

Howden's range of Kühnle, Kopp & Kausch® compressors for the sulphuric acid industry



Sulphur is the world's most used chemical and versatile mineral applied as an essential intermediate in many processes in the chemical and manufacturing industries.

Thereby sulphur is the primary source to produce sulphuric acid. Due to mega-trends like rising global population alongside greater fertiliser need for agricultural food production or increased mining of metals for emerging electro mobility, the worldwide demand for sulphuric acid is continuously growing. As a result, an economic production of sulphuric acid increasingly requires greater plant capacities. We are taking full account of this trend by continuously enhancing our product range.

Howden's Blower Applications for Sulphuric Acid Plants (SAP)

Core competence

Typical operation conditions in Sulphuric Acid Plants (SAP) such as unbalance, corrosive attack and erosion place high demands on main blower design. As the world market leader Howden sets the standards for sulphuric acid blowers with respect to efficiency, reliability and rugged design. Consequently, Howden's Kühnle, Kopp & Kausch SF and ST series turbo compressors form an integral part in the production of sulphuric acid. With more than 100 years of experience in compressors and steam turbines, Howden offers the optimum train configuration for each of your projects while complying with highest plant standards.

Plant/blower size correlation

Typical plant size (TPD)	1000	2500	4000	6000
Flow rate up to (10 ³ Nm ³ /h)	85	200	330	490
Typical impeller diameter (mm)	900	1400	1800	2200

Chemicals

- SAP within fertilisers and caprolactam/oleum producing sulphur-burning plant.

Metallurgy

- SAP after metallurgical smelter acting as gas-cleaning plant for off-gases (desulphurisation process).
- SAP within acid leaching (e. g. nickel production) sulphur-burning plant.

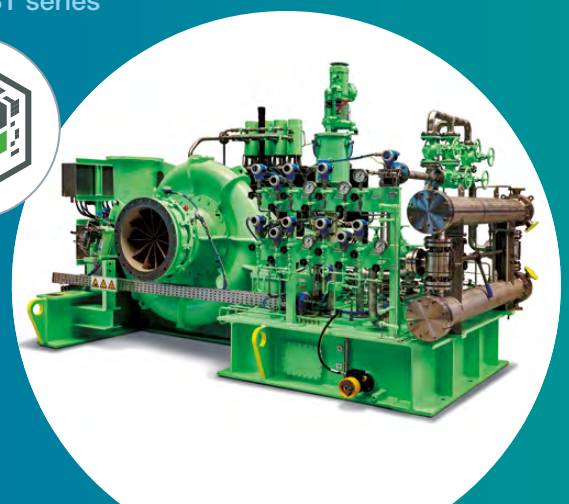
Petrochemicals and refinery

- SAP within petrochemical or refining industry acting as acid recovery.

Howden ST series



Open or download Vuforia app and scan QR code to open Augmented Reality (AR) model of machine



Customer benefits

Highest availability

- Mechanical durability
- Maximum wear-resistance
- Flexible adaption to (plant/customer specification) process conditions
- Single source supply by Howden's packaging capabilities

Lowest operational costs

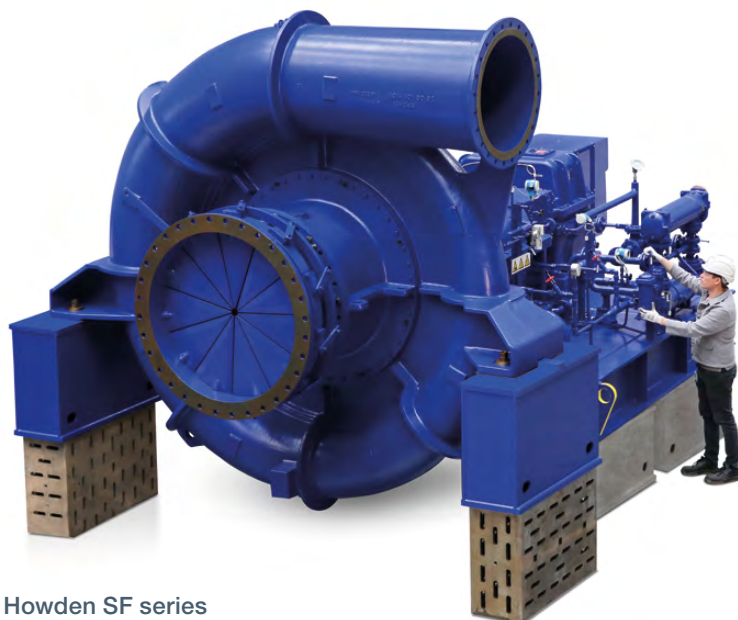
- Highly efficient blowers with lowest power consumption
- Wide control range to ensure economic operation (even in part load)
- Low maintenance requirements

Handling of corrosive gases

- Rugged design
- Heavy duty impeller and shaft
- Special bearing support system

Safe operation

- Customised control systems
- Superior surge margin (combined with highest efficiency)
- Optimum blower design to meet demanding duty requirements



Howden SF series

Your driver of choice

Our turbo compressors can be equipped with electric motors, or – if steam is available – with our very own in-house Kühnle, Kopp & Kausch or Peter Brotherhood steam turbines.

If the operating parameters are suitable, compressor and steam turbine can even run at the same speed – which allows the machine to operate without gearbox and with maximum efficiency. This does not only result in lower investment costs, but also brings additional OPEX savings.

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