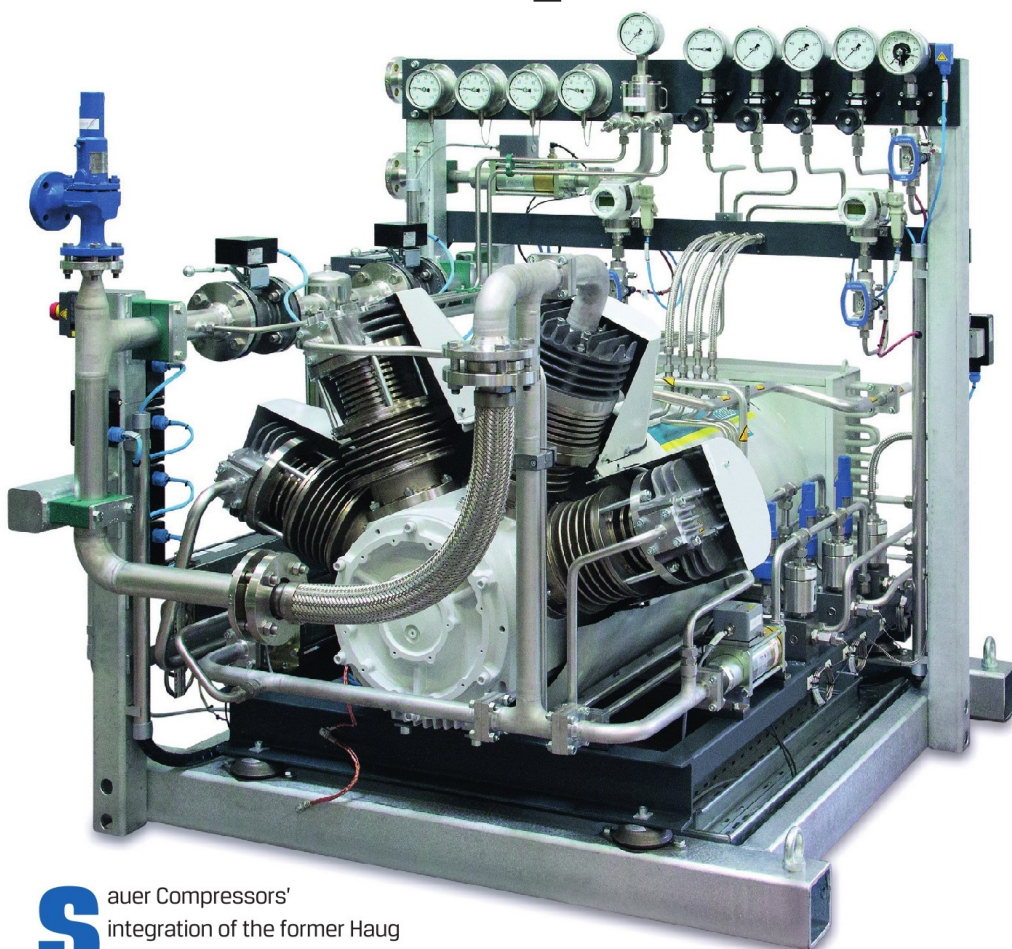


Sauer Compressor debuted the Haug.Sirius NanoLoc compressor in June 2018 at Achema in Frankfurt, Germany.

AT-A-GLANCE

HAUG.SIRIUS NANOLOC

- 11-30 kW motor
- Suction pressure max of 435 psig (30 barg)
- Final pressure max of 6530 psig (450 barg)
- NanoLoc design
- Gas tight with magnetic coupling
- Zero emissions



Sauer Compressors' integration of the former Haug Kompressoren AG has allowed the company to significantly expand its portfolio of products for the gas compression marketplace.

Haug compressors have a reputation that dates to 1930, yet the company has never pushed its machines past the 1450 psig (100 barg) mark. At least, that was the case up until 2018 when Sauer Compressors unveiled its first high-pressure Haug compressor.

Making its official debut in June last year at Achema in Frankfurt, Germany, the

The Haug.Sirius NanoLoc piston compressor offers oil-free compression of nearly any gas, making it applicable for several applications.

Haug.Sirius NanoLoc is an oil-free piston compressor that can reach discharge pressures up to 6530 psig (450 bar), giving Sauer Compressors a new high-pressure flagship machine to complement its existing lineup.

"This high-pressure compressor enlarged

our compressor range," said Jaroslav Ježek, an international sales manager with Sauer Compressors in Switzerland. "Before this, we did not have any oil-free high-pressure compressors above 1450 psig (100 barg)."

Improving the discharge pressure, however, is only one aspect of the story. The Haug.Sirius NanoLoc also features a gas-tight design, oil-free compression and the ability to process almost any gas, Ježek said.

"The new high-pressure model Haug.Sirius NanoLoc combines the best of two worlds – Sauer's high-pressure expertise and the oil-free expertise of Haug," he said. "The result of this combined knowledge is an oil-free, 'any gas' high-pressure compressor. Its oil-free, dry running design, gas-tight construction and magnetic coupling drive enable the Haug.Sirius NanoLoc to compress almost any gas."

Handles a range of gases

The absence of oil along with the compressor's tight construction allows it to handle a range of gases, which also

Sauer Compressors' newest compressor can process nearly any gas at discharge pressures up to 6530 psig (450 barg).

makes it an applicable choice for several applications, Ježek said. Those applications include industrial gas bottling (air, nitrogen, hydrogen); wind and solar energy storage; synthesis process gas compression; emergency gas storage; hydropower stations; hydrogen fuel stations; hydrogen storage at electrolysis plants; and gas boosting.

The Haug.Sirius NanoLoc provides a modular-built, high-pressure cylinder system. Several compressor configurations are available by using 23 standard cylinders. At Achema, Sauer Compressors displayed an air-cooled version with four-stage compression with four cylinders.

The Haug.Sirius NanoLoc provides four-stage compression with an inlet pressure up to 435 psig (30 barg), a maximum flow rate of 35 cfm (66 Nm³/h) and a rotary speed range from 970 to 1450 rpm. Depending on the configuration, the compressor comes with an 11 to 30 kW motor and has air- and water-cooled variations, as well as an explosion-proof model. Due to its construction, the compressor also has a compressor block leak rate of less than 0.001 mbar l/s.

The NanoLoc piston design features a unique piston sealing, which reduces wear and friction losses in the cylinders. The machine also includes a magnetic coupling drive to aid with the compressor's tight construction and low leak rate during and outside of operation. The modular design gives the compressor flexibility during installation in multiple applications.

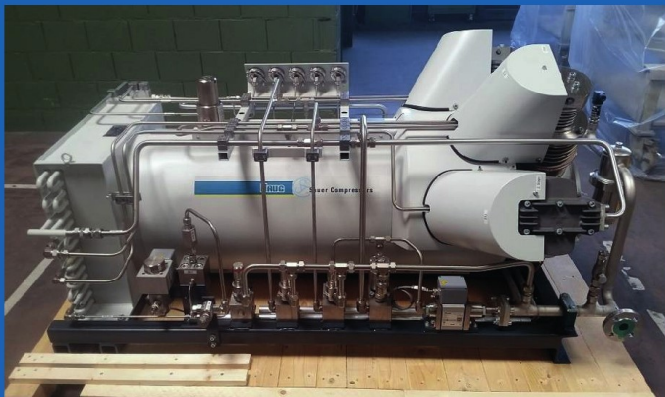
'Emissions-free'

Sauer Compressors also designates the Haug.Sirius compressor as an emissions-free machine, mainly because it is hermetically sealed, has a low leak rate and does not require oil-related maintenance or disposal. Thanks to the oil-free design, gas treatment and filtration post compression is either minimal or unnecessary given the compressor's processing capabilities, Ježek said.

"This system ensures no gas losses to the atmosphere and no compressed gas pollution from outside," he said.

With the Haug.Sirius NanoLoc compressor available in the marketplace, Ježek said Sauer Compressors doesn't have any plans for another variation or update to this new offering. But if the company were to come back to this model, a potential update could be a smaller compressor with the NanoLoc design.

CT2



The NanoLoc piston design includes a piston sealing that is designed to reduce wear and friction losses in the cylinders.

Due to its hermetically gas-tight construction, the Haug.Sirius NanoLoc compressor has a compressor block leak rate of less than 0.001 mbar l/s.

