

OIL-FREE SCREW COMPRESSORS

TRYG-SERIES CATALOG

TOF-2024/V00

TRYCOMP[®] TRYG-Series Screw Compressors

Welcome to the cutting-edge world of TRYCOMP[®] Oil-Free Screw Compressors, where innovation meets reliability. Our compressors redefine the standards, delivering not just air but a seamless blend of performance, durability, and environmental consciousness.

At TRYCOMP[®], we pride ourselves on pushing the boundaries of compressor technology. Our Oil-Free Screw Compressors are not just machines; they are precision-engineered solutions designed to elevate your compressed air experience.

Why go oil-free? Because we believe in a cleaner, greener future. TRYCOMP[®] Oil-Free Screw Compressors ensure your operations run smoothly without compromising on performance. Say goodbye to oil-related worries and hello to a new era of efficient and sustainable compressed air solutions.

Explore the world of TRYCOMP[®] Oil-Free Screw Compressors – where reliability meets innovation for a breath of fresh air in your industrial journey.

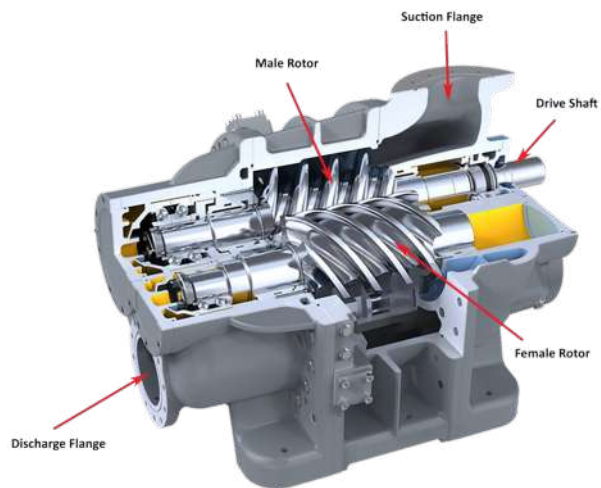


How do Screw Compressors Work?

The process begins with atmospheric air intake through a compressor inlet valve. Inside the compressor, two interlocking rotors, typically helical screws known as male and female rotors, rotate in opposite directions within the compression chamber.

As the rotors turn, they trap air between their helical lobes, reducing the volume and causing compression.

During this process, a sealing system in the compression chamber is crucial. In addition, Compression generates heat, so a cooling system must be employed to maintain an acceptable temperature.



In traditional Oil-Inject screw compressors, a controlled amount of oil is often injected into the compression chamber to lubricate the rotors, reduce friction, and enhance sealing. This oil also helps in cooling and sealing any gaps between the rotors. However, a side effect of this method is oil contamination in the compressed air, particularly in Oil-Inject screw compressors.

Oil-Free Screw Compressors, on the other hand, are advanced machines designed to provide compressed air without the use of lubricating oil in the compression chamber. These compressors feature special rotors and unique sealing and cooling systems that ensure efficient and oil-free compression, eliminating the risk of oil contamination in the compressed air.

The compressed air is then discharged through an outlet valve, ready for various applications.

Advantages of Screw Compressors

Energy Efficiency

Screw compressors are often praised for their energy efficiency rather than just operational efficiency. The efficiency of screw compressors is particularly notable during continuous operation, making them suitable for applications with sustained air demand.

Their design, with interlocking rotors, allows for smooth and continuous compression, minimizing energy consumption. This energy efficiency is vital in reducing operational costs and making screw compressors an attractive choice for industries seeking to optimize their energy usage.

Wide Range of Capacities

Screw compressors offer a broad range of capacities, providing flexibility to meet diverse industrial and commercial air demand requirements.

Application Versatility

These compressors are versatile and well-suited for a wide range of applications, from automotive and manufacturing to healthcare and food processing.

Relatively Compact Design

Featuring a compact design, these compressors are suitable for installations with limited space, without compromising performance.

Lower Vibration and Noise Levels

Acknowledged for their stable and quiet operation, Oil-Free Screw Compressors contribute to a comfortable and noise-controlled working environment. Despite their substantial air flow, these compressors operate quietly, and many are even equipped with advanced noise-dampening technologies for enhanced workplace tranquility.

Advantages of Oil-Free Screw Compressors

Oil-Free Screw Compressors operate without oil in the compression chamber, offering several advantages:

Elimination of Oil Contamination

The absence of lubricating oil in the compression chamber eliminates the risk of oil carryover, ensuring a clean and pure compressed air stream. This is particularly crucial for sensitive applications such as food and pharmaceutical processing.

Enhanced Product Quality

Oil-free compression is vital for applications where the quality of the end product is critical, preventing any risk of oil contamination in manufacturing processes.

Easy Installation and Maintenance

The absence of oil-related components simplifies installation, making it quicker to set up Oil-Free Screw Compressors in various industrial and commercial settings. Maintenance tasks are also simplified, contributing to reduced downtime, ensuring hassle-free operation, and leading to cost savings and increased operational efficiency.

Extended Life Span for both the Compressor and the Equipment

The absence of lubricating oil in the compression chamber reduces frictional heat, leading to cooler operating temperatures and extending the lifespan of the compressor. Additionally, fewer components and lower friction reduce wear and tear on downstream equipment, resulting in enhanced durability and an extended operational life span for both the compressor and associated machinery.

Environmental Sustainability

With no oil in the compression process, Oil-Free Screw Compressors contribute to environmental sustainability, aligning with stringent regulations and standards.

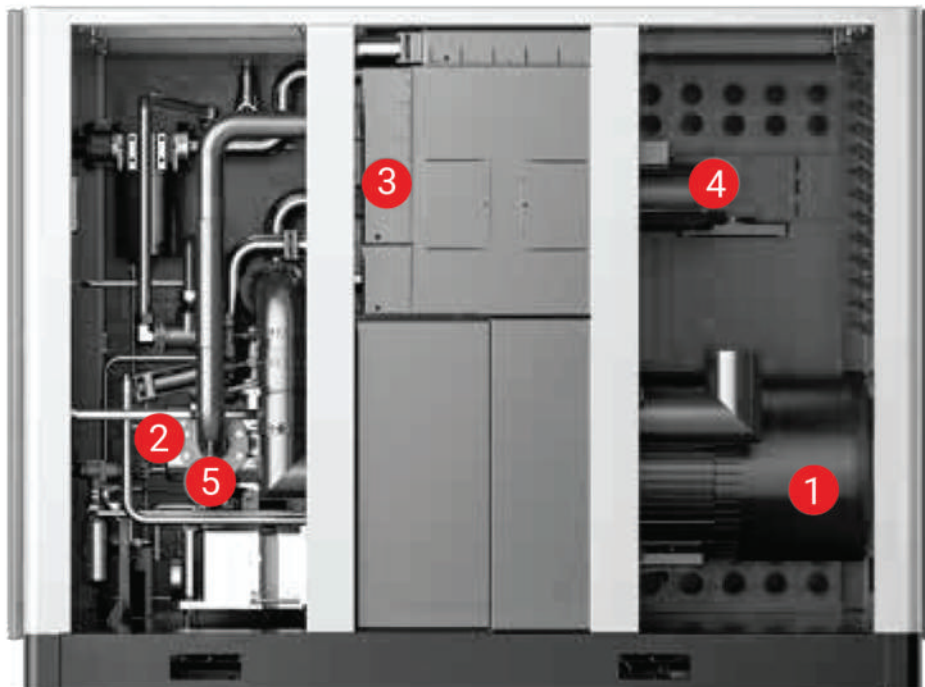
Why Choose Our TRYG-Series Oil-Free Screw Compressors?

3- Inlet Filter

- Nano-scale, heavy-duty
- Filtration accuracy upto 99.9%
- Captures dust particles below 0.3µm
- Pressure drop indicator
- Service intervals: 2000 hours

4- Centrifugal fan

- Upto 220HP
- High reliability
- Low noise level
- High capacity for optimized cooling
- Low power consumption



2- GHH Airend

- Original German GHH Rand airend
- Stainless steel rotor
- Dual sealed
- SKF bearings
- Long maintenance intervals
- Energy efficient operation
- Class 0 clean 100% oil-free air

5- Stainless steel pipe system

- All-Stainless steel internal pipework and compression joint are used to prevent leakage and premature aging, often seen with flexible pipes
- Reduced friction losses

1- TEFC motor (PM motor is an option)

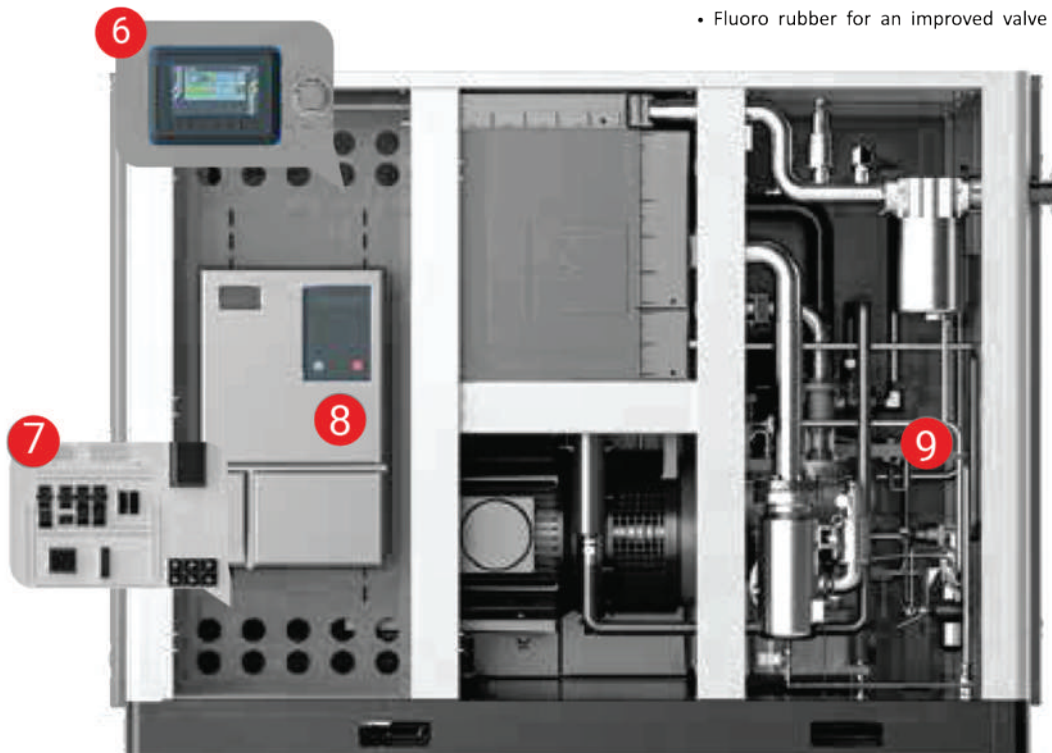
- IE3 Efficiency standards
- IP55 Protection grade
- F insulation grade

6- TRY9000 Touch controller

- 7" Full color touch screen controller
- Real-time operation, maintenance and alarm information
- Full graphical flow diagram
- Operation record/chart display
- Multi-Lingual
- Weekly and daily scheduling, service history
- Onboard RS485 interface, modbus RTU

9- Inlet valve

- Optimizes the inlet flow of the air end
- No blow-down losses
- Maintenance-free pipe design
- High vacuum degree: 700 mmHg
- Large suction area, especially designed for low-pressure applications
- Prevents unloading and shutdown oil injection
- Fluoro rubber for an improved valve



7- Electrical control cabinet

- Siemens core electrical components are used to further enhance reliability

8- Innovative Flux vector inverter (Optional)

- CE/UL Certification
- Wide voltage design
- Meets EMC C3 and C2 requirements
- Built-in DC reactor
- Independent cooling air duct design
- Robust enclosure for trouble-free operation even in harsh conditions

INDUSTRIAL COMPRESSED AIR & GAS SOLUTIONS

Model	KW	HP	Capacity (m ³ /min)	Pressure (BAR)	Dimension (mm)	Weight (KG)	Size
TRY50GPM-7	37	50	3.4-5.7	7	2380*1250*1980	2400	DN50
TRY50GPM-8			3.3-5.5	8			
TRY50GPM-10			2.5-4.6	10			
TRY60GPM-7	45	60	4.1-6.8	7	2380*1250*1980	2500	DN50
TRY60GPM-8			3.9-6.6	8			
TRY60GPM-10			3.2-5.4	10			
TRY75G-7	55	75	9.2	7	2380*1120*1880	2750	DN50
TRY75G-8			9	8			
TRY75G-10			7.7	10			
TRY100G-7	75	100	12.2	7	2380*1120*1880	2800	DN50
TRY100G-8			12	8			
TRY100G-10			10.7	10			
TRY125G-7	90	125	16	7	2880*1960*2110	3400	DN65
TRY125G-8			13.6	8			
TRY125G-10			13	10			
TRY150G-7	110	150	19.5	7	2880*1960*2110	3500	DN65
TRY150G-8			18.2	8			
TRY150G-10			16.5	10			
TRY180G-7	132	180	23	7	2880*1960*2110	3800	DN65
TRY180G-8			22.5	8			
TRY180G-10			19.5	10			
TRY220G-7	160	220	25.8	7	2880*1960*2110	4000	DN65
TRY220G-8			25.5	8			
TRY220G-10			22	10			
TRY300WG-7	220	300	37.8	7	3350*2280*2080	5000	DN100
TRY300WG-8			37.5	8			
TRY300WG-10			34	10			
TRY340WG-7	250	340	45	7	3350*2280*2080	5200	DN100
TRY340WG-8			42	8			
TRY340WG-10			38	10			
TRY375WG-7	280	375	47	7	3350*2280*2080	5500	DN100
TRY375WG-8			46.5	8			
TRY375WG-10			41	10			

NOTE:

The capacity is measured as GB3853 standard.(equivalent to ISO1217 Annex C)

Standard voltage is 380V/50HZ/3P, other voltage is available.

Alpine/high altitude, high temperature, high humidity, high dust loads or other adverse working conditions will require specialized custom designs. These are available on special request.

We reserve the right to make changes and improvements to the design and appearance.

Specifications may change without prior notice.

Your vision is our commitment.

Reach out to us today, to explore the great possibilities.

A brand by **ARNIKA**
—COMPANY—

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