

Oil-free compressed air like no other from Sulzer

Sulzer and Tamturbo develop together technologies and offerings for oil-free compressed air. The uniquely designed HSR high-speed turbocompressor is manufactured in Finland. Not a single drop of oil is present in the machine, making it truly oil free.

The variable speed direct-driven technology of the HSR turbocompressor delivers a wide turndown of flow from the gearless direct drive. Titanium impellers supported by active magnetic bearings make the HSR the most energy-efficient and environmentally friendly compressor on the market. And as if that was not enough, the machine can also recover up to 93% of its generated heat, which can then be utilized in the industrial process.

One key benefit of this outstanding technology is the minimal life cycle and maintenance cost. For most, if not all compressors, a life cycle of over 15 years normally equates to 3.6 times the investment cost of the machine, but with the HSR, the maintenance costs are hugely reduced. Why? Because parts that don't touch don't wear and parts that don't wear don't fail.

Key benefits

- No touching parts
- No oil
- Direct gearless drive
- Active magnetic bearings
- Titanium impellers
- Extremely low maintenance costs
- Variable speed
- Wide turndown, up to 63%
- Remote monitoring
- Heat recovery
- Small carbon footprint
- 8-54 m³/min @ 7bar



The HSR range of turbocompressors offers truly outstanding wire-to-air efficiency

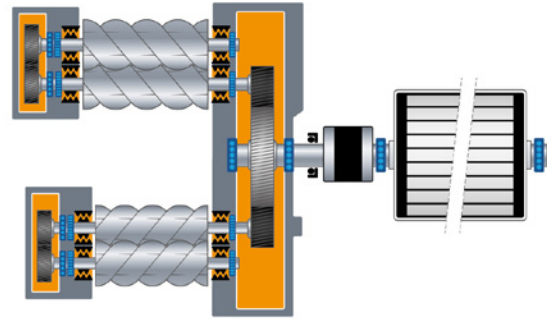
	"Oil-free" screw compressor	Traditional turbocompressor	HSR
Oil systems	1	1	0
Gears	7	3	0
Oil seals	9	4	0
Bearings (mechanical/journal)	20	7	0

The HSR turbocompressor is a reliable and care-free solution for oil-free compressed air. To guarantee the most energy-efficient system possible, we analyze the data from your compressed air system (air consumption and pressure variation) and build, install, optimize, and operate a suitable system.

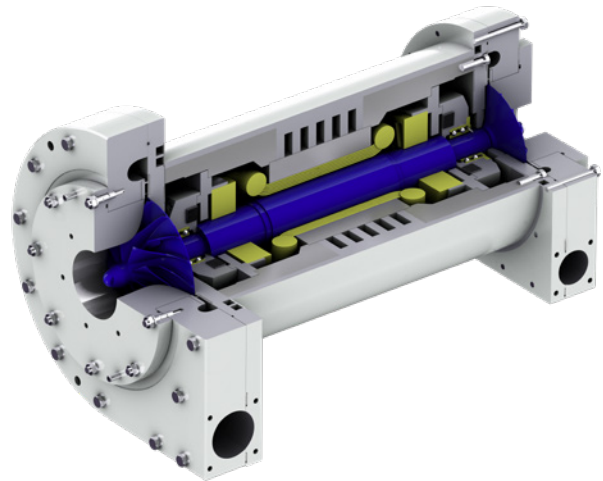
With the HSR, the right amount of compressed air is always available. It adjusts to the varying needs of your process because the compressor setup can be scaled to produce the amount of air you need. In addition, all HSR compressors are variable speed driven and therefore ideally respond to changing needs.

The HSR turbocompressor with 24/7 remote monitoring optimizes the compressed air production and generates an uninterrupted supply of 100% oil-free air, at the lowest cost per unit. The customer can focus on the operational performance of the site instead.

Read more about the HSR turbocompressor <https://www.sulzer.com/en/shared/products/hsr-turbocompressor>



- “Oil-free” screw compressor**
- Requires oil
 - Efficiency loss
 - High maintenance



- Oil-free turbocompressor**
- 100% oil free
 - Magnetic levitation bearing
 - Maintenance free