



## OABC D Series

Screw Booster  
Compressor Series

**ozen**  
AIRTECHNOLOGY  
EXCLUSIVELY COMPRESSED AIR SOLUTIONS

# THE DETAILS THAT DELIVER THE RIGHT RESULTS...

## EXPERIENCE

Ozen Air Technology, with its industry experience of half-a-century and its large portfolio of compressed air products, provides, reliable, efficient and smart solutions.

## TRUST

Ozen's dedication to customer satisfaction has helped the company to build lasting relationships of trust and loyalty with its customers.

## DURABLE AND EFFICIENT

All of the compressed air equipment in Ozen's portfolio have proven their durability under toughest conditions. They provide high-quality, high-efficiency air.

## QUALITY

Manufacturing consistently high-quality products is one of Ozen's fundamental tenets. To that end, Ozen continuously enhances its quality policies.



## TECHNOLOGY

Ozen Air Technology is innovative. It always uses up-to-date technologies in compliance with world-standards.

## R & D

With its creative team and competent infrastructure, Ozen is capable of developing its own technology through collaborations with several universities.

## STRONG SERVICE NETWORK

Ozen Air Technology believes in maintainability. Its customers can enjoy uninterrupted manufacturing thanks to its accessible, fast and reliable service network.

## COMPETITIVE

Ozen Air Technology acts in favor of its customers. Providing them with leverage is one of Ozen's strong suits.

## RESPECT FOR THE ENVIRONMENT

Striving for a sustainable future, Ozen Air Technology selects for environmentally friendly practices and takes all necessary precautions while structuring its work processes.



# Screw Booster Compressor Series

OABC D (18-55 kW)

*OABC D screw booster compressors are designed for the demanding conditions of industries that require medium pressure at continuous production. They work 7/24 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

MINES

PLASTICS /  
FOOD  
INDUSTRY

DRILLING

POWER  
PLANTS



#### Industries that Use OABC D Series

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





# Screw Booster Compressor Series

OABC D (18-55 kW)

## Screw-Separator Components

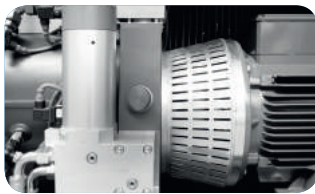
- High-efficiency, high-quality screw block components
- Mono-block screw-separator design
  - Minimum pressure drop
  - Oil level control
  - Spin-on separator



1

## NEMA TEFC Premium Efficient Motor

Provides high efficiency and performance thanks to its outstanding IP 54 motor.



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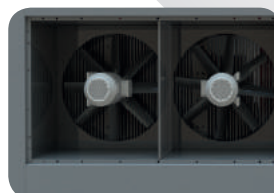
## Ozen Drive - 1:1 Coupling

- 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.

3

## "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



4



### Maestro

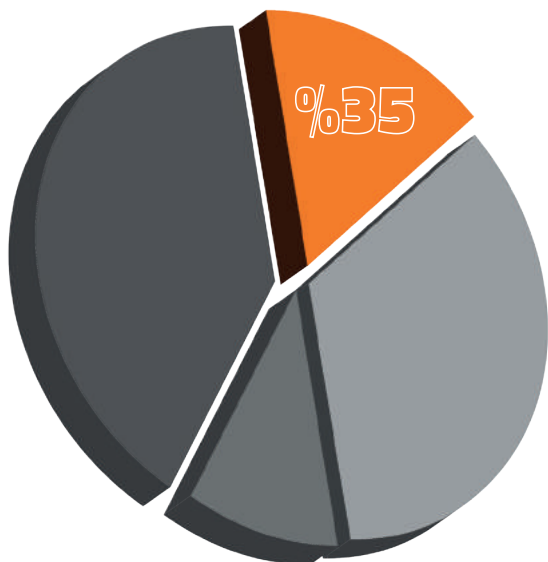
- User-friendly control panel indicators facilitate the assessment of the equipment as well as the planning of maintenance.
- All the functions of the OABC D series screw boosters are monitored by 21 sensors and any potential problem is prevented by the electronic control system.
- Up to four compressors can be managed from a single control point, providing ease of use and energy savings.
- Support for 12 languages
- Equal aging option is available

### Quality Equipment

- Product durability is improved with reinforced body design.
- Ozen Air Technology 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.

### 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**



## 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 OASC V series 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.

## Energy savings even during low-capacity utilization

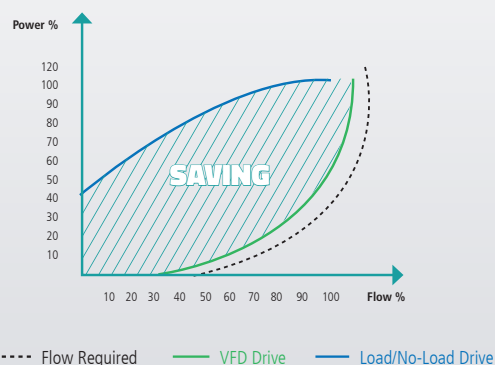
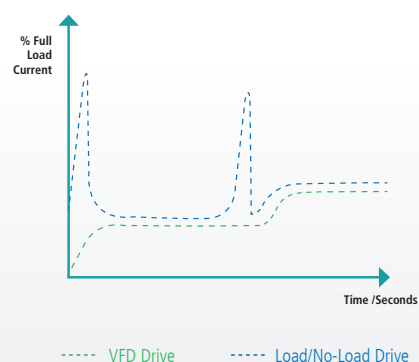
Since the OASC V series screw compressors with frequency inverter adjust the motor speed according to the actual air need of the facility, high energy use during low-capacity utilization is avoided.

## 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.

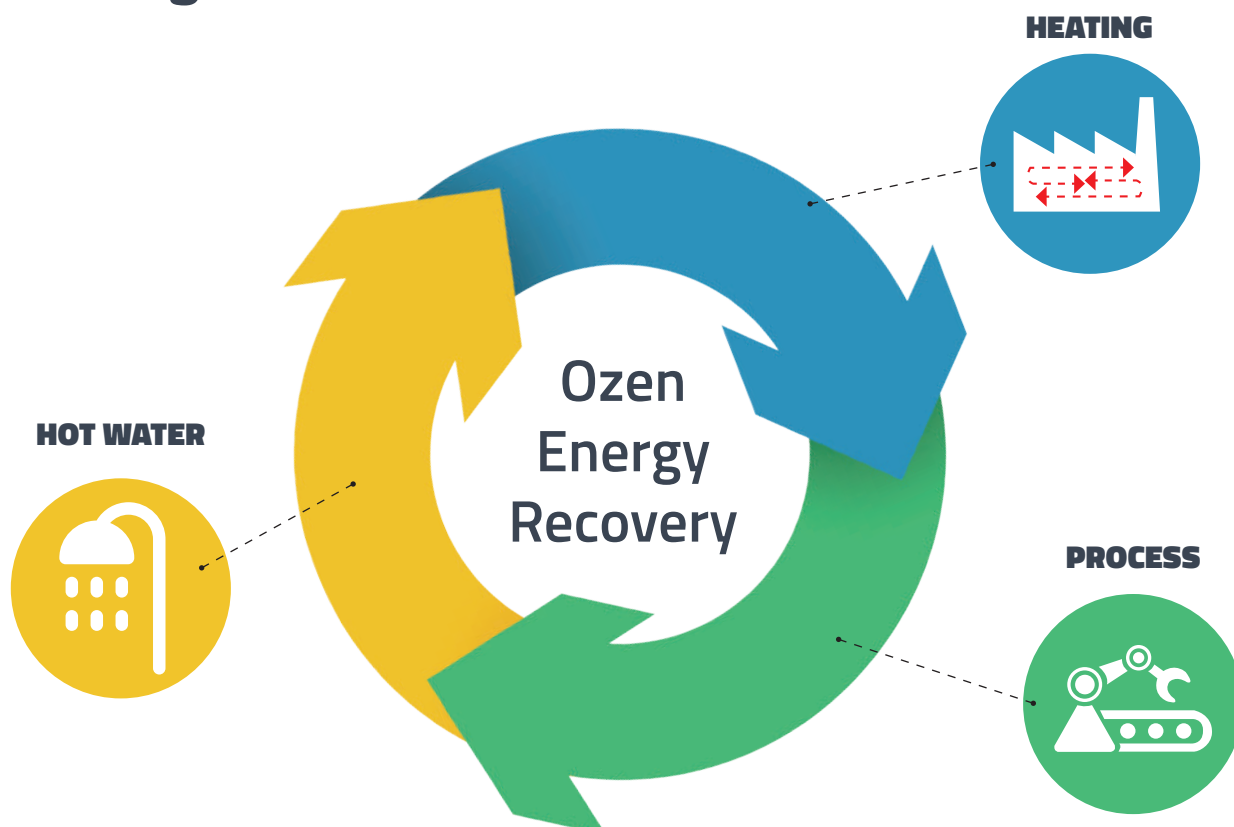
## Smooth initial start-up

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. Controlled motor speed also helps the motor and screw components to last longer.





### 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.

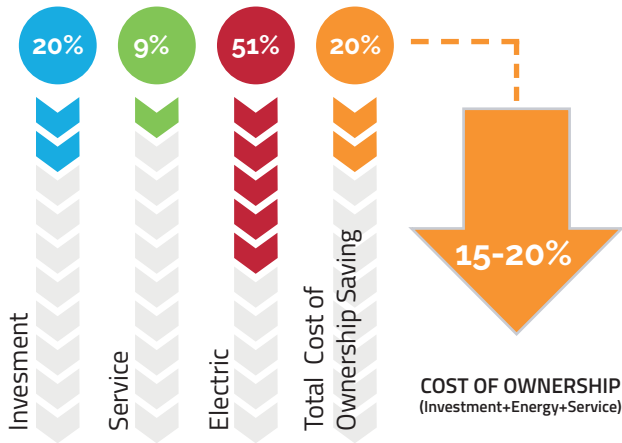
Ozen Energy Recovery solution makes it possible to use the waste heat generated by your compressor within the facility. The integrated heat exchanger recovers the heat, which can, then, be used for heating the factory and storage areas, as well as for hot water. This rather easy-to-implement system increases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

\* OER is applied to low pressure screw compressor (OASC/OASC D) in the package.

# Screw Booster Compressor Series

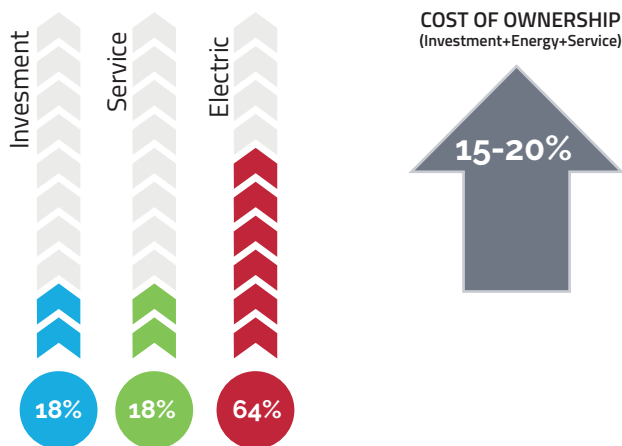
OABC D (18-55 kW)

## SCREW BOOSTER **vs** PISTON BOOSTER



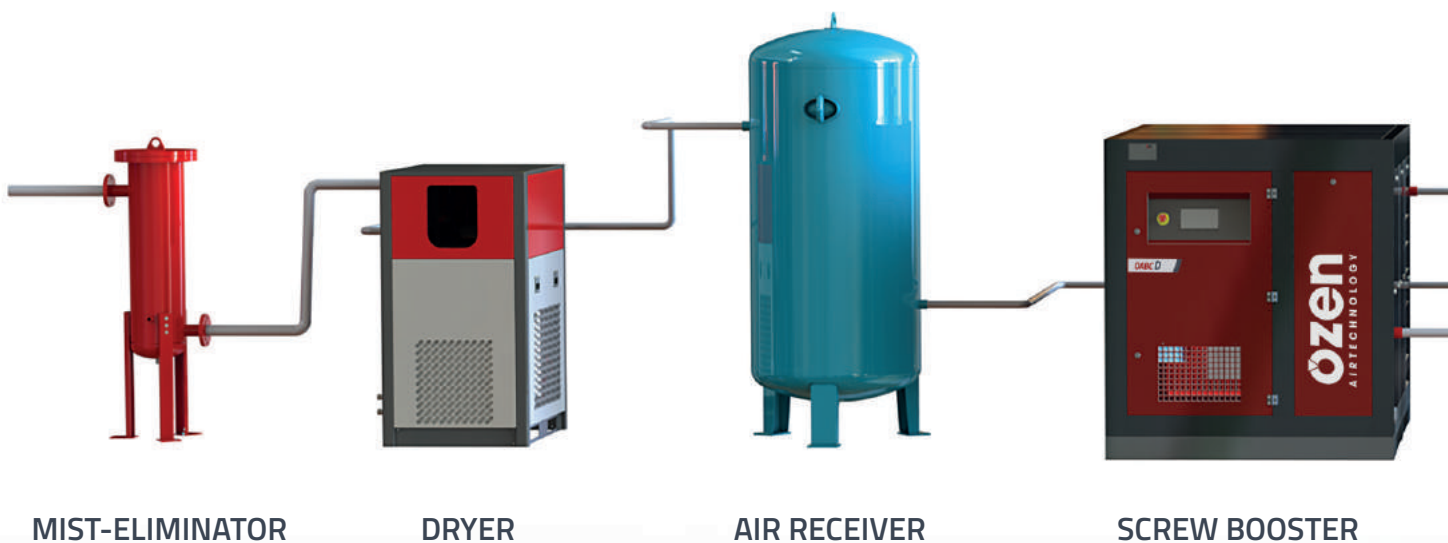
### SCREW BOOSTER

- 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.



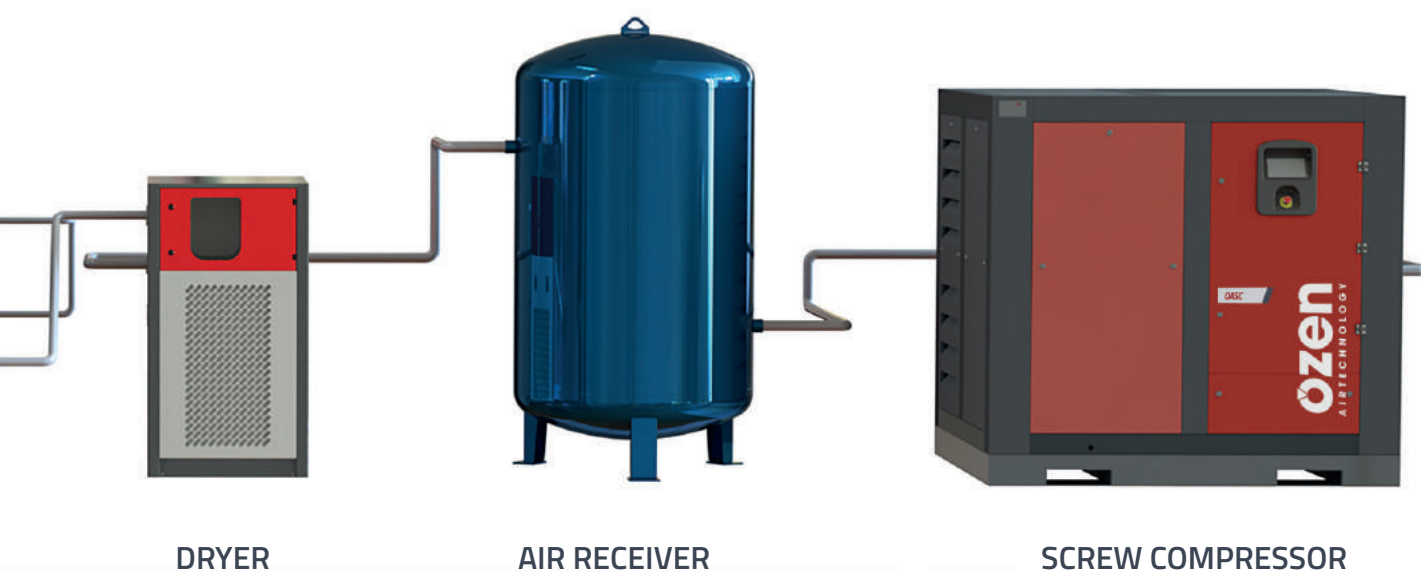
## Technical Specifications OABC D (18-55 kW)

MODEL	Motor Power		Inlet (FAD)		Outlet (FAD)				Dimensions (inch)		
	kW	hp	PSI	Bar	PSI	Bar	cfm	m <sup>3</sup> /min	W	L	H
OABC D 18	18,5	25	102	7	580	40	74,2	2,1	54,9	82,5	61,0
			145	10			116,5	3,3			
OABC D 22	22	30	102	7	580	40	84,8	2,4	54,9	82,5	61,0
			145	10			155,4	4,4			
OABC D 30	30	40	102	7	580	40	120,1	3,4	54,9	82,5	61,0
			145	10			202,9	5,7			
OABC D 37	37	50	102	7	580	40	158,9	4,5	54,9	82,5	61,0
			145	10			336,7	9,5			
OABC D 45	45	60	102	7	580	40	208,4	5,9	54,9	82,5	61,0
			189	13			427,3	12,1			
OABC D 55	55	75	102	7	580	40	293,1	8,3	58,9	86,4	61,0
			189	13			452,0	12,8			

Compressor performance measured according to ISO 1217, Annex C Edt. 4 (2009).

Reference conditions:

- Absolute inlet pressure 14,5 psi (1 bar)
- Intake air temperature 68°F (20°C)





Ozen Compressed Air Technology and Equipment LLC.  
4205 Golf Acres Drive Charlotte NC 28208  
**Office** (704) 660 0334  
**E-mail** [info@ozenairtech.com](mailto:info@ozenairtech.com)

