

Screw Booster Compressor Series

OBS D (18-45 kW)

OBS D screw booster compressors are designed for the demanding conditions of industries that require medium pressure at continuous production. They work 24/7 seamlessly. With their high OEE (Overall Equipment Efficiency), they are the ideal option to replace the piston boosters that fail to satisfy your needs. At the end of five years, they generate savings of up to 15-20% in the "Total Cost of Ownership".

CHEMICAL
TREATMENT
FACILITIES

MARINE

WOOD
AND GLASS
INDUSTRY

METAL-
WORKING
INDUSTRY

MINING

PLASTIC /
FOOD
INDUSTRY

DRILLING

POWER
PLANTS



Industries That Use OBS D Series

- Plastics/Food Industry – PET blow molding
- Marine – Initial motor start
- Metalworking Industry – Laser cutting
- Wood and Glass Industry – Surface coating
- Power Plants
- Chemical Treatment Facilities – High pressure oxygen supply
- Mining – Removal of toxic gasses



Screw Booster Compressor Series

OBS D (18-45 kW)

Screw-Separator Components

- High-efficiency, high-quality screw elements
- Mono-block screw-separator design
 - Minimum pressure drop
 - Oil level control
 - Spin-on separator



1

5



Maestro

- User-friendly control panel indicators facilitate the assessment of the equipment as well as the planning of maintenance.
- All the functions of the OBS D series screw boosters are monitored by 21 sensors and any potential problem is prevented by the electronic control system.
- Up to four compressors can be managed from a single control point, providing ease of use and energy savings.
- Support for 10 languages
- Equal aging option is available

High Efficient Motor

Provides superior efficiency and performance thanks to its unrivalled motor.

2



3

Ozen Drive - 1:1 Coupling

- Improves compressor efficiency by the motor power transmission to the screw block with a rate of 1:1 ratio.
- Saves energy by eliminating losses due to friction.

7

4

5



6

Quality Equipment

- Product durability is improved with reinforced body design.
- Ozen Kompressor uses components that are compatible with world standards.
- High performance and durability provide peace of mind.
- It is easy to find the products with the desired specifications.
- Access to after-sales services is effortless.

"SCS" - Symmetrical Cooling System

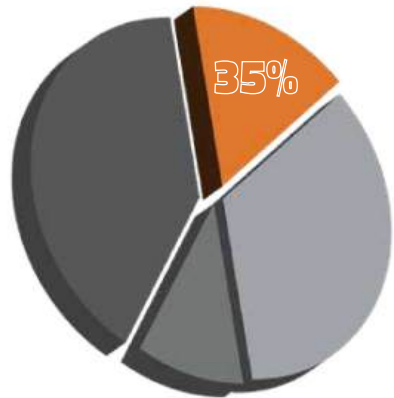
- Guaranteed cooling performance with large size radiator pack.
- Strong, compact design provides durability that is tested and proven under tough work conditions.
- Enables your compressor to keep working with high efficiency under various climate conditions.

4

7

Ease of Service

- The strategic positioning of product components provides ease of maintenance.
- With easily available spare parts, maintenance is no longer an issue.
- Maintenance and overhaul intervals are long (oil-filter change every 8000 hours / overhaul every 35,000 to 40,000 hours).



Ozen Energy Optimisation on Average up to 35%

- Energy Cost Saving VFD
- Energy Cost
- Investment
- Maintenance

Energy savings even during low-capacity utilization

Since OBS D series screw booster compressors with frequency inverter adjust the motor speed according to the actual air need of the facility, high energy use during low-capacity utilization is avoided.

The advantage of constant pressure

As the actual air demand is continuously monitored, the air production is steady and pressure is constant in the compressed air-pipe line at all times. Energy loss due to load/unload work modes is avoided. These compressors can respond to different pressure needs with simple settings on the control panel, without changing anything in the compressor itself.

Smooth initial start-up

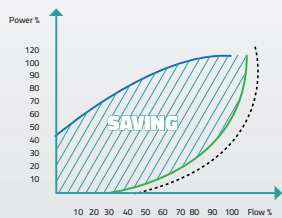
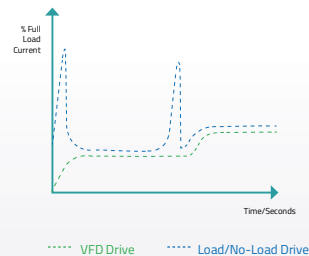
Because motor speed is controlled by the frequency inverter, the initial start-up is significantly simpler and smoother than a wye-delta, direct connected compressors.



Variable Frequency Drive (VFD)

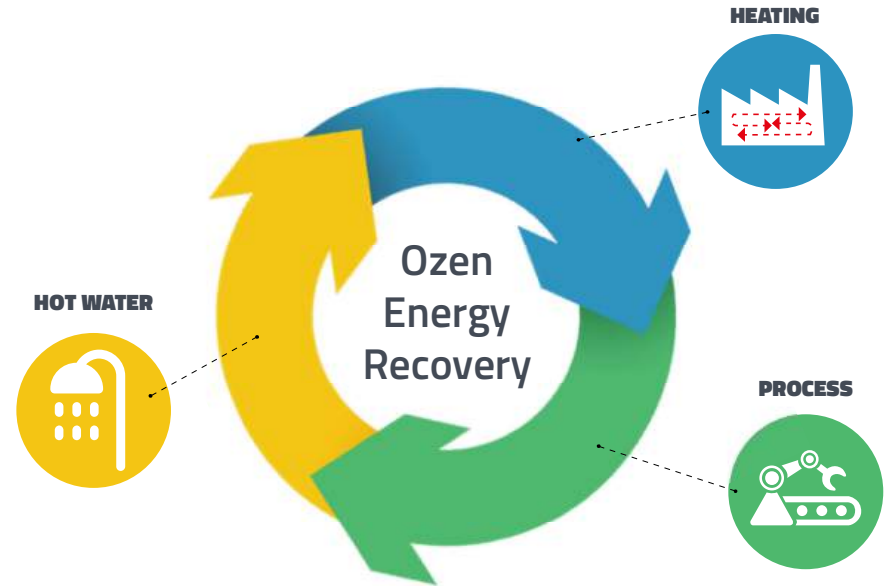
In manufacturing facilities, the need for air tends to fluctuate throughout the day for various reasons. Standard compressors continuously work in load/unload mode in order to satisfy changing air demands. A screw compressor working in unload mode spends about 30-35% of the installed motor power and wastes energy even though it does not produce any air.

In OBS D series screw booster compressors, the built-in frequency inverter adjusts the motor speed according to the actual air need of the facility. Achieving energy savings of up to 35%, these compressors help reduce operating costs.



---- Flow Required — VFD Drive - - - - Load/No-Load Drive

Reduces operating costs by recovering waste heat...



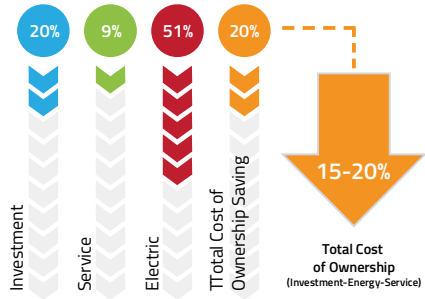
Advantages

- > Does not have any impact on compressor maintenance.
- > Return of investment is 1 year.
- > Reduces gas etc. consumption for heating and hot water.
- > Selecting for heat recovery not only lowers energy costs but also contributes greatly to the protection of the environment.

Improving energy efficiency is essential for the industry. Rising energy prices and growing environmental awareness increase the importance of waste heat recovery. 94% of the energy consumed by a compressor is converted into heat. This heat is released back into the atmosphere through the cooling system and by radiation. Not being able to make use of this waste heat has a negative effect on operating costs.

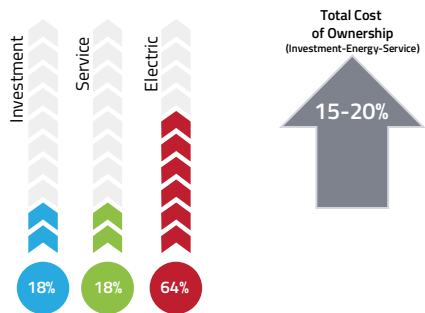
Ozen Energy Recovery solution makes it possible to use the waste heat generated by your compressor within the facility. The integrated heat exchanger recovers the heat, which can, then, be used for heating the factory and storage areas, as well as for hot water. This rather easy-to-implement system increases energy efficiency and provides operating cost savings.

SCREW BOOSTER vs PISTON BOOSTER



SCREW BOOSTER

- ▶ 10% higher specific power (Full load).
- ▶ 15-20% lower electric consumption. VFD controlled.
- ▶ 8000 h service time. 50% lower service cost.
- ▶ 30% higher OEE. Due to sparse service and maintenance period.
- ▶ 15-20% lower cost of ownership



PISTON BOOSTER

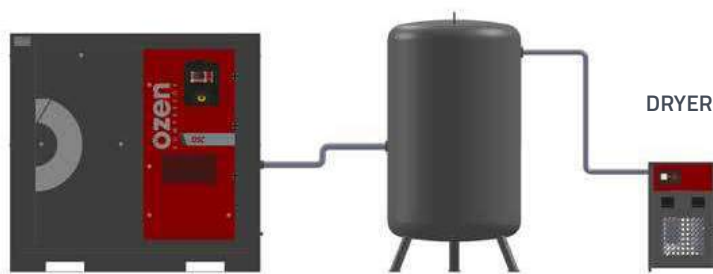
- ▶ Lower specific power due to piston compressing efficiency.
- ▶ Works load, no-load with higher electric consumption.
- ▶ Every 2000h, 4000h, 8000h service time.
- ▶ Frequent service and maintenance period.

MODEL	Motor Power		Inlet Pressure	Outlet Pressure	Capacity (FAD)	Inlet Pressure	Outlet Pressure	Capacity (FAD)	Inlet Pressure	Outlet Pressure	Capacity (FAD)	Width (mm)	Length (mm)	Height (mm)
	kW	HP	Bar	Bar	m3/min	Bar	Bar	m3/min	Bar	Bar	m3/min			
OBS 18 D	18.5	25	7	40	2.51	7	35	2.8	7	30	3.4	1400	2100	1555
			10		3.28	10		3.98	10		4.85			
			12		3.4	12		4.5	12		6.7			
OBS 22 D	22	30	7	40	2.96	7	35	3.58	7	30	4.4	1400	2100	1555
			10		4.24	10		5.02	10		6.19			
			12		4.68	12		5.68	12		7.09			
OBS 30 D	30	40	7	40	4.53	7	35	5.48	7	30	6.65	1400	2100	1555
			10		6.17	10		7.46	10		8.6			
			12		7.13	12		8.43	12		10.01			
OBS 37 D	37	50	7	40	5.7	7	35	6.8	7	30	7.8	1400	2100	1555
			10		7.82	10		9.15	10		10.61			
			12		10.06	12		10.55	12		12.44			
OBS 45 D	45	60	7	40	7.46	7	35	7.7	7	30	-	1400	2100	1555
			10		9.97	10		10.5	10		-			
			12		11.47	12		12.28	12		-			

- Compressor performance is measured according to ISO 1217: 2009 Annex C with reference to 1 bar inlet pressure and 20 ° C ambient temperature.

SCREW COMPRESSOR

AIR TANK



SCREW BOOSTER COMPRESSOR

AIR TANK

