

# Atlas Copco

Quality Air Solutions

Compressed Air Filters



*Sustainable Productivity*





## Total capability, total responsibility

Right at the heart of your business, Atlas Copco delivers quality compressed air for superior operational capacity. From compressed air generation to point of use, you can choose from our wide range of products to create a complete compressed air system tailored to your specific needs. All Atlas Copco products are engineered to integrate seamlessly, ensuring the highest level of reliability and energy efficiency. As a result, Atlas Copco can take full responsibility for your compressed air infrastructure with a guarantee of best-in-class quality. With a global presence in over 170 countries, we can provide an unrivalled service to maintain and continually improve your compressed air system performance.

Backed by more than 135 years at the forefront of compressed air, Atlas Copco products offer the finest quality and efficiency. Our goal is to be First in Mind—First in Choice®. That is why Atlas Copco's pursuit of innovation never ceases, driven by the dedication to meet and exceed your demands. Always working with you, we are committed to providing the customized air solution that is the driving force behind your business.

*We are committed to your superior productivity through interaction and innovation.*

# The ultimate protection

Your compressed air system, production process and end product: three crucial elements your business depends on. While superb quality air is an essential ingredient for the success of your plant, untreated air may cause extensive damage and lead to serious

performance degradation. To protect your investment, equipment and processes, Atlas Copco presents a full line-up of innovative filtration solutions to suit the high quality requirements of your specific application.



## RELIABLE QUALITY AIR

During the compressed air process, the concentration of dirt particles, oil carryover and moisture increases. This creates an abrasive mixture that, when left as such, may bring about severe instrument failures and even contaminate your end product. Atlas Copco has developed a complete range of top-of-the-line DD, DDp, PD, PDp and QD filters which efficiently reduce all types of contamination with minimal pressure drop.



## REDUCED ENERGY COSTS

Designed for maximum contaminant removal, Atlas Copco's filter range offers significant energy savings thanks to their:

- Optimal air flow path with low resistance.
- Housing and cartridge engineered for minimal pressure drop.



## PROVEN PEACE OF MIND

Building on many years of experience in compressed air solutions and continuous in-depth research and development, Atlas Copco offers the widest selection of filtration solutions and application knowledge. With the protection of your compressed air investment in mind, Atlas Copco has designed its filter range to meet your current and future needs while providing the superb quality air according to the latest international standards.



### Compressed Air Contaminants

- Dust particles (from ambient air and/or desiccant)
- Liquid water and water vapor
- Liquid oil and oil vapor
- Hydrocarbon vapor
- Rust particles
- Pipe scale
- Acidic condensates



# High performance filtration

In almost all applications, contamination of the air supply can cause serious performance decline and increase maintenance costs in terms of actual repairs and lost productivity.

## ASSURED PEACE OF MIND

- 1 Audible alarm.

## EXTERNAL GRIP FOR EASY MAINTENANCE

- 2 External ribs enabling a firm grip to allow for easy removal of the bowl.

## PROTECTION AGAINST CORROSION

- 3 Die cast aluminium housing with special anodized treatment outside and inside.

## INCREASED RELIABILITY

- 4 High performance automatic drain.

## EASY MONITORING

- 5 Sight glass.

## REDUCED PRESSURE DROP/INCREASED SAVINGS

- 6 Unique head design (inlet guide).



The differential pressure indicator or gauge is standard on sizes 44 and bigger.

In addition, above 520 l/s flanged filters have been designed. A high pressure range from 14 l/s to 445 l/s is also available.



Sight glass



External ribs



High performance automatic drain



Special anodized treatment outside and inside



Unique high efficiency head design (inlet guide)

Atlas Copco's innovative filtration solutions are engineered to cost effectively provide the best quality air and meet today's increasing quality demands.



#### RELIABLE FILTRATION

- 1 High performance stainless steel filter cores ensuring hardness of the cartridges.
- 2 Protection paper to avoid direct contact between the filter media and the stainless steel filter core.
- 3 Epoxy sealed cap.

#### SUPERB EFFICIENCY

- 4 Top quality filter media, large filter surface ensuring low pressure drop and long cartridge lifetime.

#### HIGH DRAINAGE

- 5 Synthetic foam.

#### INCREASED ENERGY SAVINGS THANKS TO REDUCED LEAKAGE RISK

- 6 Double O-rings for proper sealing, reducing leakage risks.

#### LOW RUNNING COSTS

- 7 Unique high efficiency head design for reduced pressure drop.

#### INCREASED USER FRIENDLINESS & RELIABILITY

- 8 Push on element.

#### PREMIUM PROTECTION

- 9 Internal ribs to protect the element from damage and facilitate the route of the oil droplets.



Double O-rings

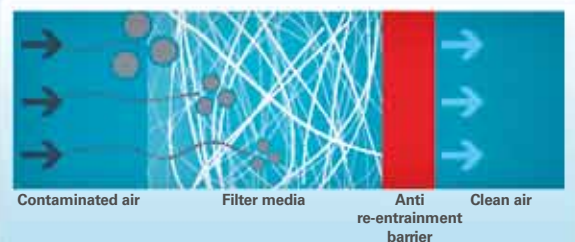


Push on element

Direct interception

Inertial interception

Diffusion/brownian movement



For optimal filtration, Atlas Copco filters apply a triple filtration function: direct interception, inertial interception and diffusion.

# Maximizing efficiency

As the cost of compressed air can represent over 40% of your total energy expenses, conducting an energy efficient strategy is one of your top priorities. Clean, treated air reduces the risk of corrosion and leaks in your compressed air system.



## EFFICIENCY & RELIABILITY

To obtain supreme air quality, optimal filter performance is key. As one of the main filter components protecting your compressed air system, the cartridge continuously comes into contact with oily, acidic condensate and dirt particles. To guarantee high filtration capabilities at the same low energy costs, an annual cartridge change is essential. This not only assures high filter performance with low pressure drop but also safeguards your valuable equipment, production process and most importantly, your end product.



## RECOMMENDED FILTER CARTRIDGE CHANGE:

PP, DD, PDp, DDp and QDT:

- At least once a year or
- Every 4,000 hours

QD:

- Every 1,000 hours



*By annually replacing the filter cartridge, your compressed air system remains clean and free from moisture, expanding the life of equipment, increasing efficiency and ensuring optimum filtration results.*



## OPTIMAL FILTRATION

- Exceptional flow path through housing and cartridge.
- Considerable reduction of air turbulence and pressure drop.
- Limited system operating costs.



*Designed to meet current and future demands, Atlas Copco's filter range features an optimized flow path which reduces air turbulence and pressure drops. This flow is applicable to the DD and PD filter ranges.*

In addition, it also limits operating pressure. Incorporating innovative filter design as well as beneficial cartridge changes, Atlas Copco's filter range offers you real energy savings without compromise in production reliability and efficiency.



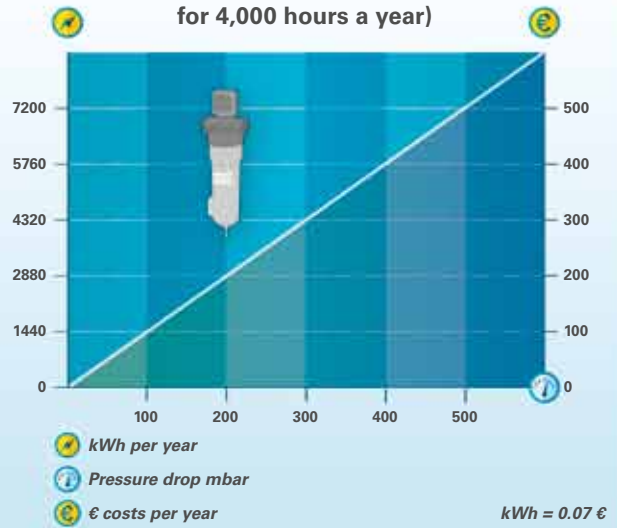
### SUPERB COST SAVINGS

Designed to combine maximum contaminant removal efficiency with minimum pressure drop, Atlas Copco's state-of-the-art filters contribute to low energy consumption in your compressed air system.

- Large effective filtration area.
- Low resistance to the air flow.

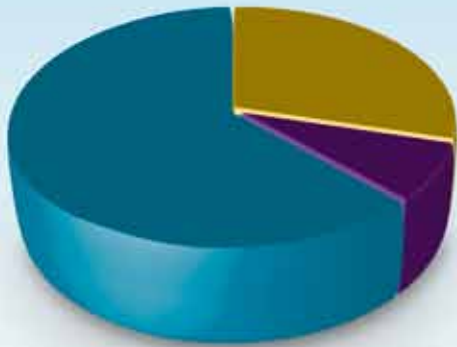
### ENERGY COSTS OF HIGH PRESSURE DROP

(Flow of 120 l/s at 7 bar for 4,000 hours a year)

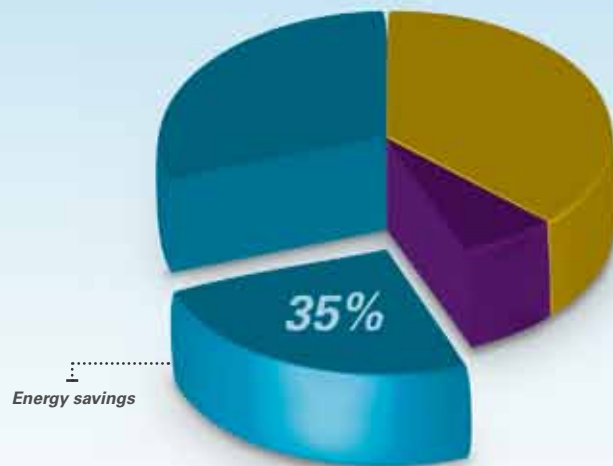


### SAVINGS OVER ONE YEAR OF OPERATION

CONVENTIONAL FILTER



ATLAS COPCO FILTER



Taking technology to a whole new level, Atlas Copco's filter range achieves maximum cost savings, allowing you to conduct a truly efficient energy reduction strategy.

- Investment
- Element replacement
- Cost of energy



Maximum energy savings, day in, day out!

# Meeting your every demand

The quality of air required throughout a typical compressed air system varies. With its extensive filter range, Atlas Copco can perfectly match your precise requirements, ensuring all

types of contamination are avoided and costs are kept to an absolute minimum.



## DD FILTER RANGE

Coalescing filters for general purpose protection, removing liquid water and oil aerosol to 0.1 mg/m<sup>3</sup> (0.1 ppm) and particles down to 1 micron.



**For optimum filtration, a DD filter should be preceded by a water separator.**



## DDp FILTER RANGE

Particulate filters for dust protection, removing particles down to 1 micron.



## PD FILTER RANGE

High efficiency coalescing filters, removing liquid water and oil aerosol to 0.01 mg/m<sup>3</sup> (0.01 ppm) and particles down to 0.01 micron.



**For optimum filtration, a PD filter should be preceded by a DD filter at all times.**



## PDp FILTER RANGE

Particulate filters for dust protection, removing particles down to 0.01 micron.



## QD/QDT FILTER RANGE

Active carbon filter for removal of oil vapor and hydrocarbon odors with a maximum remaining oil content of 0.003 mg/m<sup>3</sup> (0.003 ppm).



**For optimum filtration, a QD/QDT filter should be protected by the right pre-filtration including a DD and PD filter at all times.**



*All grades are also available for silicon-free applications (e.g. painting).*



# Atlas Copco quality air solutions



## COMPRESSED AIR PURITY ISO 8573-1 EDITION 2010

The international standard for compressed air purity provides a system of classification for the three main contaminants present in compressed air systems: dirt, water and oil. As member

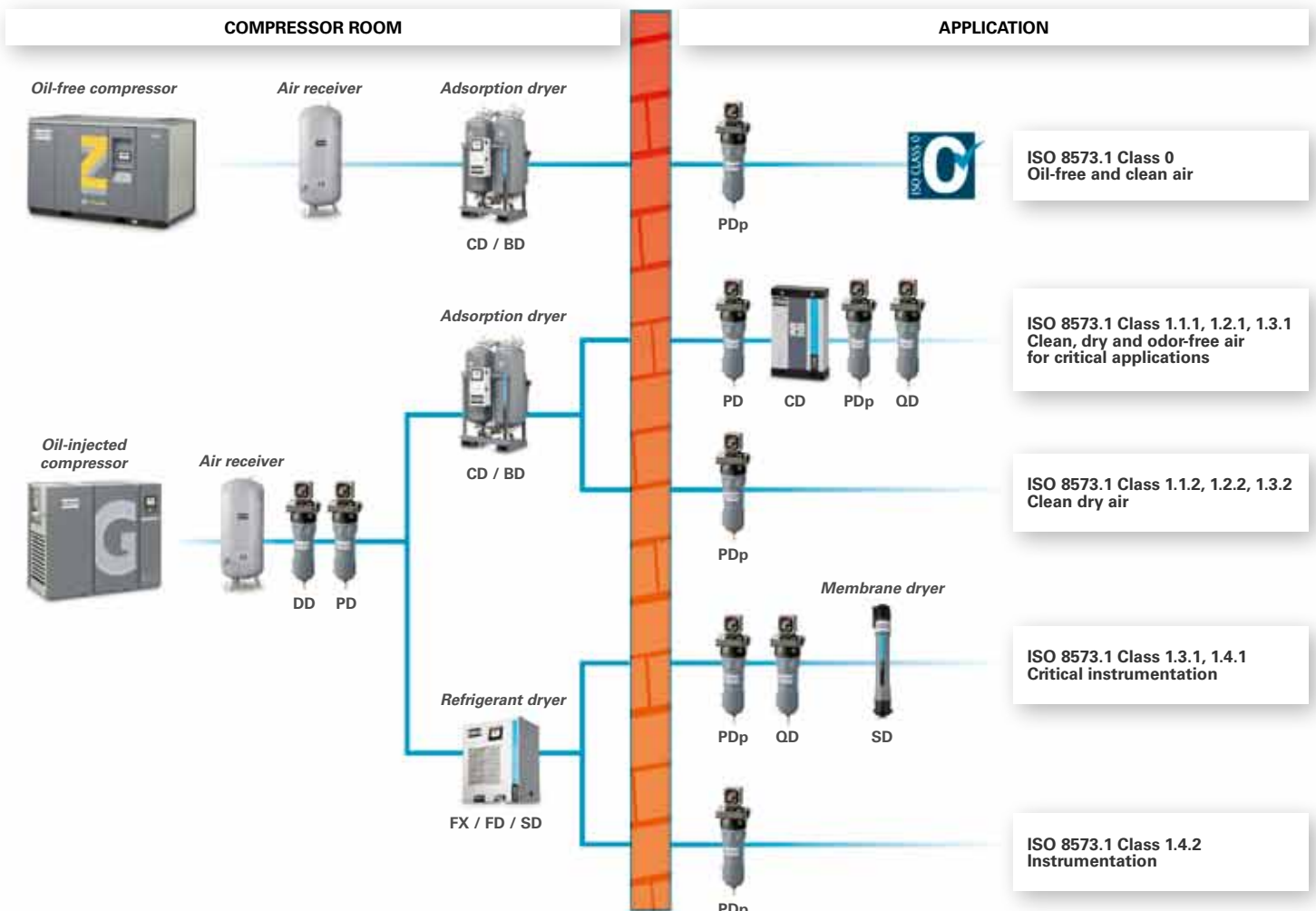
of the ISO committee, Atlas Copco designs filtration solutions to provide compressed air purity that meets or exceeds the levels shown in the standard above.



As leader in the field of oil-free air compression technology, Atlas Copco has become the first manufacturer to be awarded ISO 8573-1 CLASS 0 certification for its Z and AQ series of oil-free compressors. Only oil-free compressors deliver oil-free air.

Purity Class	Solid Particles			Water		Total Oil*
	Maximum number of particles per m <sup>3</sup>			Maximum pressure dewpoint		Maximum concentration
	0.1-0.5 micron	0.5-1.0 micron	1.0-5.0 micron	°C	°F	mg/m <sup>3</sup>
0	As specified by the equipment user or supplier and more stringent than class 1.					
1	20,000	400	50	-70	-94	≤ 0.01
2	400,000	6,000	100	-40	-40	≤ 0.1
3	–	30,000	1,000	-20	-4	≤ 1
4	–	–	10,000	3	37.4	≤ 5
5	–	–	100,000	7	44.6	–
6	–	–	–	10	50.0	–

\* Aerosol, liquid and vapor.

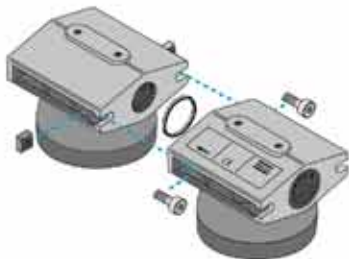


# Proven peace of mind

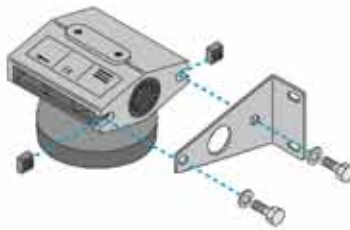


Building on Atlas Copco's know-how and years of experience with regards to compressed air solutions, the entire filter range is produced in-house, on the most advanced production lines, and tested using the most stringent methods in the industry. You can rest assured at all times: severe certification and testing procedures are conducted to ensure air is supplied to the highest standards of quality control. To further reduce any type of contamination within your process and protect your equipment, Atlas Copco presents a complete range of quality air solutions to meet your every need. This way, only Atlas Copco can ensure 100% quality... not only at the time of delivery, but for many, many years to come. A total quality air solution for any application.

## Accessories & options



**Filter connection kit**  
allows easy mounting of filters  
in series (sizes 9-520)



**Wall mounting kit**  
simplifies installation (sizes 9-520)



**Quick coupling**  
for easy connection to drain  
collector or oil/water separator  
(sizes 9-520)



**Voltage-free contact**  
mounted in the differential pressure  
gauge, to give remote indication of  
cartridge replacement.



**EWD electronic drain**

- no loss of compressed air
- alarm function

(EWD optional on sizes 9-520)  
(EWD standard on sizes  $\geq$  520F)





### **Driven by innovation**

With more than 135 years of innovation and experience, Atlas Copco will deliver the products and services to help maximize your company's efficiency and productivity. As an industry leader, we are dedicated to offering high air quality at the lowest possible cost of ownership. Through continuous innovation, we strive to safeguard your bottom line and bring you peace of mind.



### **Building on interaction**

As part of our long-term relationship with our customers, we have accumulated extensive knowledge of a wide diversity of processes, needs and objectives. This gives us the flexibility to adapt and efficiently produce customized compressed air solutions that meet and exceed your expectations.



### **A committed business partner**

With a presence in over 170 countries, we will deliver high-quality customer service anywhere, anytime. Our highly skilled technicians are available 24/7 and are supported by an efficient logistics organization, ensuring fast delivery of genuine spare parts when you need them. We are committed to providing the best possible know-how and technology to help your company produce, grow, and succeed. With Atlas Copco you can rest assured that your superior productivity is our first concern!

