

New compact high-efficiency turbo compressor released

Sulzer's HST™ 5 cuts costs and boosts reliability for smaller treatment works

4 May 2026

Aeration is a critical component of both municipal and industrial wastewater treatment, enabling the effective removal of organic contaminants and supporting regulatory compliance. Blowers have long been essential, but they are often associated with high energy consumption, noise and ongoing maintenance demands. The introduction of the new HST 5 turbocompressor marks a significant advance, particularly for smaller treatment plants processing less than 5'000 cubic meters per day. The HST range from Sulzer has established the proven advantages of high-speed turbo compressor technology to a wide range of facilities.

The HST 5 is not just for municipal applications. It is also well suited to industries such as pulp and paper, food and beverage, chemicals, pharmaceuticals and mining, where it can enhance both core production processes and integrated wastewater treatment systems. Its flexibility reflects a growing need for compact, efficient and reliable solutions across diverse operational environments.

Proven technology reducing costs

Central to the HST 5's performance is its advanced design, which prioritizes efficiency while reducing mechanical complexity. The compressor combines cutting-

edge turbo technology with a permanent magnet motor engineered specifically for this application. Magnetic bearings and air cooling eliminate the need for lubrication systems, significantly lowering maintenance requirements.

These technical features deliver meaningful efficiency gains. In wastewater treatment plants, aeration systems are typically the largest consumers of energy, making them a key focus for cost reduction. The new HST 5 also offers a rugged numeric keypad display as an option in place of the standard touchscreen controls, simplifying operator control.

The HST 5 provides a stable, low-maintenance alternative that operates with minimal vibration and significantly reduced noise. Its compact footprint, low noise and almost vibration free operation optimizes the installation and allows units to be housed in space-efficient structures, helping to reduce infrastructure and operational costs. For example, there is also a containerized version that is suitable for rental solutions and when additional capacity is required to support existing processes.

Improved sustainability and simple integration

By focusing on energy efficient operation, optimized use of materials, and long term reliability, Sulzer enables customers to improve the environmental performance of their processes. The HST 5 has been developed in line with these principles, supporting customers in their transition towards more sustainable operations.

Installation can be carefully planned to minimize disruption, with new units integrated into existing control systems and brought online alongside legacy equipment. This staged approach allows operators to replace older compressors gradually, maintaining operational continuity while improving efficiency. The compact design also frees up space as older equipment is removed.

Flexibility and reliability

Once in operation, the HST 5 delivers precise control and consistent performance. An integrated variable speed drive enables airflow to match process demand, ensuring optimal efficiency under varying conditions. This adaptability, combined with the reliability of the system, provides operators with a dependable and cost-effective solution.

Building on more than two decades of proven high-speed turbo compressor technology, the HST 5 extends these benefits to smaller facilities. It offers a compelling option for operators seeking to reduce energy consumption, lower maintenance costs and improve reliability, all within a compact and sustainable design.

See the new HST 5 up close at IFAT 2026 on the Sulzer Booth (Hall B1 Booth 321) or take a minute to watch here: <https://youtu.be/q5My6FRkc6w> and see how Sulzer is tackling the megatrends of the water industry, such as process reliability and total cost of ownership (TCO).

Image captions:



Image 1: The new HST 5 uses proven technology to deliver reliability and performance in a compact frame

The image(s) distributed with this press release are for Editorial use only and are subject to copyright. The image(s) may only be used to accompany the press release mentioned here, no other use is permitted.

About Sulzer

Sulzer is a global leader in critical applications for core infrastructure and processes for large essential industries around the world. We ensure the security, quality and durability of critical goods and services by supporting energy security, natural resource management and efficiencies in process industries. This in turn supports the transition to a circular economy. Our integrated solutions add significant value by enabling energy efficiency, carbon emissions and pollution reduction, and process efficiency improvements. Customers benefit from our commitment to innovation, performance and quality through our responsive network of 160 world-class manufacturing facilities and service centers across the globe. Sulzer has been headquartered in Winterthur, Switzerland, since 1834. In 2024, our 13'500 employees delivered revenues of CHF 3.5 billion. Our shares are traded on the SIX Swiss Exchange (SIX: SUN). www.sulzer.com

The Flow Equipment division specializes in pumping solutions specifically engineered for the processes of our customers. We provide pumps, agitators, compressors, grinders, screens and filters developed through intensive research and development in fluid dynamics and advanced materials. We are a market leader in pumping solutions for water, oil and gas, power, chemicals and most industrial segments. www.sulzer.com

Through a network of over 100 service sites around the world, Sulzer provides cutting-edge parts as well as maintenance and repair solutions for pumps, turbines, compressors, motors and generators. We service our own original equipment, but also all associated third-party rotating equipment run by our customers, maximizing its sustainability and life cycle cost-effectiveness. Our technology-based solutions, fast execution and expertise in complex maintenance projects are available at our customers' doorsteps. www.sulzer.com

Press contact:

Sulzer Pumps

Joelle Farrell

Global Digital Content Coordinator, Water BU

Tel.: +44 (0)1293 558169

joelle.farrell@sulzer.com

www.sulzer.com

PR agency:

DMA Europa

Zoe Taylor

Progress House, Great Western Avenue, Worcester,

WR5 1AQ, UK

Tel.: +44 (0) 1905 917477

zoe.taylor@markettechgroup.com

news.dmaeuropa.com