Atlas Copco Compressors for PET blowing

P-series high pressure oil-free piston compressors

WE
SUPPORT
YOUR GROWTH

Atlas Copco

Your PET partner

In a booming business, cut-throat competition is inevitable. So it is crucial for the health of your bottom line that you can produce efficiently, reliably and with consistent quality.

Compressed air is a vital resource in your PET blow-moulding operation. An interruption in the air supply leads to loss of product, expensive delays and costly restarts. The smallest contamination from unwanted particles can corrupt your product quality, or worse, ruin your customers' reputation. It simply cannot happen.

On the other hand, you don't want to worry about air. It just has to be there, around the clock, in the right flow, pressure and quality.
You want to concentrate on your business, and more importantly, on a sound bottom line.

As the worldwide leader in compressed air technology, Atlas Copco understands your needs and can put its experience of more than a century to work for your profitability. A professional service organisation across the globe will ensure your peace-of-mind.

Atlas Copco Crépelle is ISO 9001 certified.

The Environmental Management System at the production facility in Lille, France, is ISO14001 certified.

Your partner in quality

In the food and beverage industry, the margin for error is minute. Quality is simply not an option, it's a requirement. But product quality can easily be compromised by the use of inferior compressed air.

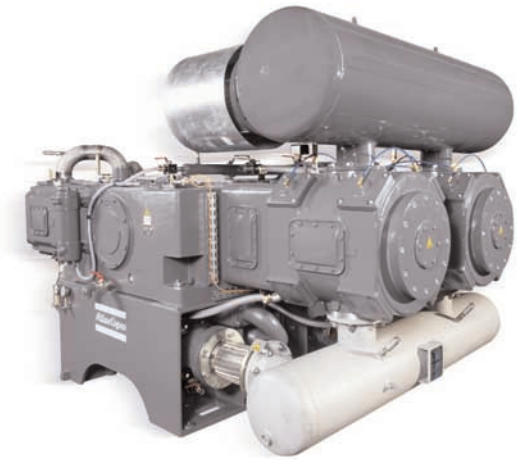
Air quality is a complex interplay of particle, oil and water content. Oil is the worst offender. No matter how well oil filters are designed, there is always that residual risk of contamination. Atlas Copco will not take that risk. All PET solutions are 100% oil-free.

- no need for oil filtration because air in the compression chambers is never in contact with oil
- less risk of condensate thanks to oversized cooling system
- optional submicronic and charcoal filters for removal of particles < 0.01 micron

Your partner in reliability

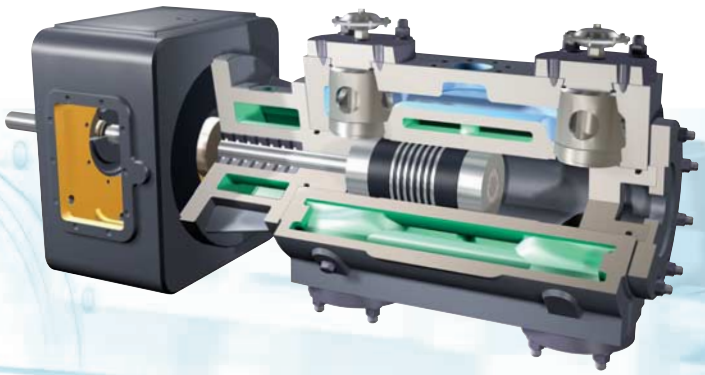
Your hard earned profitability can melt away with unforeseen production stops. Therefore, Atlas Copco P-compressors are designed for 24 hour operation, year after year after year…

Carefully selected components have been studied for longevity and trouble-free operation. Highly accurate balancing of forces and a sturdy construction ensure a maximum level of safety. The machines can run under continuous load without any risk of overheating.



- extended lifetime of piston rings and bearings because of low piston temperature & speed and reduced specific load
- longer life of wearing parts thanks to powerful cooling and low operating temperatures
- reliable piston/rod connection achieved by the superbolt tightening method
- reduced risk of water damage thanks to the downward air flow arrangement (as per API 618)
- higher overall reliability because the twin bearing avoids overtensioning of V-belts

Long distance pieces and PTFE piston rings guarantee oil-free compression chambers.

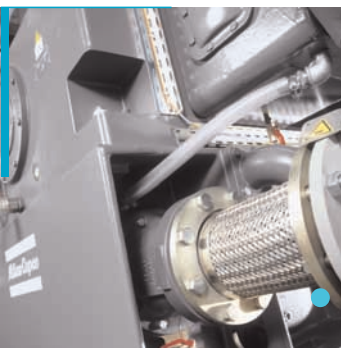


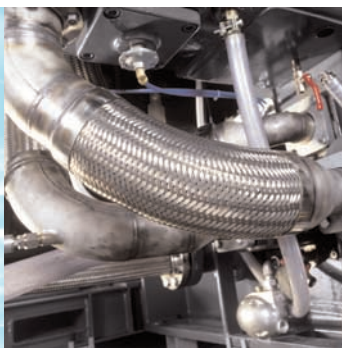
Your partner in innovation

The piston compressor has been around longer than most of us will remember. Yet, major improvements have been integrated into the P-series high pressure compressor range.

These innovations are not created for the sake of technology, but for real everyday benefits such as increased efficiency, easier maintenance and reduced life cycle cost.

- integration of the cooler into the new cast-iron frame (P27 to P45D)
- creation of anti-pulsation volumes instead of exterior pulsation dampers (P27)





Stainless steel cooler bundle with shock separator

- improved cooling efficiency by simplifying the water circuit, incorporating a shock separator between stages
- reduced overall investment thanks to simplified circuits and reduced number of parts
- easier maintenance and better accessibility by integrating traditionally external parts and positioning all maintenance points at an ergonomic working height
- improved stability thanks to a more compact design, reduced height and lower centre of gravity

The right machine for the job

Free air delivery P compressors* Discharge pressure: 40 bar (e)		50 Hz		60 Hz	
		m³/h	cfm	m³/h	cfm
	P05	206	121	206	121
	P10	343	202	343	202
	P15	452	266	452	266
	P20	755	445	755	445
	P22	882	519	882	519
	P27	1 224	721	1 224	721
	P37	1 631	960	1 631	960
	P45	1 912	1 126	1 912	1 126
	P45D	2 001	1 178	1 912**	1 126
	P46D	2 215	1 304	2 125	1 251
	P51D	2 512	1 479	2 410	1 419
	P52D	2 621	1 543	2 515	1 481

REFERENCE CONDITIONS :
Ambient temp. : 20°C
Suction pressure : 1 bar (a)
Cooling water : 20°C
RH : 0%.

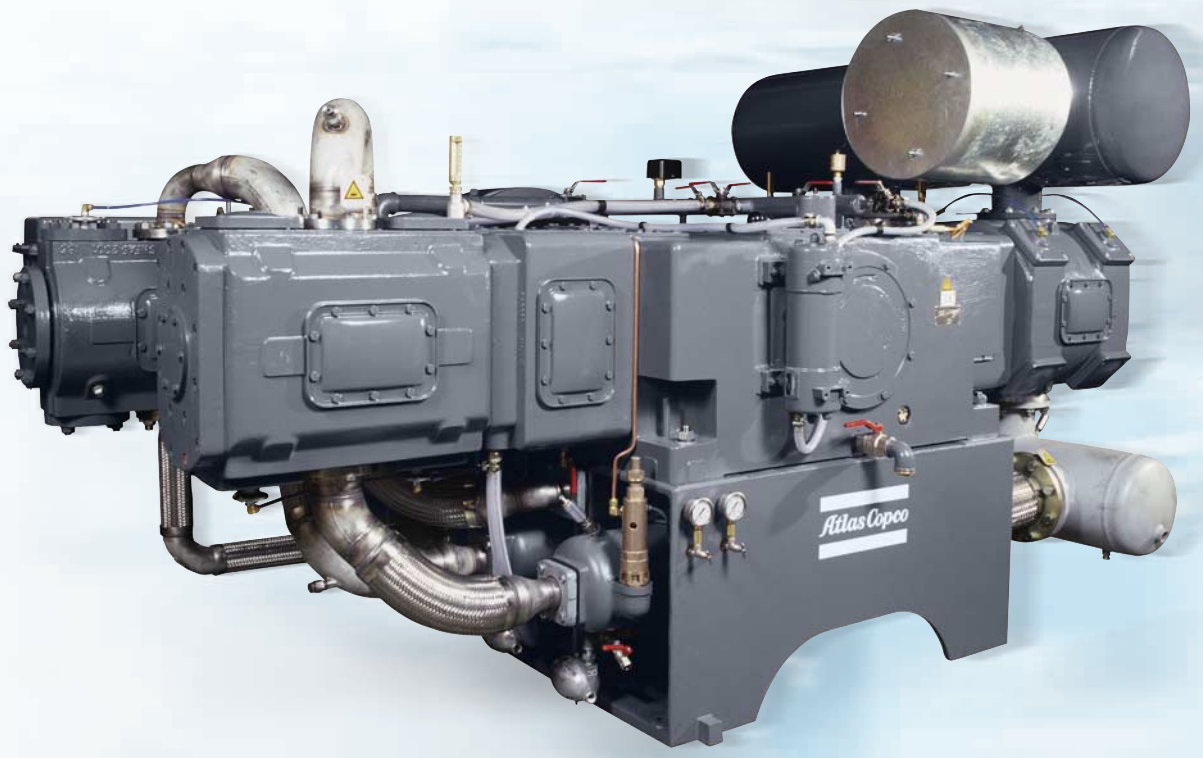
*measured a/c to ISO1217 – 3rd edition – Annex C.
** Identical flow with P45 in 60 Hz

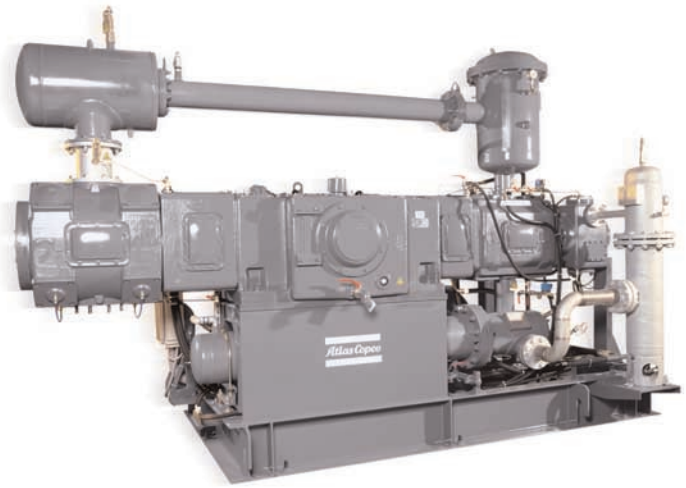
Atlas Copco P-series piston compressors cover a capacity range of 200 to 2600 m³/h FAD at a discharge pressure of 40 bar.

This range is embodied by three main series of multi-stage machines, both in 50 and 60 Hz.

THE MEDIUM P-series: from 1224 to 2001 m³/h

The medium range of Atlas Copco P-series has been completely redesigned. Efficiency, maintenance and investment costs have all benefitted from the incorporation of state-of-the-art technologies.





THE SMALL P-series: 206 to 882 m³/h

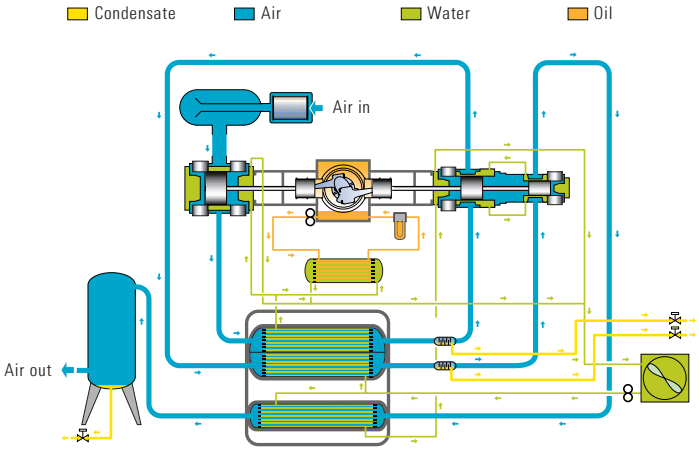
The small range of Atlas Copco P-series has a proven track record in the PET world. With thousands of units installed, customers have quality machines they can rely on. Easily installed, easily managed with the state-of-the-art Elektronikon®, these machines will give the best service under all conditions.

THE BIG P-series: 2215 to 2621 m³/h

The heavy duty range of 4-stage compressors serve large blow moulding units in major bottling plants. Several machines can be installed when a larger flow is needed. A sequence controller will monitor the working hours for a smoother repartition of wear.

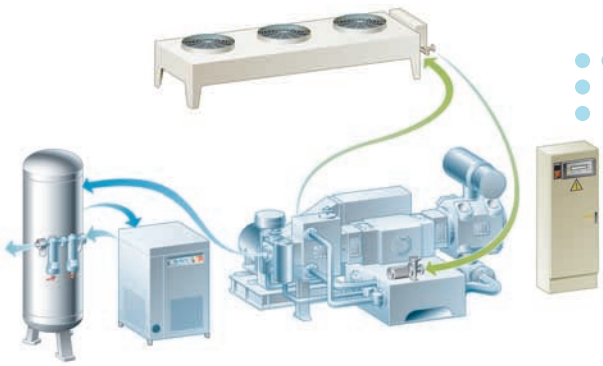
P as in complete

Atlas Copco Crépelle pioneered the completely packaged concept for the PET industry. The equipment comes ready to install. All that remains is to connect the air line, the electrical power and the cooling water supply. No hidden costs, no surprises.



Efficient closed-loop cooling unit ($t_{amb} \leq 32°C$)

- closed loop saves on water consumption
- limited maintenance because of absence of fouling
- effluent in accordance with legislation
- approved cooling fluid protects against frost down to -20°C



Total supervision and monitoring by Elektronikon®

- overall system performance status, alarms and safety shutdowns
- comprehensive service and safety indications
- multilingual selection program

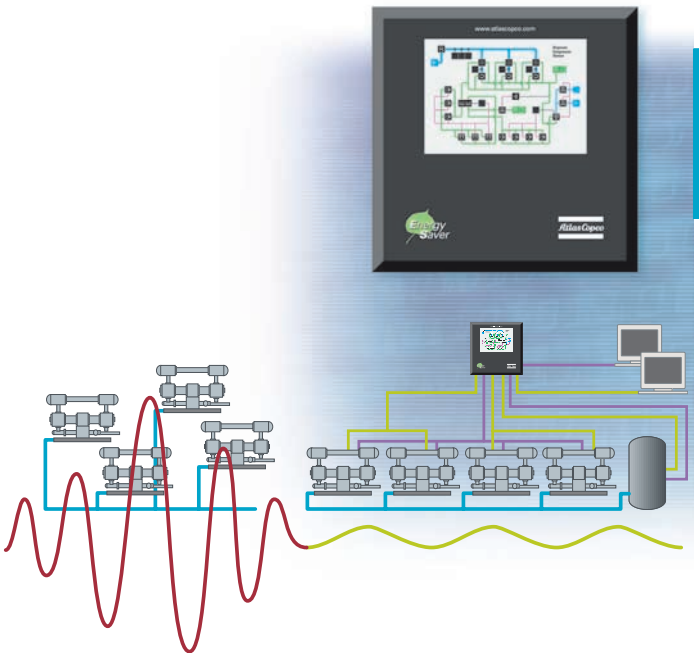
High pressure refrigeration dryer

- designed for pressures up to 45 bar
- stable dewpoint of 3°C even at fluctuating air demand
- environmentally safe refrigerant

P as in options

Because every installation has its own particularities and operating conditions, Atlas Copco Crépelle has developed a number of options that allow the compressors to operate in the most extreme conditions without tampering with product quality, reliability or longevity.

When the compression system consists of several units, the optional sequence controller will optimise the duty cycle, overall maintenance and monitoring capabilities.



Centralized ES energy saving control system

- sequencing of compressors to distribute load
- anticipation of maintenance requirements via trending
- optimized maintenance schedule

Customization for climatic conditions

- electric heating of frame for cold environments
- electrical cubicles for temperatures up to 50°C
- cooling tower for operation in hot conditions for ambient temperatures above 32°C

Extra particle filtration for pollution-free outlet air

- submicronic filters
- charcoal filters
- air quality conform to NFE and ISO standards
- removal of impurities down to 0.01 micron

Your partner in day-to-day operation

Easy installation

- overall dimensions allow for transport via truck/container
- fixation by chemical bolts

Strong commitment to optimal machine availability

- all-in service contracts for absolute peace-of-mind
- maintenance kits for internal service departments
- highly automated central distribution center for spare parts, with 24 to 72 hour delivery

A global service force

- 150 sales and service centers around the world
- highly trained service force
- technicians speak your own language
- proximity saves time and costs

A team effort

- customer involvement from the design stage onwards
- on-site training of operators and maintenance staff
- advice on optimization of processes and profitability

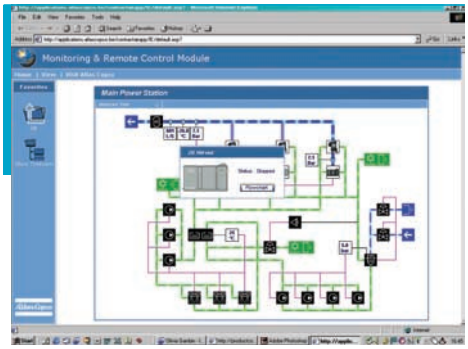
When Atlas Copco delivers a compression system, it comes with a strong commitment to be there for you, all over the world. With technical support and high quality spare parts, but also with sound advice.

Atlas Copco has built an enviable reputation of industry leadership. It is able and willing to share with its customers the expertise that it has developed over the years. Because Atlas Copco can only flourish when its customers are on a path of growth and prosperity.

Your partner in the future

The PET business is here to stay, and so are you. You want to rely on partners that grow with you. Partners that have the R&D capabilities and the financial strength to continuously improve your process and to develop novel applications or products.

Atlas Copco is the world leader in compressed air technology and has pioneered and patented many technologies. Always driven by the philosophy: what is good for the customer is good for Atlas Copco.



Innovative use of internet and wireless technology

- web based consultation and generation of drawings, service history, spare parts lists, manuals, etc.
- on-line tracking of orders
- e-procurement of spare parts through the Atlas Copco customer centers

True innovations for the PET industry

- Variable Speed Drive PETPACK® drastically cuts the energy bill and improves the bottom line
- PETPACK®, the unique combination of the proven ZR screw compressor and a high pressure booster for optimal efficiency – a market's first

Large scale research and development

- basic research on materials and techniques
- applied research to improve efficiency and reliability
- unparalleled testing and measurement facilities