# Rotary lobe blower

- Flow rate from 10 5,700 cfm
- Pressure from 0 14.5 psig
- Vacuum up to -7.25 psig

### High performance and low costs

Thanks to the simplicity and the tested design of the lobe blower, it is the ideal choice for difficult environments around the world that have limited supervision requirements, providing the exact amount of air requested by the application.

### **Methods of operation**

- Pressurised (up to 14.5 psig)
- In a vacuum (up to -7.25 psig)

### Advantages

### A simple, complete and high-quality solution.

The rotary lobe volumetric blower is developed for low pressure compressed air applications, with operating pressures ranging from 0-14.5psig

This type of blower is also suitable for compressing Biogas, CO<sub>2</sub>, Nitrogen and operating in a vacuum

Atex versions are also available in stainless steel for food and pharmaceutical applications

The blowers can also be supplied in a Plug and Play version, i.e. with an electrical panel with a Y/D starter or inverter, inside the blower

# A complete package for all applications

Oil-free screw blower

• Pressure from 0 - 22 psig

• Flow rate from 120 - 5,500 cfm

The ZS blower is designed to guarantee maximum product safety. It ensures a continuous and longterm supply of oil-free air, it is highly reliable and energy-efficient in all your applications, and has the lowest possible operating costs.

Maintenance costs and downtime are reduced due to the innovative technology of the screw blower. The blower is also available in a Plug & Play version, with an on-board ready-to-use Y/D starter or inverter.

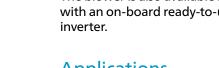
### **Applications**

### DILUTED PHASE PNEUMATIC TRANSPORTATION

Minimise energy costs, up to 80% of the cost of running a blower

### NON-WOVEN FABRIC

- Adjustable flow rate to determine the characteristics of the fibres
- Energy efficient blower to reduce the running costs of this 24/7 active
- Adaptable installation without the need for noise prevention measures



ZS



The Atlas Copco ZB range is the ideal choice for meeting the high demands of these processes. This range offers a complete package that comes with all the components perfectly synchronised.

### Advantages package

### INTEGRATED - THE ONLY EMC TESTED AND CERTIFIED SOLUTION:

- No emissions from other equipment
- 100% Turndown as the only blower that continues to run with blow off

# **VSD SYSTEM**

- Constant system pressure guarantees stability for all processes that use compressed air

- Unlimited start and stop cycles - No risk of current peaks during start-up







WASTEWATER TREATMENT

than the lobe blower

Wide pressure range and

FERMENTATION

flow rate

Oil-free certified air

• Lower noise, lower supply-air

temperature and lower vibrations

• Wide pressure range and flow rate

# ZB Variable Speed Direct Drive Centrifugal blower with magnetic bearings

• Flow rate from 900 - 7,000 cfm • Pressure from 0 - 19 psig

### Proven reliability

Low pressure compressed air is the basis of many production processes. A reliable and constant flow is essential and the air quality must be high. Aeration for waste water, printing, air separation, fermentation and processing of non-woven fabric do not tolerate product contamination.

- Synchronous motor with permanent magnets
- Full range of Flows without "flow gaps"

# ADVANTAGES OF THE

 Absence of current peaks during start-up:

### EXCEPTIONAL RELIABILITY AND EFFICIENCY OF MAGNETIC BEARINGS:

- Capable of withstanding sudden Surge conditions
- The contact-free design offers unlimited start-stop cycles
- Friction-free operation for maximum efficiency and guaranteed reliability



# ZE/ZA Oil-free single-stage screw air compressor

- Flow rate from 300 4,500 cfm
- Pressure from 0 60 psig

### **Easy installation**

The ZE/ZA compressor is supplied as a ready-touse all-in-one package and includes a powerful controller and an optional integrated after-chiller (internal or external depending on the model). The completeness of the supply eliminates the need for additional components and minimises installation work, consequently saving time and money.

The ZE/ZA compressor is immediately operational as it is built to be easily integrated into the existing compressed air network.

### **Applications**

### MINERAL SECTOR

- Improved energy efficiency and productivity with low environmental impact
- Minimum machine downtime and maintenance costs, thanks to the innovative technology of single-stage screw compressors

### FERMENTATION

- Reduction of energy costs kept to a minimum, as they are up 80% of the running cost of a compressor
- Reduced machine downtime and maintenance costs, thanks to innovative screw compressor technology
- Extremely wide pressure range and flow rate

### GLASSBLOWING

- Higher pressure ratio for mould
- Maximum guality thanks to totally oil-free air certified as Class 0 Reduced energy consumption for continuous operation

### **DENSE PHASE PNEUMATIC** RANSPORTATION

- Reduction of energy costs, as they are up 80% of the running cost of a compressor
- Compressors can also be installed outdoors. They can be exposed directly to the weather and can be kept near the silos for unloading

# ZM

- Flow rate from 500 32,000 cfm
- Pressure from 0 20 psig
- Vacuum up to -7.25 psig

### **Great energy efficiency in the** compression of air or gas including in a vacuum.

The ZM series is a centrifugal blower with oil-free compression and a variable number of stages, depending on the desired flow rate and pressure.

The blower is air cooled and is designed to be used with an inverter and based on a pressure range of up to 20 psig (under pressure), -7.25 psig (in a vacuum) and a flow rate up to 32,000 psig for air or gas.



### Centrifugal blower with side channels



### Technologies at the service of industries

Atlas Copco low-pressure solutions are ideal for the following

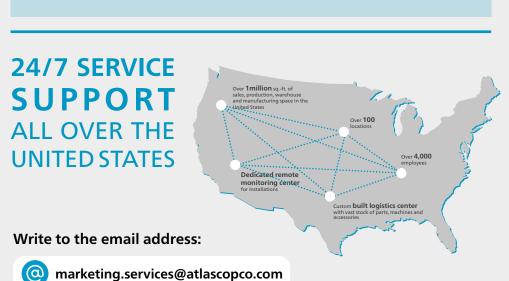
# **SMART**LINK DATA MONITORING

Boogle Play

With SMARTLINK service, compressor and blower data can be monitored in real time by PCs and smartphones.

Continuous monitoring allows for planning of maintenance operations and optimizes the use of compressed air, leading increase in energy efficiency and, as a result, generating savings in terms of time and money. The service can also automatically provide energy reports in compliance with ISO50001 Thanks to notifications on smartphones, users can be informed promptly about the conditions of the compressor room.

The SMARTLINK Notifier app is available at the App store and Google Play Store.



Scarica su App Store

The Adventure

AtlasCopc

Atlas Copco USA 300 Technology Center Way Ste 550 Rock Hill, South Carolina 29730

atlascopco.com/blowers-usa

# Atlas Copco

# **DEVELOPMENT OF ATLAS COPCO BLOWERS**



1873 Atlas Copco founded

# 1904

Atlas Copco introduces its first **oil-free piston** compressor



# Solutions for all needs

A unique product range to optimize the reliability and efficiency of low-pressure applications. Our vast range of technologies guarantees the right products for every need. Atlas Copco introduces the first oil-free screw compressors





Atlas Copco launches a low-pressure single-stage screw compressor (ZE/ZA)

1970



Introduction of the high-performance ZB centrifugal blower with magnetic bearings, for maximum energy savings

2004

# 1967

The first asymmetrical twostage screw Z compressor with low energy consumption is released



# 2003

The launch of the (ZL) series of lobe blowers, which cover all flow rates up to 5,700 cfm with lobe technology







# 2008

Atlas Copco is the first company to launch the screw blower on the market; The ZS oil-free blower saves 30% more energy than a classic lobe blower

Atlas Copco introduces improvements in terms of **efficiency** and the compact design of all its blowers:

2019

- **ZL 1-2-3:** lobe blower with electric control panel completely on board
- **ZS 4:** new, more efficient screw blower requiring less space.
- **ZB 5-6 VSD**<sup>+</sup>: new, even more efficient centrifugal impeller



# Low Pressure Solutions

All the products, applications and benefits of Atlas Copco low-pressure blowers and compressors.



COCORD

Alline Capert