



Atlas Copco

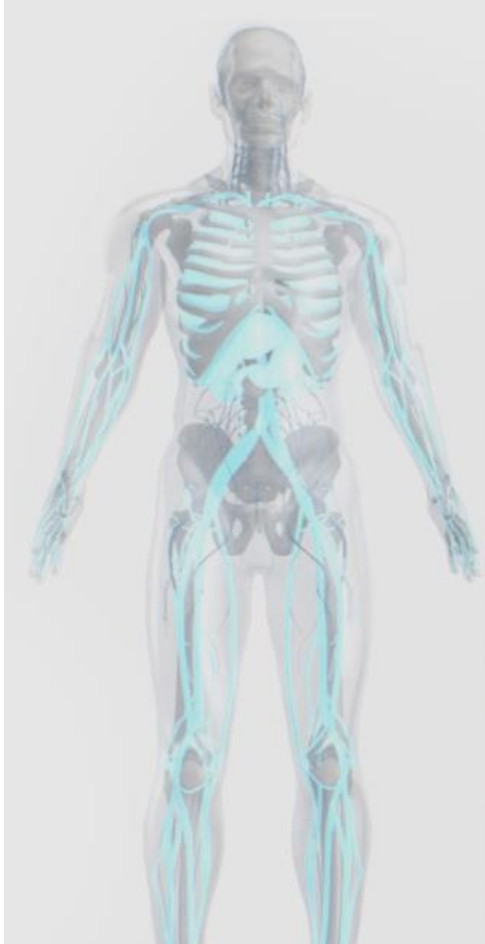


Genuine Parts

PT Atlas Copco Indonesia

# Why Choose Genuine Parts ?

[Atlas Copco | Why Choose Genuine Compressor Parts? \(youtube.com\)](https://www.youtube.com/watch?v=...)



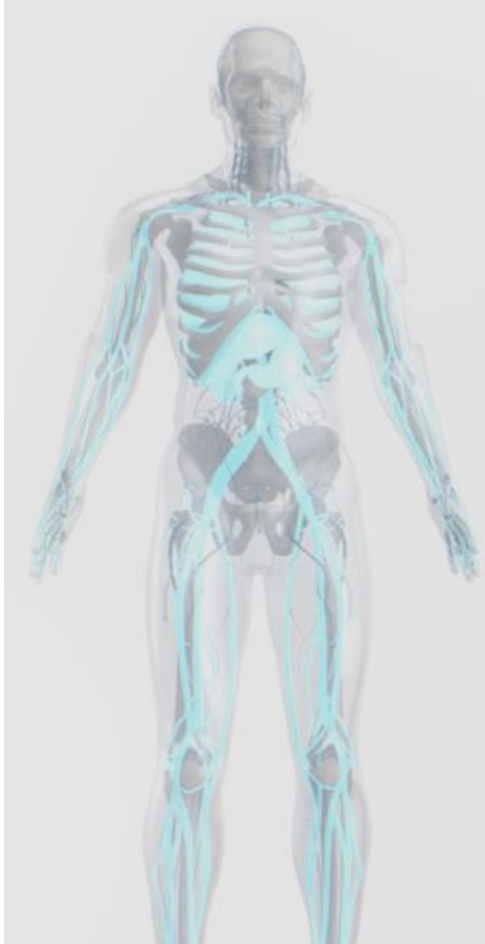
**Think of the human body with its vital organs.**

**If these are in good shape, we are healthy and fit. If one organ fails however, our very life may be at risk.**



# Why Choose Genuine Parts ?

[Atlas Copco | Why Choose Genuine Compressor Parts? \(youtube.com\)](https://www.youtube.com/watch?v=...)



Each component of your compressor is vital for its overall performance, giving you the reliability, long lifetime and energy efficiency you expect.

That's why every part and lubricant is expertly designed, manufactured and tested according to the most stringent standards. That's why using non-genuine replacement parts puts your entire air system at risk





# Air filtration



## Air Intake Filter

### Keeping the particles out

Compressors operate in many different types of environment, affecting the inlet air.

Impurities, such as dust particles, are mostly invisible to the naked eye. But they can cause damage to the compressor element, reducing its efficiency or even causing failure.

They can also make the lubricant age faster and disrupt its capacity to protect metal components.

# Comparison with others



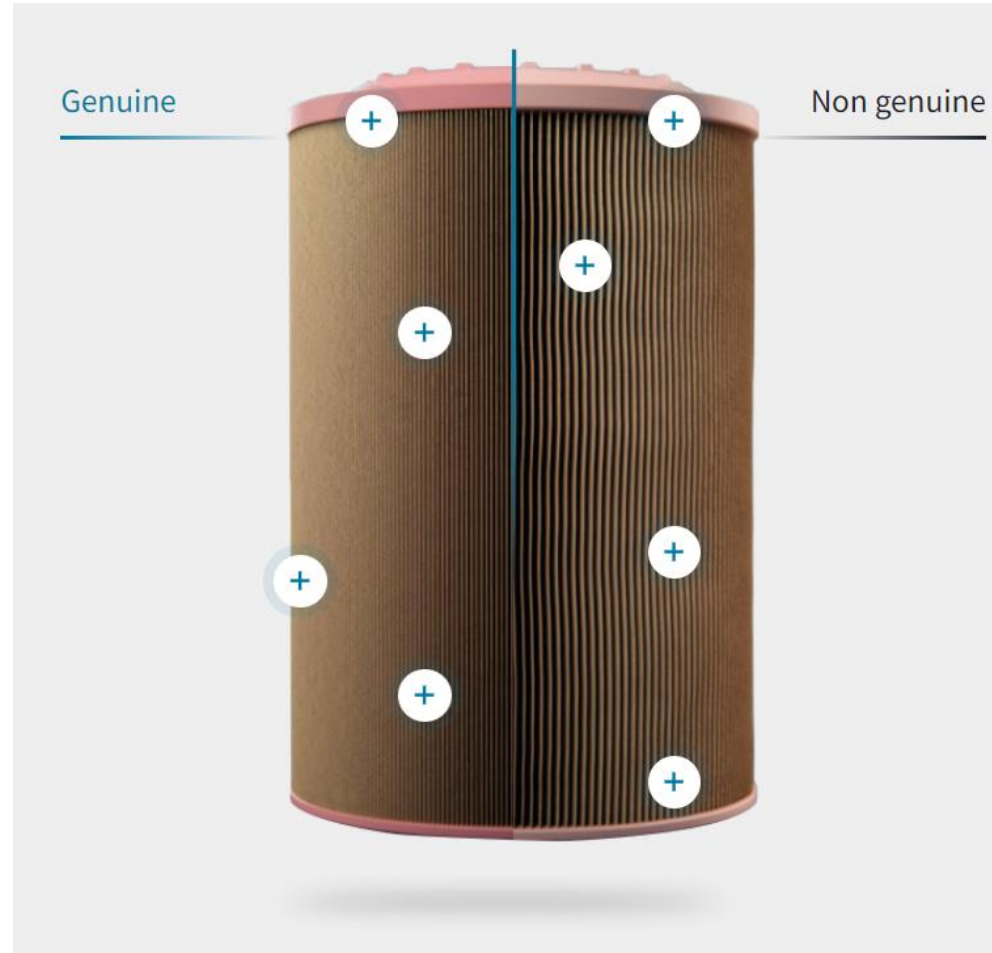
# Genuine vs Non genuine

## Air intake filter



### Careful seal design

- Optimal hardness and a perfect fit with the housing, the top and bottom seal prevents unfiltered air from passing through.
- The filter paper is pressed into the seal, keeping its shape over the filter lifetime.

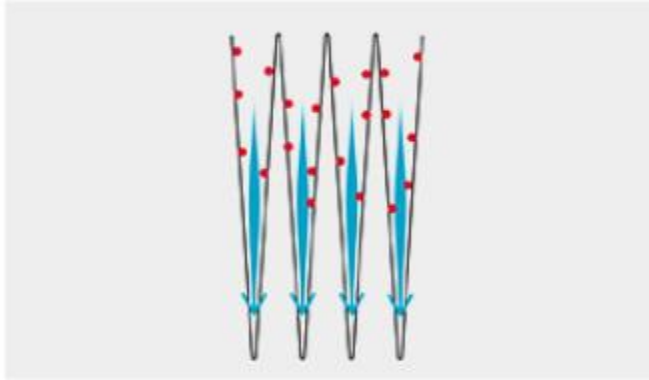


### Poor seal design

- Inadequate hardness and a less than perfect fit cause leakage of unfiltered air.
- Glued-on filter paper is not stabilized and will lose its shape and function.

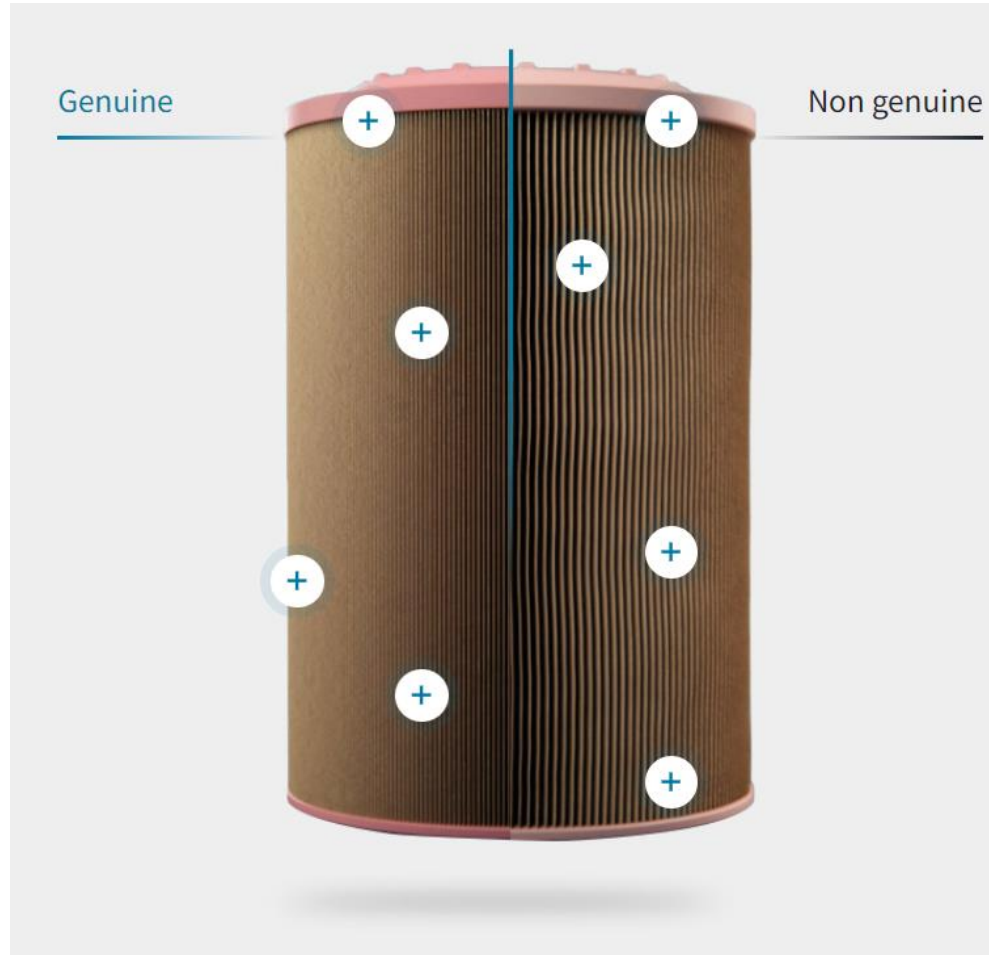
# Genuine vs Non genuine

## Air intake filter



### Symmetrical V-shape design

The pleated design results in a large filtration surface. This allows more particles to be captured while maintaining minimal pressure drop. A symmetrical and durable V-shape prevents particle buildup and premature clogging.



### Unstable or loose pleats

A smaller filtration surface, loose or deformed pleats: it all results in early dust buildup and clogging, shorter lifetime and increased pressure drop



# Genuine vs Non genuine

## Air intake filter



### Stabilized for durability

Depending on the filter size, a robust inner support ring or extra glue string ensures the stability needed to withstand the increasing pressure difference over time.

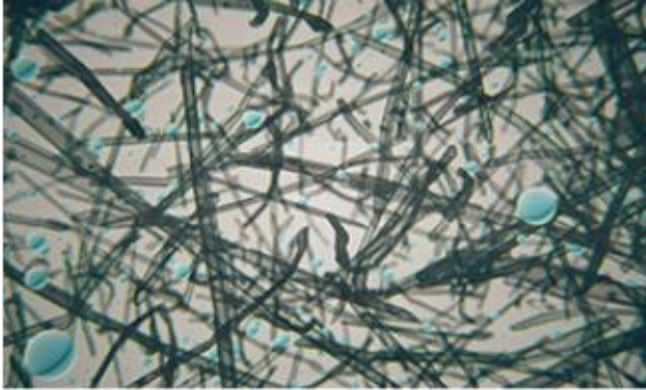


### Poor stability

The absence of a support ring may cause the filter element to collapse over time. In some filters, this is compensated by additional glue strings or metal grating, both resulting in higher pressure drop.

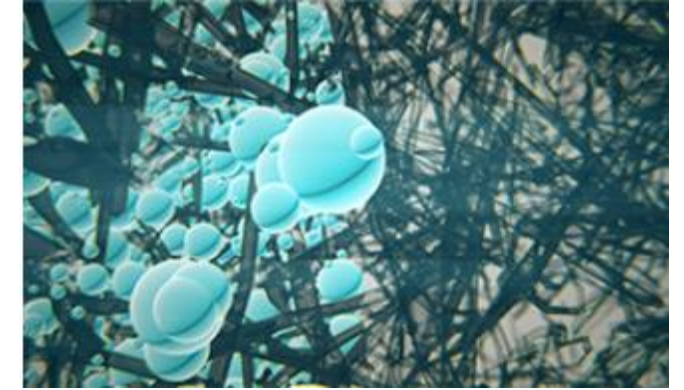
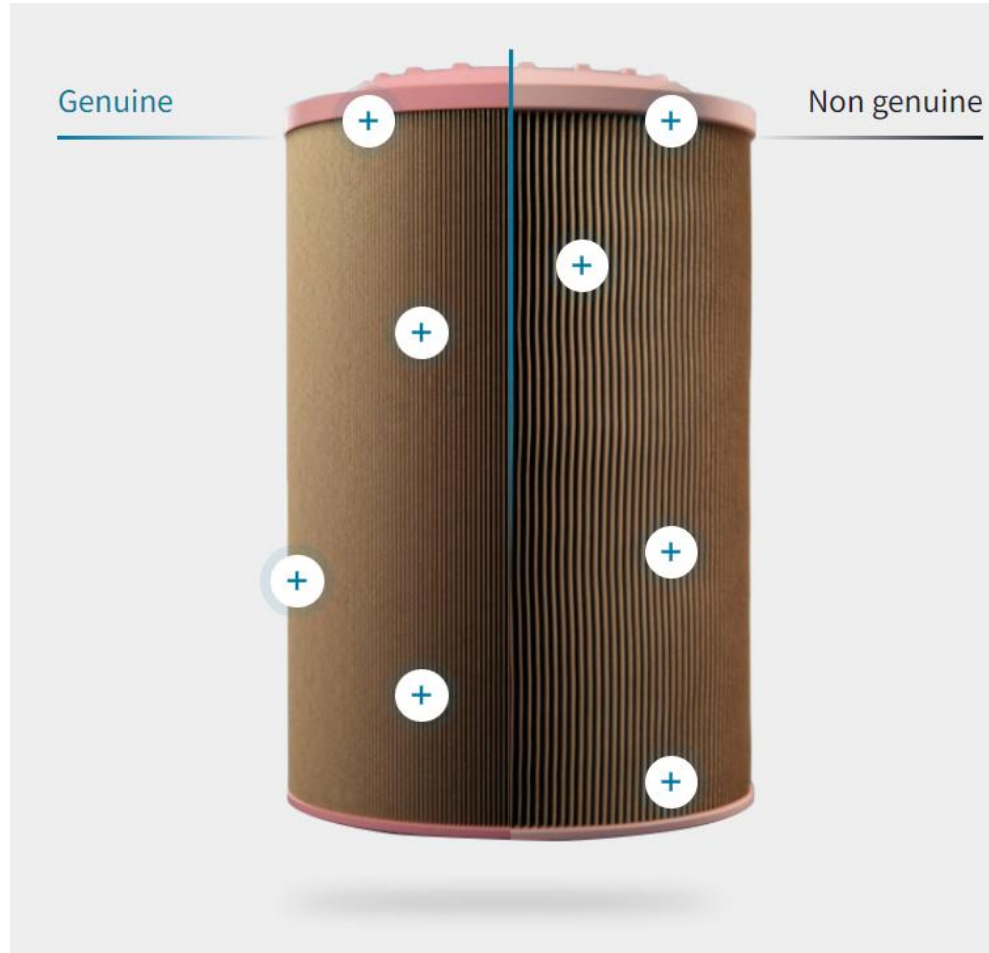
# Genuine vs Non genuine

## Air intake filter



### Multilayered filter media

The multi-layered filter paper has a fiber structure evolving from open to dense, enabling in-depth filtration. This means particles of different sizes are captured more efficiently over an extended lifetime.



### Inferior paper quality

A limited amount of low-quality cellulose paper means there is no in-depth filtration. Dust will saturate the filter quickly, shortening its life while greatly increasing pressure drop.

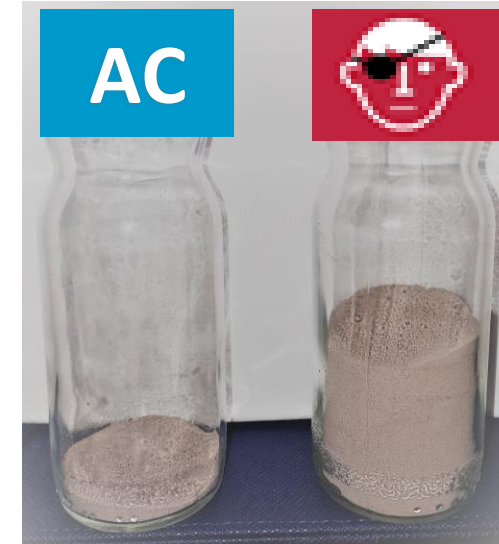
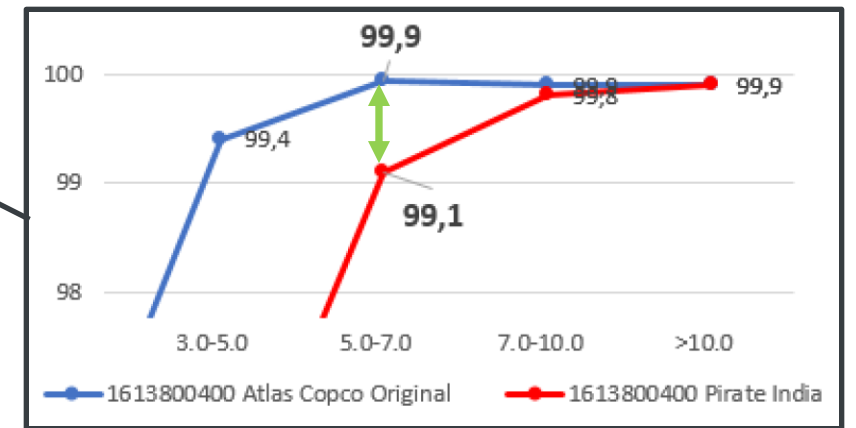
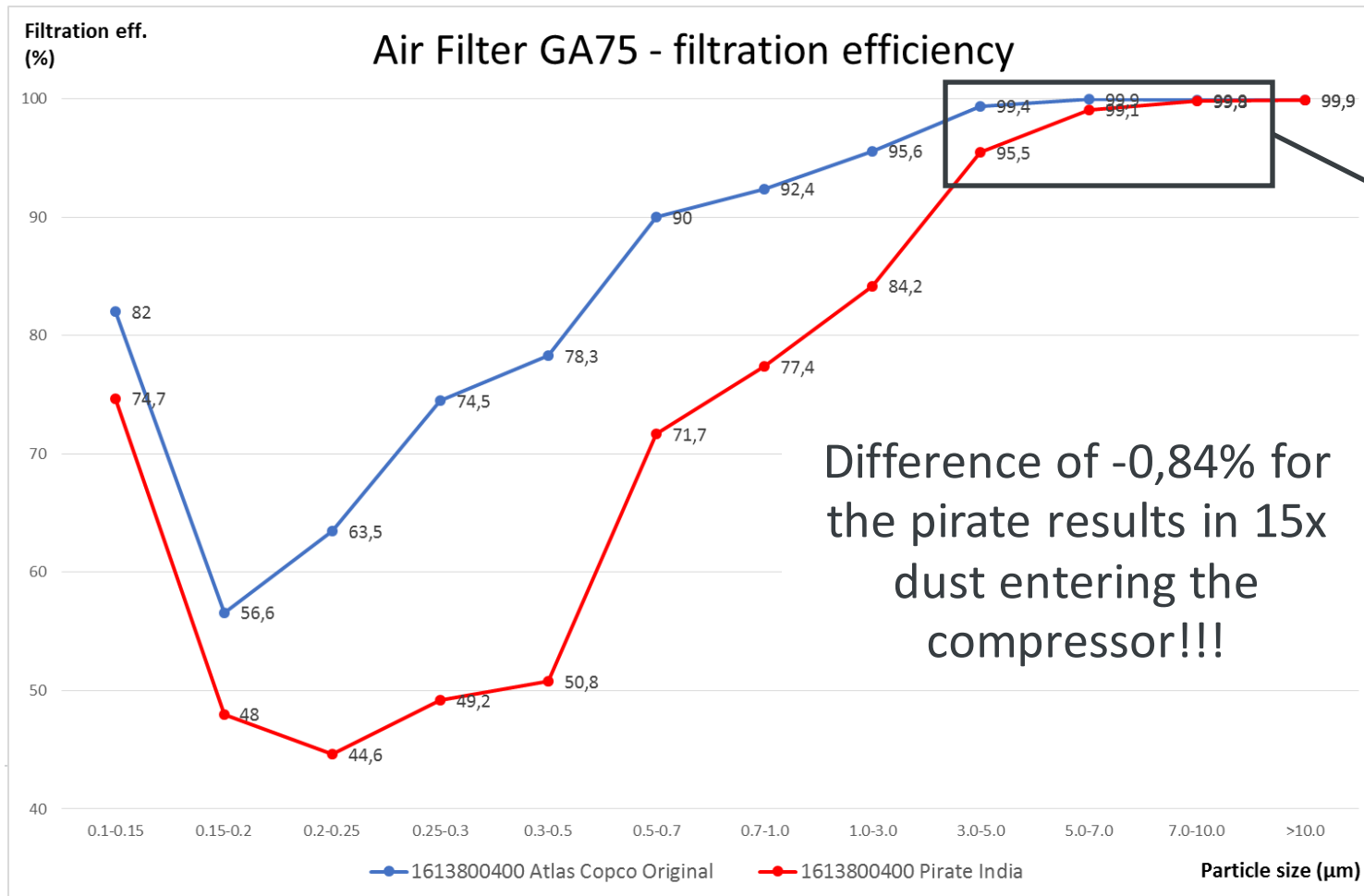
# Pirate parts – air filter

Example – air filter 1613800400 (GA75)



## Filtration efficiency

% of dust that will be captured by the filter per particle size ( $\mu\text{m}$ )



+1500%



# Oil filter



## Oil Filter

### Protecting the oil system

Impurities in the oil can cause damage to the compression element's rotors and housing, resulting in reduced performance and higher operational costs.

They can also harm the bearings, leading to rotor contact, possible element failure and production downtime. Finally, they shorten the lifetime of components and of the oil itself.

The oil filter captures dust, deposits and other foreign particles, ensuring a clean oil flow to the compressor element.

Apart from protecting the bearings and other mechanical components, it prevents premature clogging of the air/oil separator.



# Genuine vs Non genuine

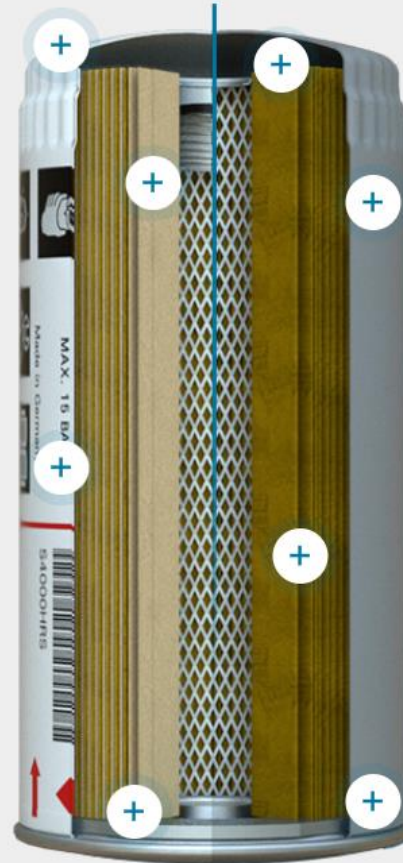
## Oil filter



### Bypass valve

Oil needs to flow to the compressor element at all times, even if the oil filter is clogged or at start-up, when oil viscosity is high. In those cases only, the bypass valve will open, preventing element failure.

Genuine



Non genuine

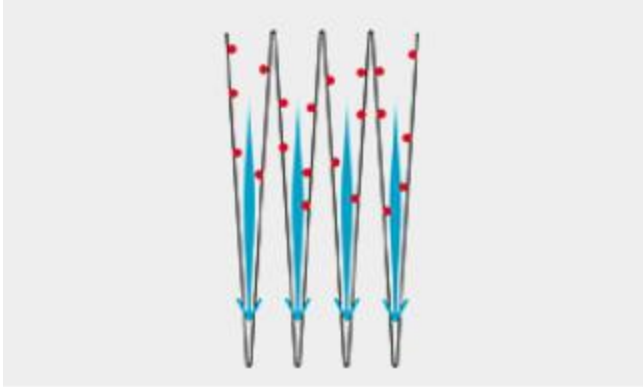


### Inferior or no bypass valve

If the bypass valve is too weak, it will open too easily, letting unfiltered oil flow freely into the system. In the absence of a bypass valve, a clogged filter can block the oil flow to the compressor element, leading to a catastrophic breakdown.

# Genuine vs Non genuine

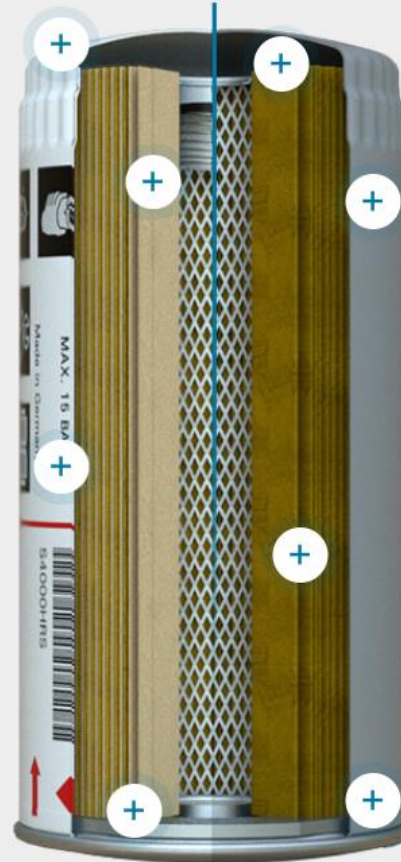
## Oil filter



### Pleated design

The pleated design enlarges the filtration area. Particles are captured more easily, while pressure drop remains at a minimum. The correct number and shape of the pleats ensure the filter's efficiency for the full duration of its service life.

Genuine



Non genuine



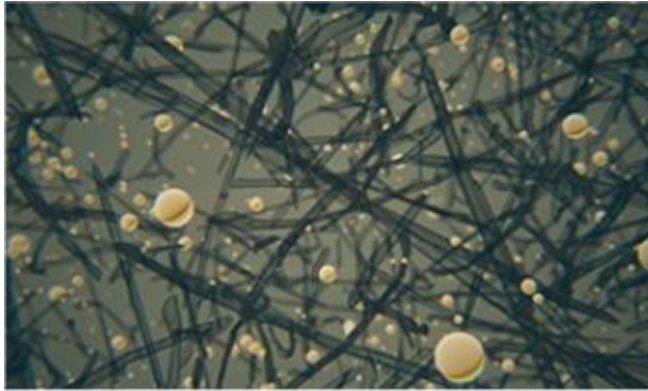
### Deformed pleats

If the V-shape is deformed, this can lead to early dust buildup and pressure drop. If less filter material is used, it will be saturated more quickly, reducing the filter lifetime.



# Genuine vs Non genuine

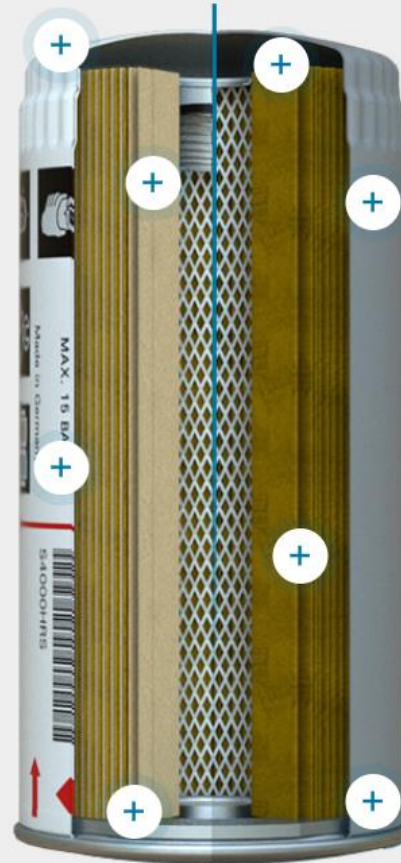
## Oil filter



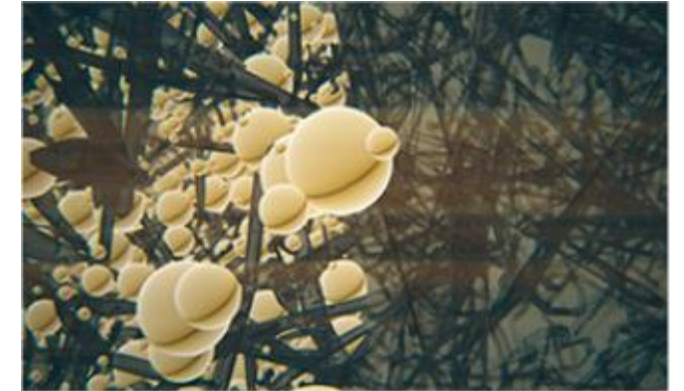
### Multilayered filter media

The carefully selected filter material is multi-layered, with a fiber structure that enables in-depth filtration. Particles of different sizes are captured efficiently, guaranteeing maximum filter lifetime.

Genuine



Non genuine



### Cheap paper material

A limited amount of low-quality cellulose paper means there is no in-depth filtration. This will lead to a premature increase of pressure drop, preventing the filter from reaching its advertised lifetime.

# Genuine vs Non genuine

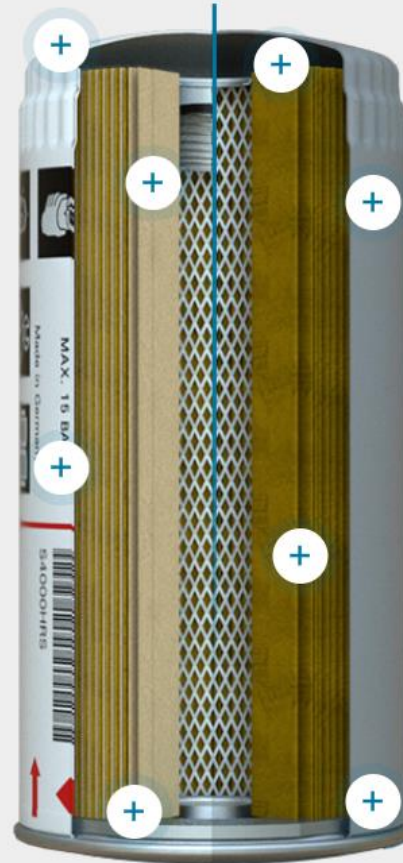
## Oil filter



### High-quality seal

A perfect fit of the seal onto the instrument block prevents unfiltered oil from getting through. Its high-quality rubber material withstands the high temperatures and pressures it is exposed to over its lifetime.

Genuine



Non genuine



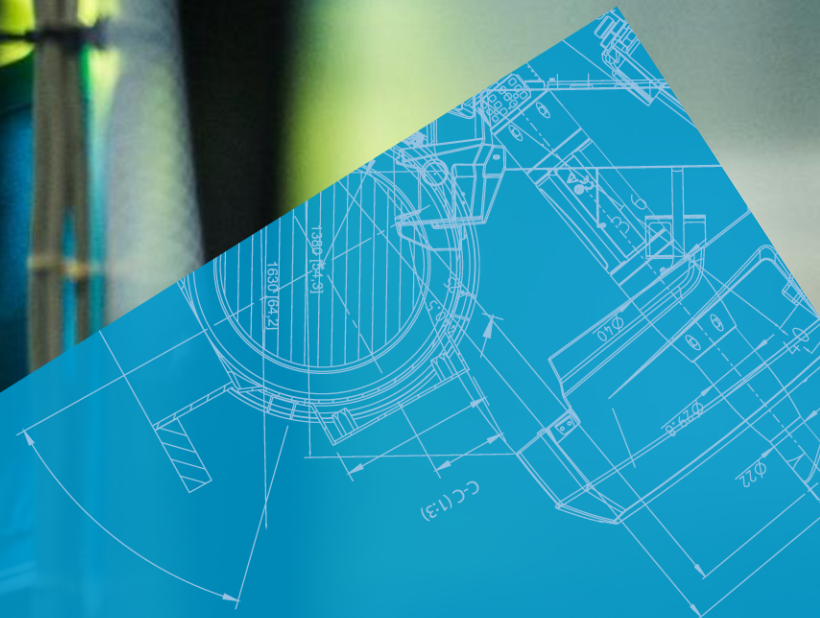
### Imperfect sealing

A slight deviation in thickness of the seal means unfiltered oil can spill into the system. Leakage will also occur if the seal material is not up to the demanding working conditions within the compressor.

# Pirate parts – oil filter

1613610500 (GA<160kW + Z units)





## Air/oil separator



# Oil Separator

## Extracting the oil

The compressed air that leaves the compressor element is a mixture of air and oil. However, to prevent contamination of production equipment or end products, you need high-quality air. That's why the oil content in the air that leaves the compressor should be reduced to an absolute minimum!

The best in class oil-air separation guarantees a typical oil content of 2 ppm with an absolute maximum of 3 ppm.

In the air/oil separator, the oil mist is liquified into droplets that collect at the bottom. From there, the oil is filtered and sent back to the compressor element.



# Air/oil separator

## The essentials

- **Specific filtermedia layer build-up:**

1. Coalescence layers + protection layers

aerosol is transformed into oil droplets

2. Oil transport layers

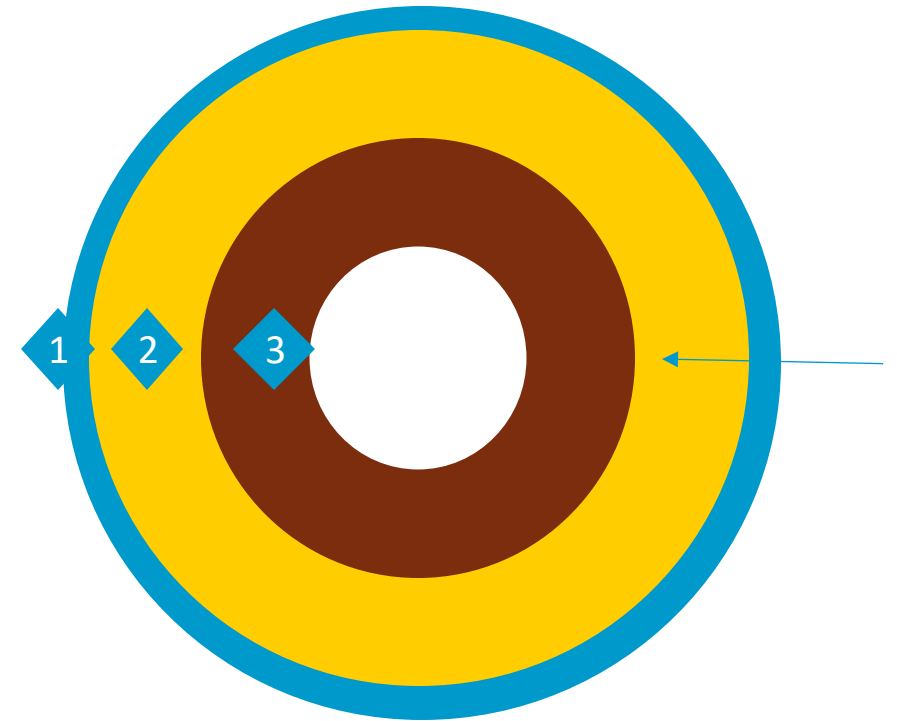
oil droplets are transported through channel formation

- Glass fiber layers:

- High porosity in stable structure
- High efficiency fine fibers
- Good cost/performance ratio

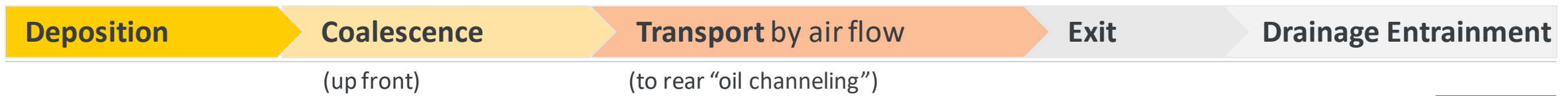
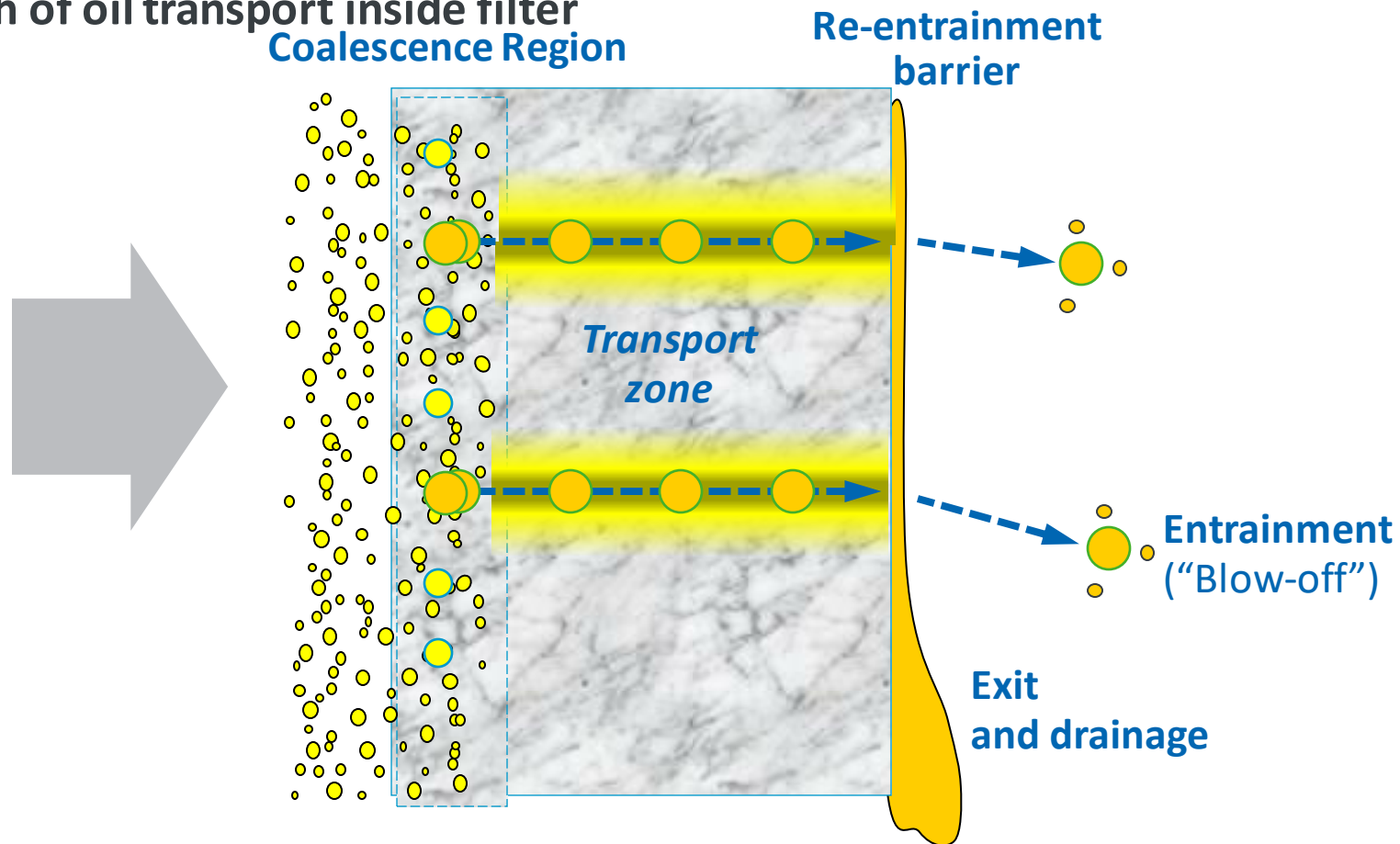
3. Re-entrainment barrier

- PUR foam material which supports the draining process and makes sure oil carryover is limited



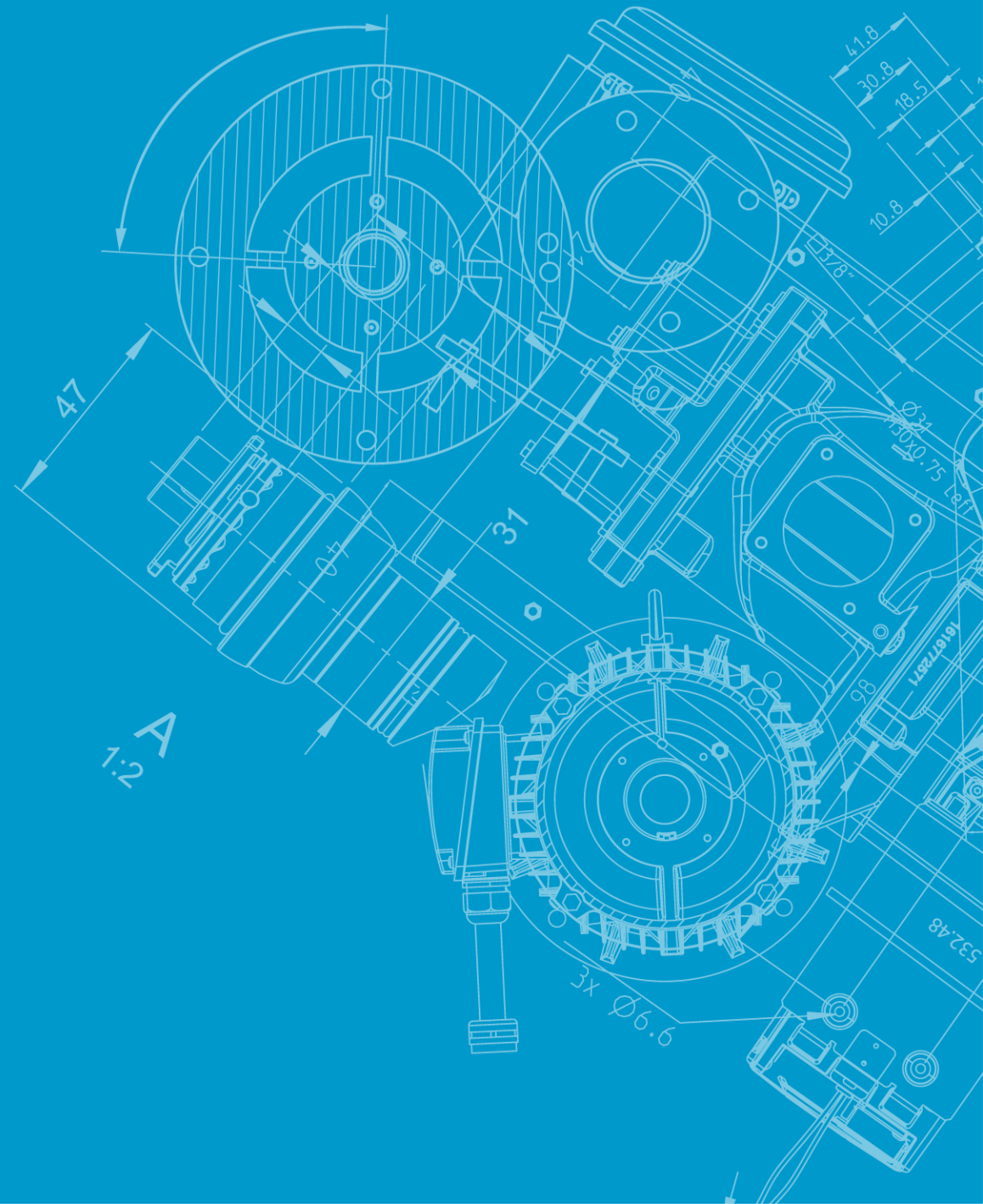
# Oil mist filtration

Typical path of oil transport inside filter





# Comparison with others



# Genuine vs Non genuine

## Air/Oil Separator



### Earthing clip

Earthing of the separator element prevents the buildup of static electricity, caused by the moving lubricant. This is an important feature to prevent the risk of fire.



### Poor-quality earthing

On cheap separator elements, earthing is often absent or made of poor quality material. Static electricity is not properly diverted and could ultimately cause fire.

# Genuine vs Non genuine

## Air/Oil Separator



### Robust metal structure

The metal framework of the separator element has the right material and thickness to withstand the stresses due to pressures building up.

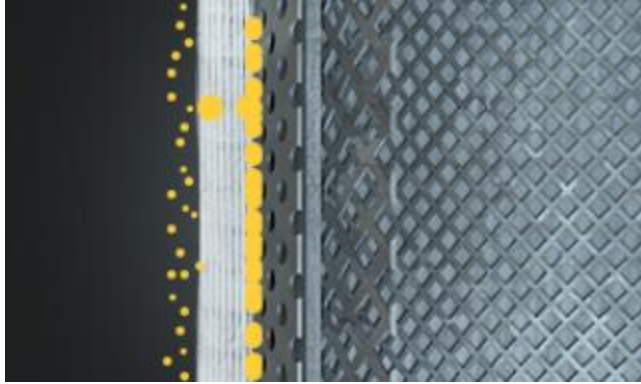


### Weak metal structure

As stresses increase over the lifetime of the separator element, cheap materials may cause it to bend or even collapse, resulting in damage to the whole compressor.

# Genuine vs Non genuine

## Air/Oil Separator



### Selected filter material

The configuration and careful selection of the filter materials is key to the separator's performance, ensuring excellent droplet formation and draining, for minimal oil consumption, minimal pressure drop and optimal quality of the outlet air.

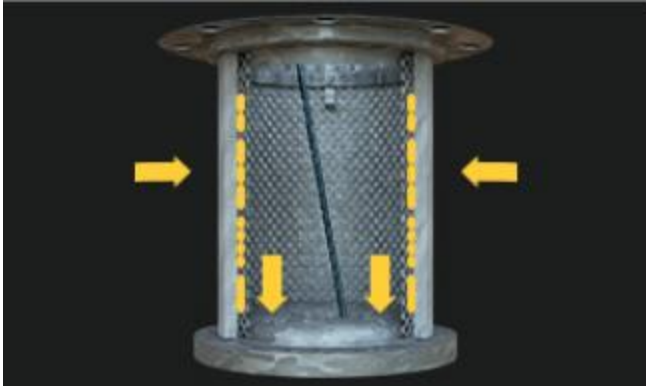


### Poor filter media configuration

Cheap cellulose paper or incorrect layering can greatly diminish the efficiency of the separator element. The result: fast-rising pressure drop, premature saturation and oil carryover into the outlet air.

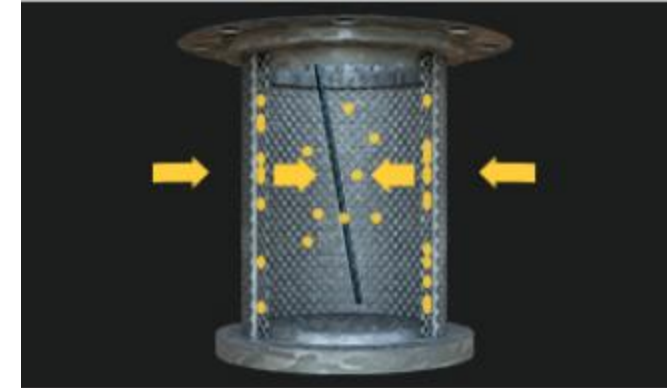
# Genuine vs Non genuine

## Air/Oil Separator



### Perfect scavenge line function

The scavenge line that takes the oil back to the compressor element needs to fit perfectly into the bottom plate, ensuring a vacuum is created so the oil gets sucked out of the separator vessel. The filter material ensures all oil is guided downwards without releasing droplets into the outgoing air. The filter material ensures all oil is guided downwards without releasing droplets into the outgoing air.



### Poor fit of the scavenge line

An incorrect shape or positioning of the bottom plate will cause failure to create a vacuum. Insufficient oil is sucked out, causing early saturation and a shortened lifetime of the separator element. Droplets in the air due to poor filtration will not be captured by the scavenge line.

Atlas Copco

CERTIFIED BY PROPERG N.V.  
MAX. PRESSURE 1.5(220) MPa(PSI)  
AT TEMPERATURE 220(240) °C(°F)  
MONT. TEMPERATURE -10(14) °C(°F)  
AT PRESSURE 1.5(220) MPa(PSI)  
S/N : 197828 YEAR : 2014

GROUP 220 PP 60 ST VOLUME V AT 6.7 bar  
DESIGN PRESSURE PT 15 bar P.S. 100%  
TEST PRESSURE PT 20 bar P.S. 100%  
MIN. MAX. DESIGN TEMPERATURE -10 170 °C  
MANUFACTURED BY: TOOL-LOK SPRING ROPPE BELGIUM GRN 100-01-04

CE 0038

Atlas Copco

ROTO SYNTHETIC FLUID  
**XTEND DUTY**

Synthetic lubricant  
for single and two stage oil injected  
screw compressors

5L

Do not mix with mineral oils  
PIN 28001 1700 00



Lubricant



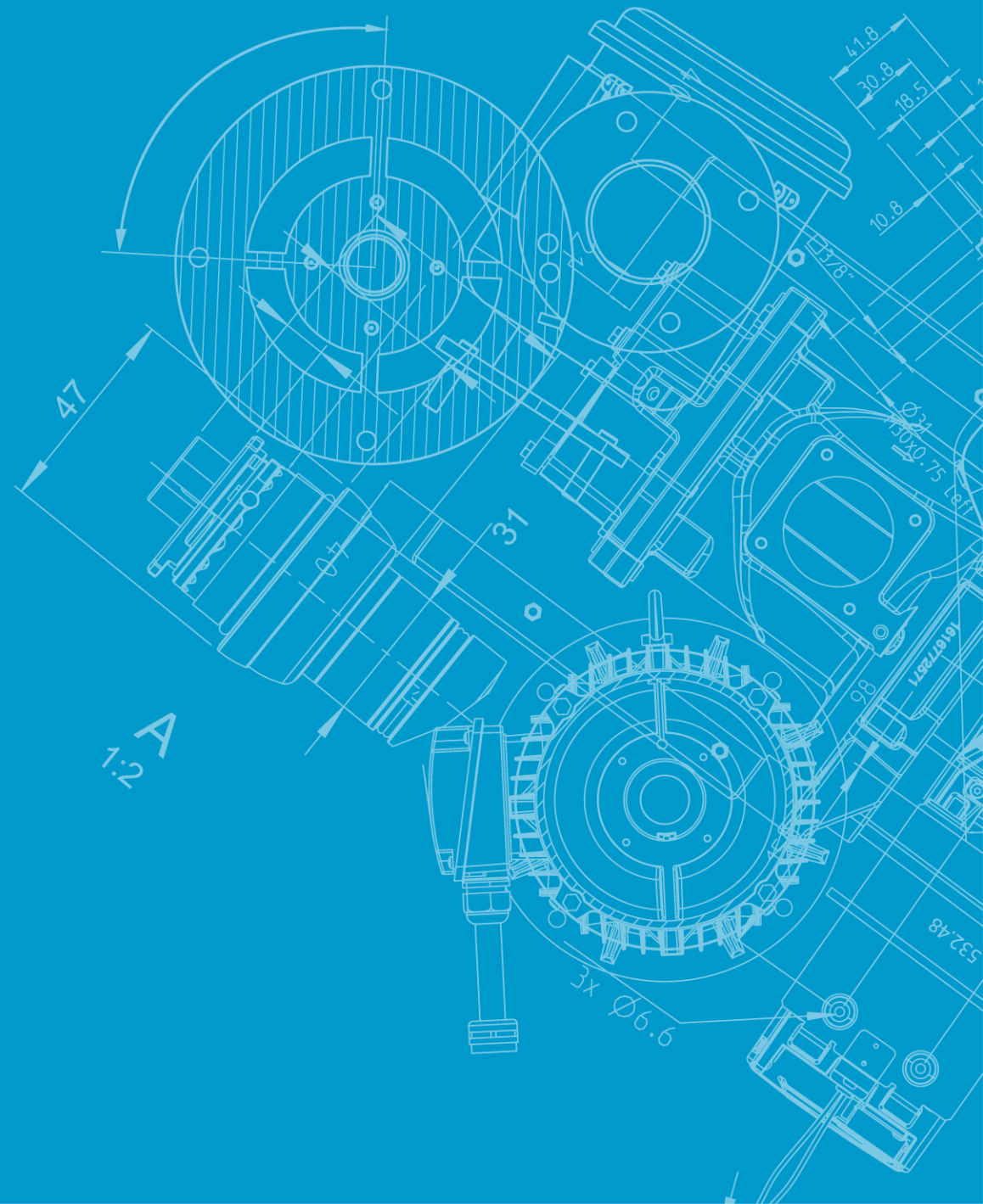
## Lubricants

### Composed for optimal performance

To keep your compressor operating reliably and cost-effectively, oil plays multiple vital roles. It protects rotating parts to **avoid metal-to-metal contact**. It **absorbs the heat** to ensure optimal working temperatures. It **seals the clearances** between the rotors and the housing, **preventing air backflow and reduced output**. Finally, it **absorbs contaminants or carries them off to the oil filter**.

Oil needs to perform all these functions at varying working conditions. Only high-quality oil with the right balance between additives combines a minimal ecological footprint with maximum reliability and energy efficiency.

How exactly oil designed





# What is in a lubricant?

## Base oil and additive

ADDITIVES

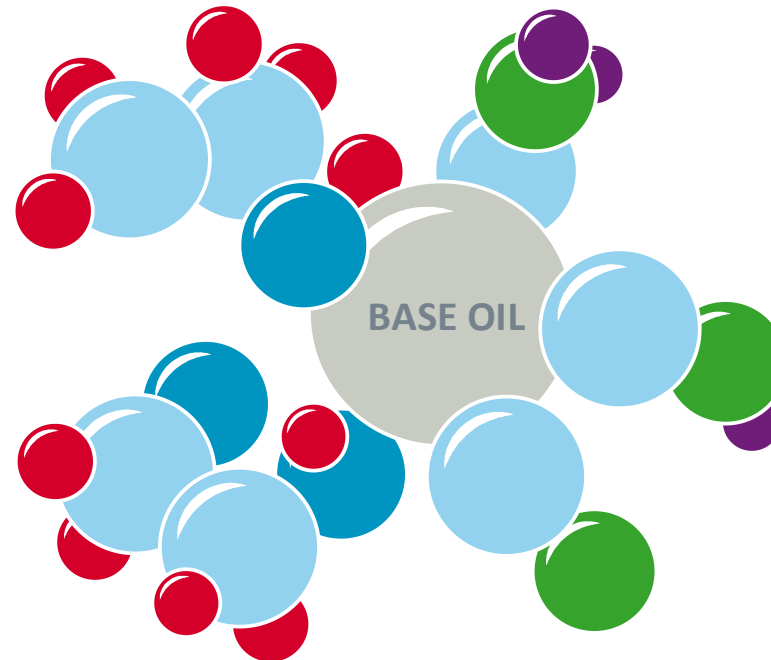
In order to have a lubricant according to our needs several **additives are blended** (added) to this base oil

### Viscosity low temperature properties

- Low temperature fluidity
- Energy losses

### Solvency

- Formula stability
- System cleanliness
- Seal compatibility



### Volatility

- Oil thickening
- Oil consumption
- Deposit formation

### Oxidation resistance

- Oil thickening
- Deposit formation
- Acid formation (TAN)
- Metal corrosion

### Surface activity

- Foaming
- Air release
- Emulsification

# What is in a lubricant?

## Viscosity

is a measure of fluid resistance to deformation at a given rate. For liquids, it corresponds to the informal concept of "thickness": for example, syrup has a higher viscosity than water.

Measured in  $\text{mm}^2/\text{sec}$  > centistokes

ISO Vis. Grades "VG46 = Vis. Of 46  $\text{mm}^2/\text{s}$  at 40C"

Table 1. ISO Viscosity Classification

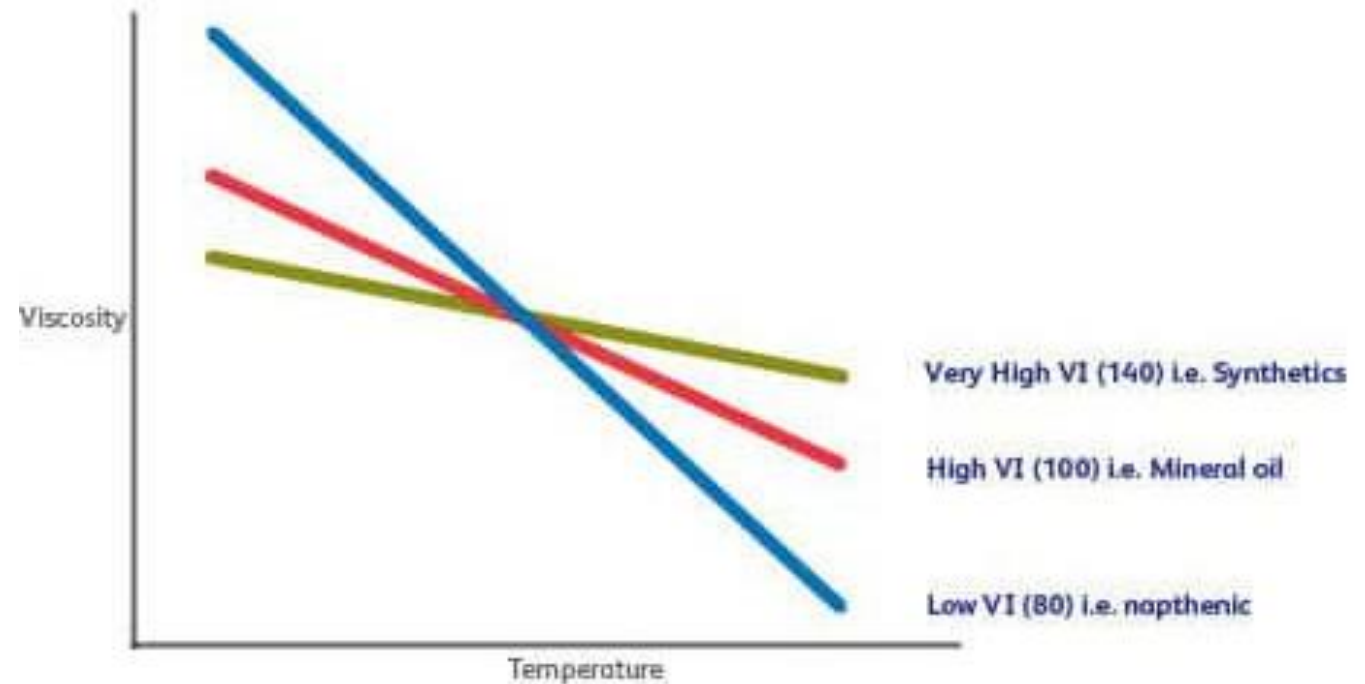
ISO Viscosity Grade	Midpoint Kinematic Viscosity $\text{mm}^2/\text{s}$ at 40°C (104°F)	Kinematic Viscosity Limit $\text{mm}^2/\text{s}$ at 40°C (104°F) Minimum	Kinematic Viscosity Limit $\text{mm}^2/\text{s}$ at 40°C (104°F) Maximum
ISO VG 2	2.2	1.98	2.42
ISO VG 3	3.2	2.88	3.52
ISO VG 5	4.6	4.14	5.06
ISO VG 7	6.8	6.12	7.46
ISO VG 10	10	9.00	11.0
ISO VG 15	15	13.5	16.5
ISO VG 22	22	19.8	24.2
ISO VG 32	32	29.8	35.2
ISO VG 46	46	41.4	50.6
ISO VG 68	68	61.2	74.8
ISO VG 100	100	90.0	110
ISO VG 150	150	135	165
ISO VG 220	220	198	242
ISO VG 320	320	288	352
ISO VG 460	460	414	506
ISO VG 680	680	612	748
ISO VG 1000	1000	900	1100
ISO VG 1500	1500	1350	1650
ISO VG 2200	2200	1980	2420
ISO VG 3200	3200	2880	3520

# What is in a lubricant?

## Viscosity Index

is unit-less measure of a fluid's change in viscosity relative to temperature change.

Viscosity index is important to make sure viscosity of oil at stable level in every temperature required

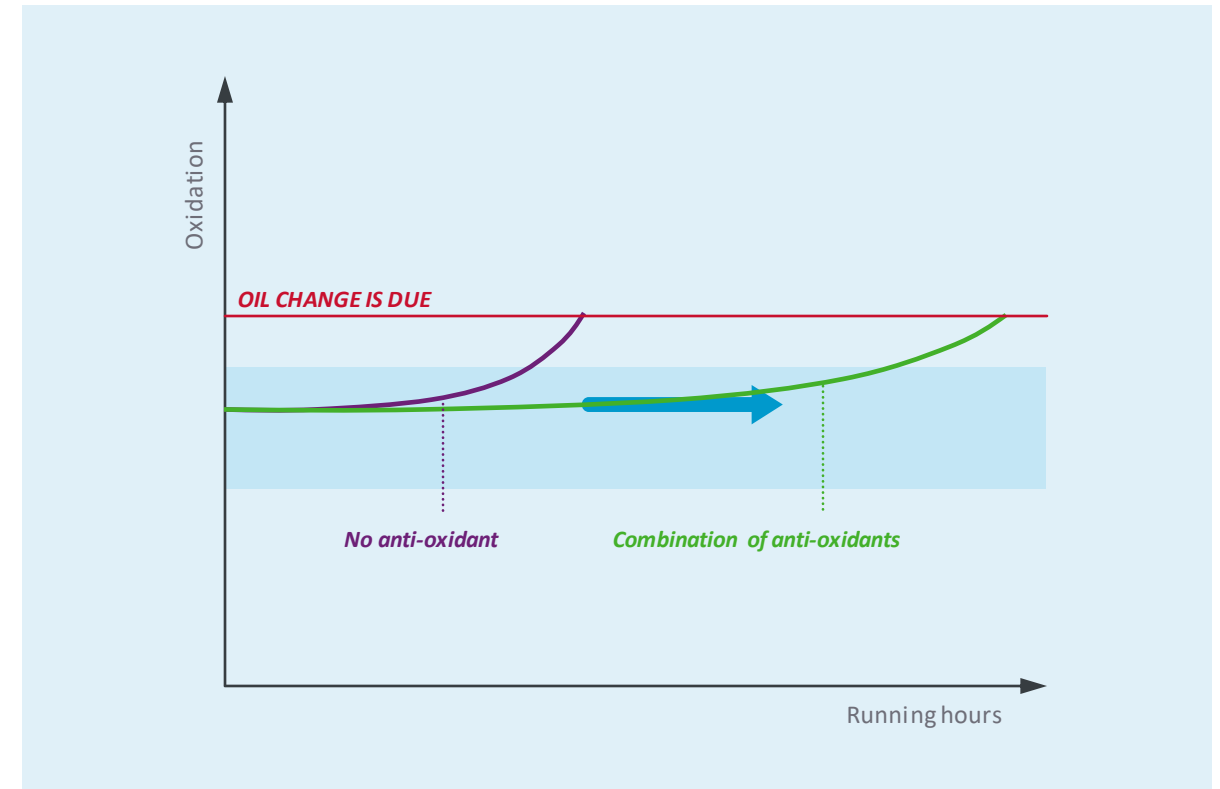


# Additive in Action

## Oxidation resistance

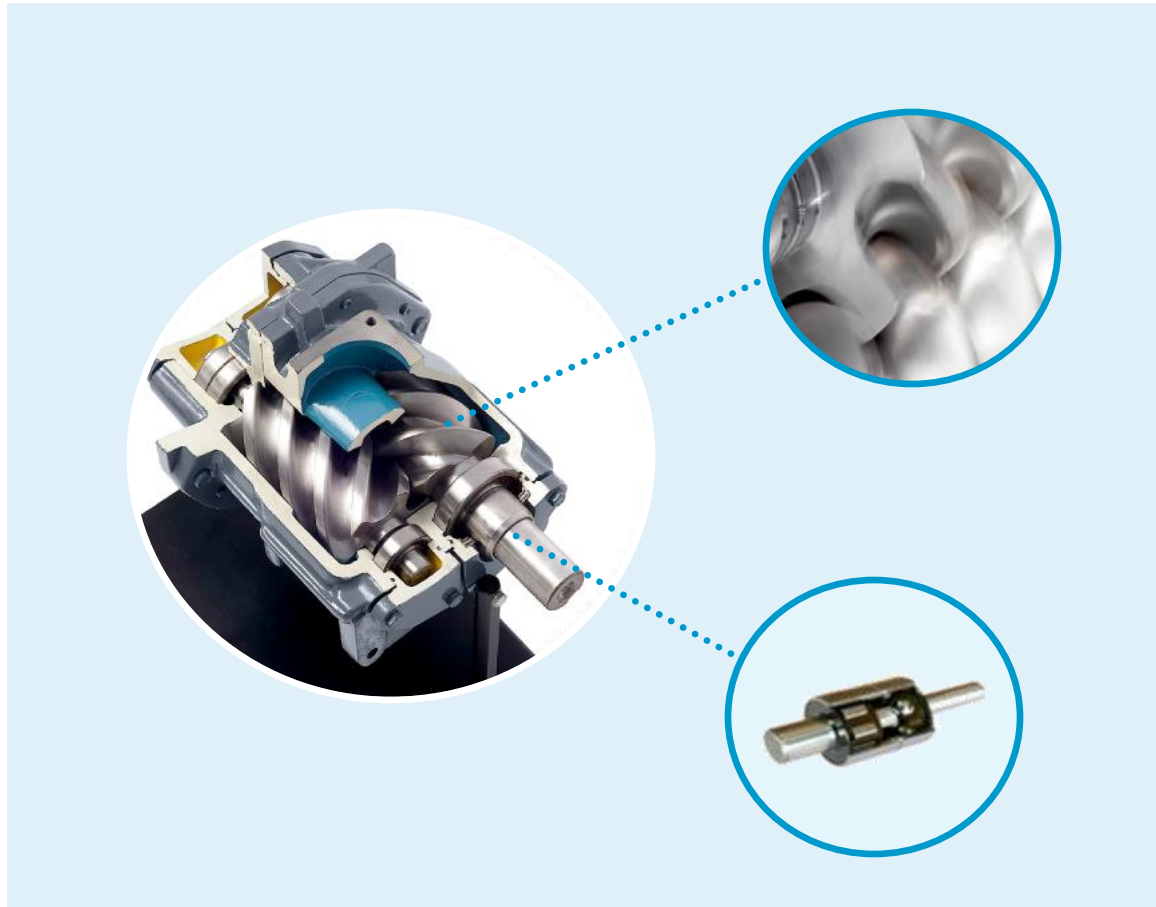
### Anti-oxidant additives

- Delay the oxidizing process, deposit and acid formation
  - > Increase lubricant lifetime
  - > Protect equipment during stand-still period (transport)
- Increase lubricant compatibility, with wider operating conditions
  - > E.g. high operating temperature, while maintaining properties
- Avoid deposit formation like varnish or sludge
  - > avoid clogging of filters, blocking of valves, failure on bearings and gears, ....

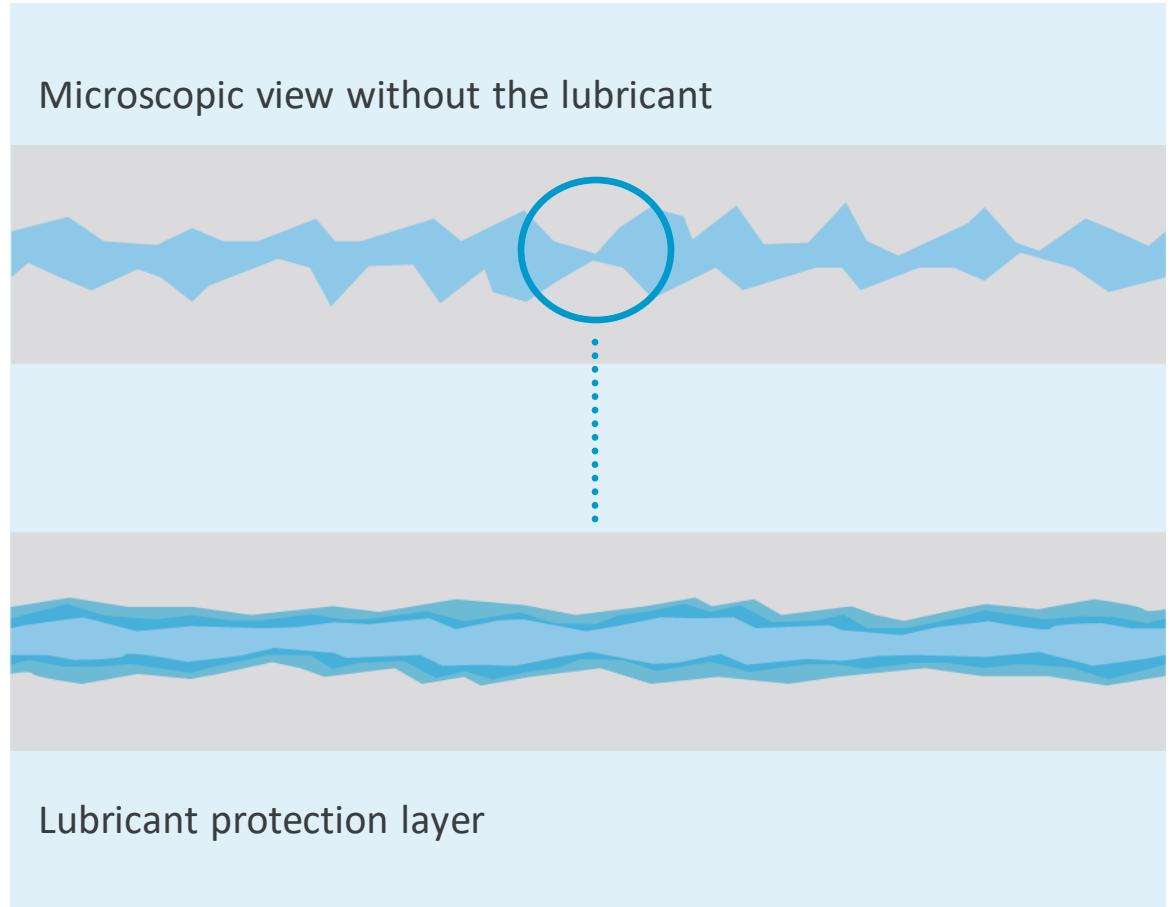


# Additive in Action

## Anti-wear



*Reduce wear scars from metal-to-metal contact due to premature wear*

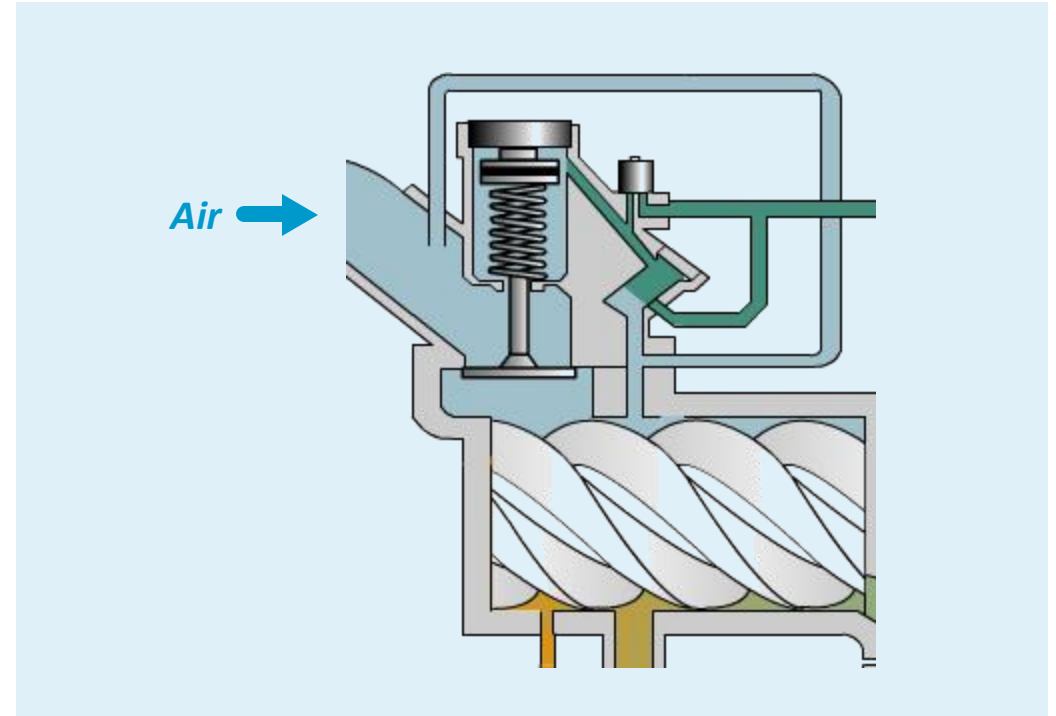


# Additive in Action

## Water resistance / rust protection

*As water is not compatible with oil mix, the lubricant needs to have a good hydrolytic stability and rust protection*

- The air to be compressed has many components and one of them is water
- The lubricant needs to have the ability to separate from the water, to maintain its original properties

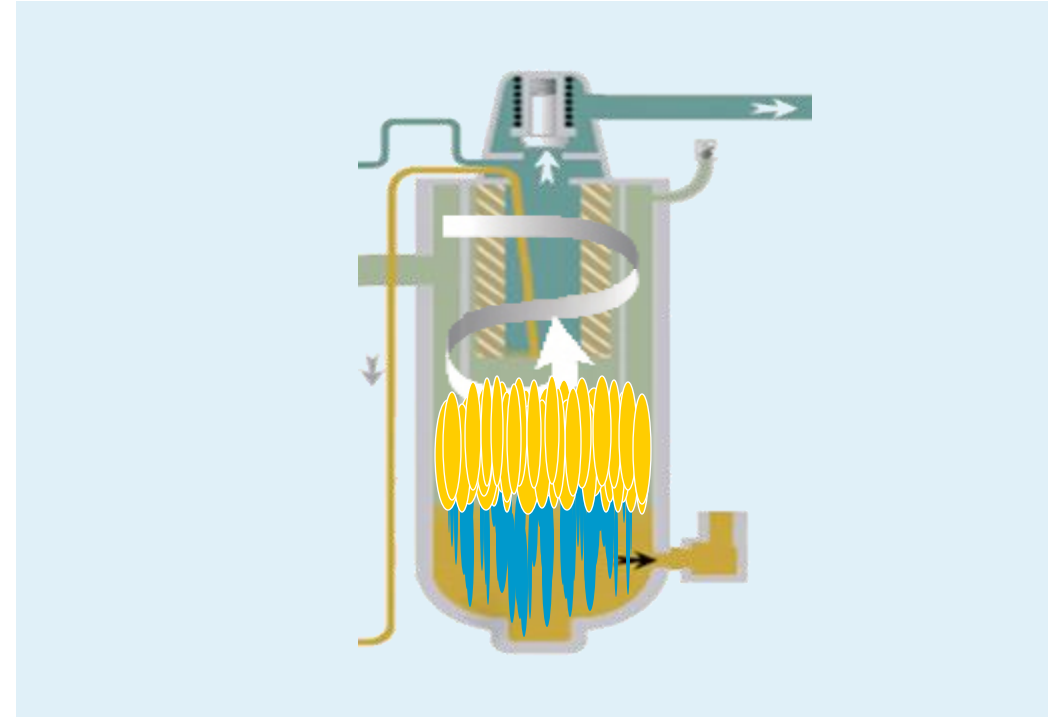


# Additive in Action

## Surface activity

*Foaming increases oxidation by exposing more of the surface area of the oil to oxygen*

- “Surface activity” additives optimize anti-foaming, essential to reduce oil residual
- Large air bubbles above 1 mm rise very fast to the surface, collapse and produce foam
- Oil additives optimize the process of air release and consequently reduce foaming tendency

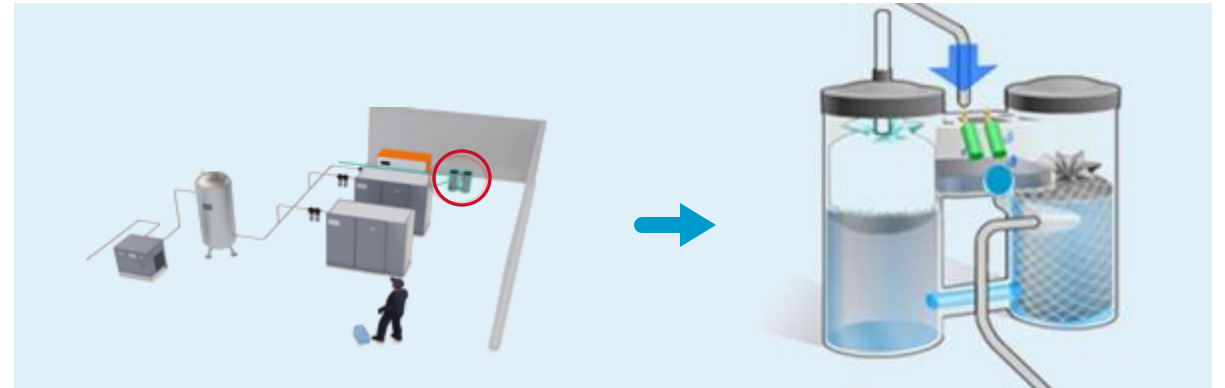


# Additive in Action

## Oil demulsification

*Additives featured for improved water separation protect the system from emulsions (mix of water and oil)*

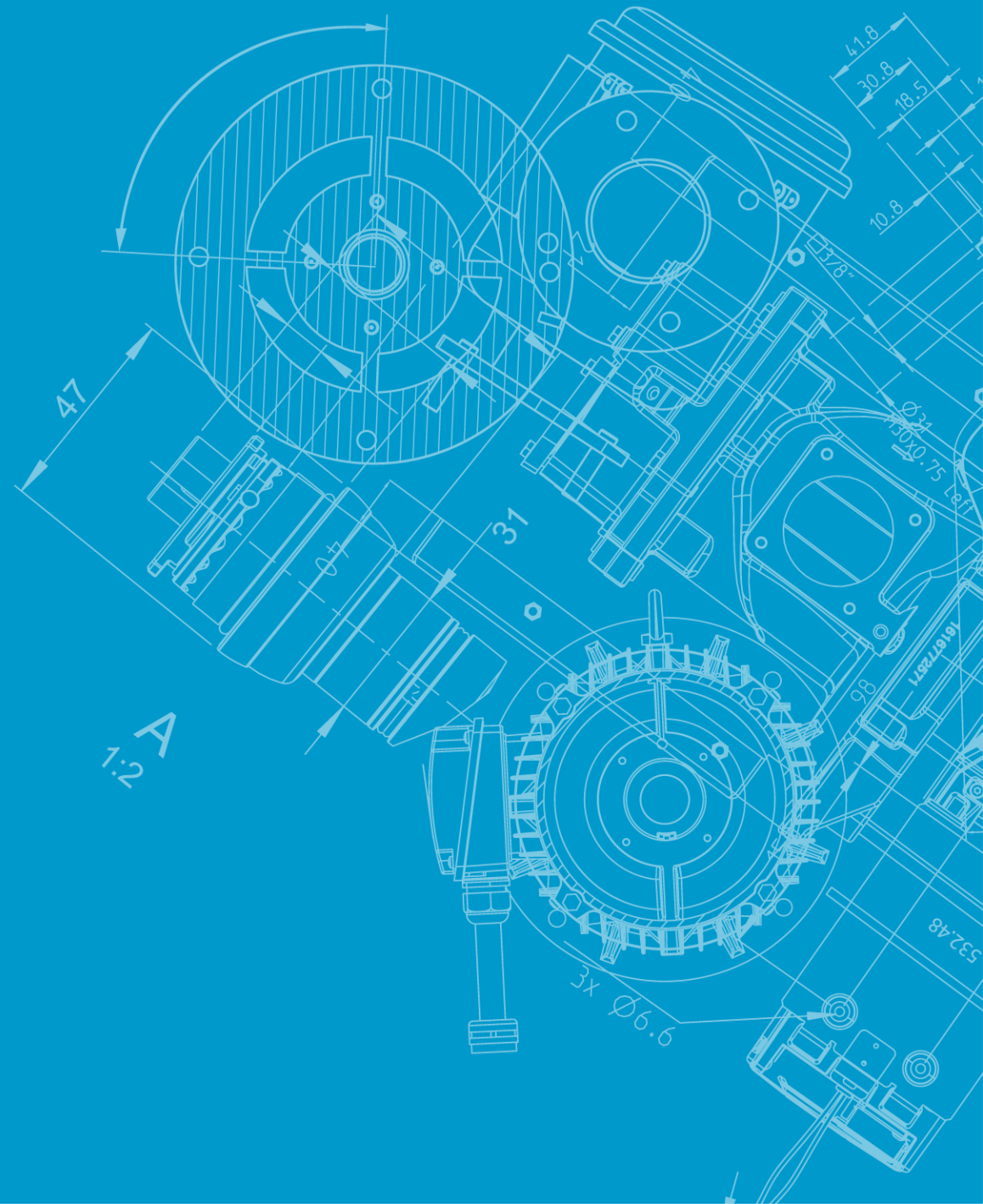
- Demulsification property is essential to improve lubricant phase separation
- Oil capture in oleophilic bags is easier and complete to lower condensate concentration
- This will prevent a premature service interval for the OSC system



Condensate, coming from the compressor, needs to be separated (water and oil) to a minimum concentration before being drained in the sewer



# Comparison with others



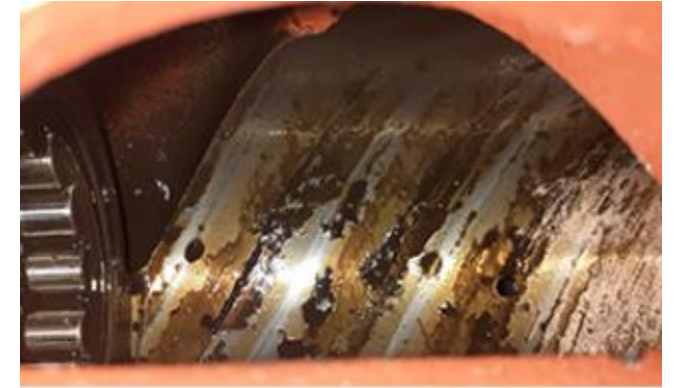
# Genuine vs Non genuine

## Lubricants



### Oxidation resistance

The right composition of well-balanced additives is essential for the performance and lifetime of the oil. Preventing oxidation is one of the main objectives, to protect critical parts from being contaminated or damaged.



### Oxidation

In the absence of the right anti-oxidant additives, the demanding working conditions within a compressor will cause oxidation by-products such as sludge, lacquer and other deposits on the bearings and rotors. They can cause clogging of the air/oil separator, leading to decreased efficiency and possible failure.

# Genuine vs Non genuine

## Lubricants



### Compatible with all parts

The oil in the compressor comes into contact with multiple components, made of a wide variety of materials, from metals to softer materials for gaskets and seals. Only the right oil composition makes it suitable for contact with all these different parts and consumables.

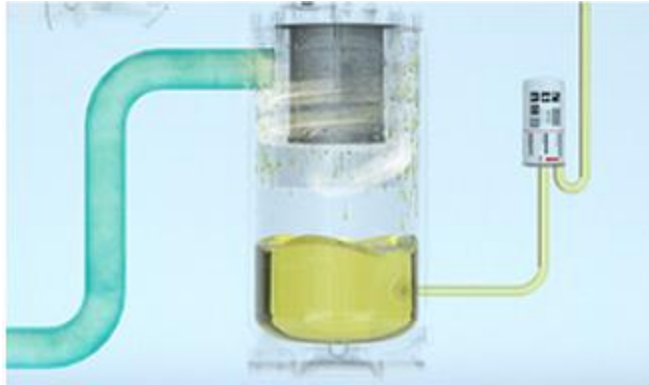


### Incompatibilities

The wrong type of oil may be destructive for gaskets, seals, paints and glues. Metal parts may become vulnerable to corrosion. This may result in leakages, reduced performance and even breakdowns.

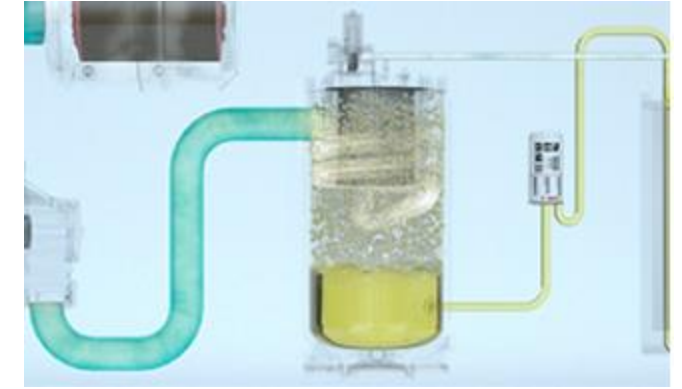
# Genuine vs Non genuine

## Lubricants



### Surface activity

Specific additives prevent foaming of the lubricant, especially in the air/oil separator where the air/oil mixture is subjected to turbulence and high pressure and temperature differences. Preventing foaming means protecting the quality of the outgoing air.



### Foaming

Oils that are not specifically designed for the challenging working conditions in the compressor, typically have poor foaming characteristics. This will cause pressure drop, shorter lifetime of the separator element and oil carryover into the outlet air.

# Genuine vs Non genuine

## Lubricants



### Preventing wear

Having the right protective film over rotating parts is all about viscosity behavior at different temperatures, combined with anti-wear additives that form a chemical coating. This prolongs the lifetime of rotors, bearings and gears and prevents breakdowns.



### Wear and leakages

If the oil doesn't have the right viscosity at higher temperatures or the required protective additives, rotating parts will wear more quickly and leakages may occur, putting the entire performance and reliability of the compressor at risk.

# Oil Lifetime



# Oil Lifetime

## Oil Injected Screw Compressor

### General Applications

#### Roto Inject Fluid Ndurance

Premium mineral lubricant

- **Mild**  
up to 4.000 hrs / 1 year
- **Demanding**  
up to 2.000 hrs / 1 year
- **GR / ER compressors or VSD+ ranges**  
not recommended



#### Roto Synthetic Ultra

Standard synthetic lubricant

- **Mild**  
up to 6.000 hrs / 2 years
- **Demanding**  
up to 4.000 hrs / 2 years
- **Extreme**  
up to 3.000 hrs / 2 years
- **GR / ER compressors**  
Up to 2.000 hrs / 2 years



#### Roto Synthetic Xtend Duty

Premium synthetic lubricant

- **Mild**  
up to 8.000 hrs / 2 years
- **Demanding**  
up to 8.000 hrs / 2 years
- **Extreme**  
up to 4.000 hrs / 2 years
- **GR / ER compressors**  
Up to 4.000 hrs / 2 years



Element Outlet Temperature	< 95°C (203°F)			95°C - 105°C (203°F-221°F)			> 105°C (221°F)		
Ambient Temperature	< 30°C (86°F)			30°C - 40°C (86°F - 104°F)			> 40°C (104°F)		
Humid	N	Y	N	Y	N	Y	N	Y	N
Dusty	N	N	Y	Y	N	N	Y	Y	N
Duty type	MILD			DEMANDING			EXTREME		
Running hours	2000h	4000h	8000h	2000h	4000h	8000h	2000h	4000h	8000h
RIF Ndurance	Green	Green	Green	Orange	Orange	Orange	Red	Red	Red
RS Ultra	Green	Green	Green	Orange	Orange	Orange	Red	Red	Red
RS Xtend Duty	Green	Green	Green	Orange	Orange	Orange	Red	Red	Red
Food and Beverage / Pharmaceutical Applications									
RS Foodgrade	Green	Green	Green	Orange	Orange	Orange	Red	Red	Red
RS Foodgrade Ultra	Green	Green	Green	Orange	Orange	Orange	Red	Red	Red

# Oil Lifetime

## Oil Injected Screw Compressor

### Food and Beverage / Pharmaceutical Applications

#### Roto Synthetic Foodgrade

Standard synthetic lubricant, Halal and Kosher approved

- **Mild** up to 4,000 hrs / 1 year
- **Demanding** up to 2,000 hrs / 1 year
- **GR / ER compressors or VSD+ ranges** not recommended



#### Roto Synthetic Foodgrade Ultra

Premium synthetic lubricant, Halal and Kosher approved

- **Mild** up to 4,000 hrs / 2 years
- **Demanding** up to 4,000 hrs / 2 years
- **Extreme** up to 3,000 hrs / 2 years
- **GR / ER compressors** Up to 4,000 hrs / 1 year



Our **Foodgrade range** are high-performance fluids specifically designed for use in oil injected screw compressors operating in the Food/Beverage, Pharmaceutical and packing industry. They meet national and international regulations strict manufacturing standards regarding contamination risk management and allowing active Critical Control Points management (in an HACCP system).



Element Outlet Temperature	< 95°C (203°F)			95°C - 105°C (203°F-221°F)			> 105°C (221°F)		
Ambient Temperature	< 30°C (86°F)			30°C - 40°C (86°F - 104°F)			> 40°C (104°F)		
Humid	N	Y	N	Y	N	Y	N	Y	N
Dusty	N	N	Y	Y	N	N	Y	Y	N
Duty type	MILD			DEMANDING			EXTREME		
Running hours	2000h	4000h	8000h	2000h	4000h	8000h	2000h	4000h	8000h
RIF Ndurance	[Green bar]			[Orange bar]			[Red bar]		
RS Ultra	[Green bar]			[Orange bar]			[Red bar]		
RS Xtend Duty	[Green bar]			[Orange bar]			[Red bar]		
Food and Beverage / Pharmaceutical Applications									
RS Foodgrade	[Green bar]			[Orange bar]			[Red bar]		
RS Foodgrade Ultra	[Green bar]			[Orange bar]			[Red bar]		



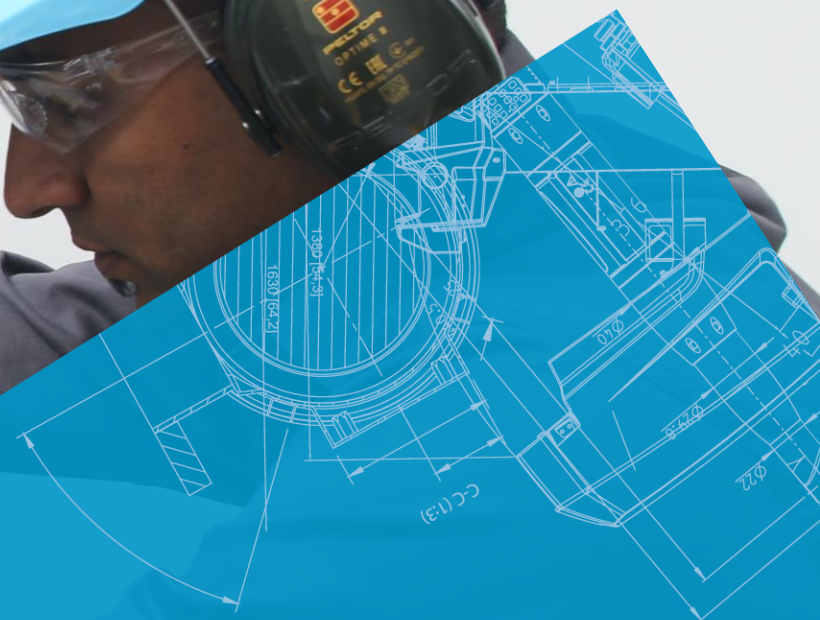
# Oil Lifetime

## Oil Free Screw Compressor

Roto Z Fluid	
Oil type	Mineral based oil with tailored additive pack
Service intervals	All conditions 8 000 h < 55 kW 16 000 h > 55 kW
Environment	Ambient temperature range at 0°C to 50°C
Equipment	Atlas Copco oil-free screws
Compatibility	ZR – ZS – ZT – ZA – ZE compressors
Capacity (ID)	5 l plastic can (2908 8503 00) 20 l plastic can (2908 8501 01) 209 l metal drum (2908 8500 00)



Atlas Copco



## Line Filters



## Line Filter

### Protecting the air quality

Air quality is key, but specific air quality demands depend on the needs of your application and production equipment. Our highly efficient line filters play a vital role in filtering out impurities such as solid particles, moisture and oil aerosols or vapor.

By minimizing pressure drops, we help you achieve your energy saving targets.

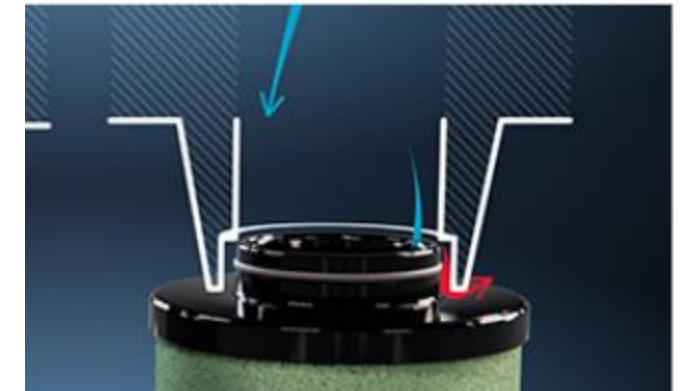
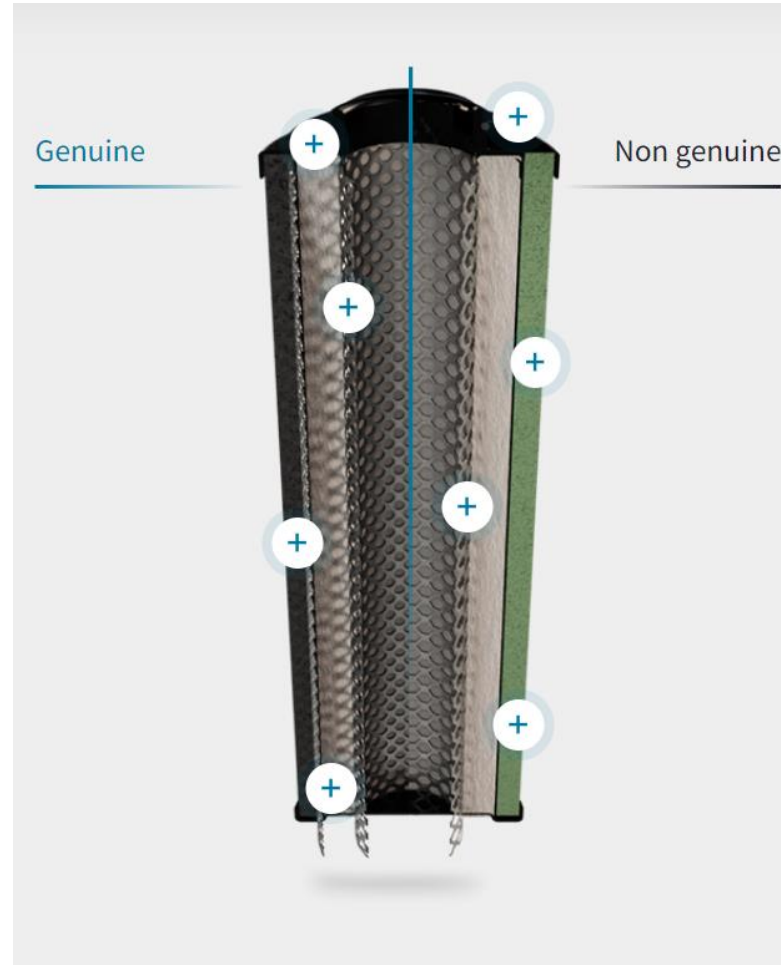
# Genuine vs Non genuine

## Line Filter



### Reliable sealing

Our push-on filter element simplifies installation and maintenance. Reliability is ensured by the double O-rings that eliminate leakage of unfiltered air.



### Poor sealing

Improper sealing of the top and bottom caps will allow untreated air to leak through, ruining the air quality.

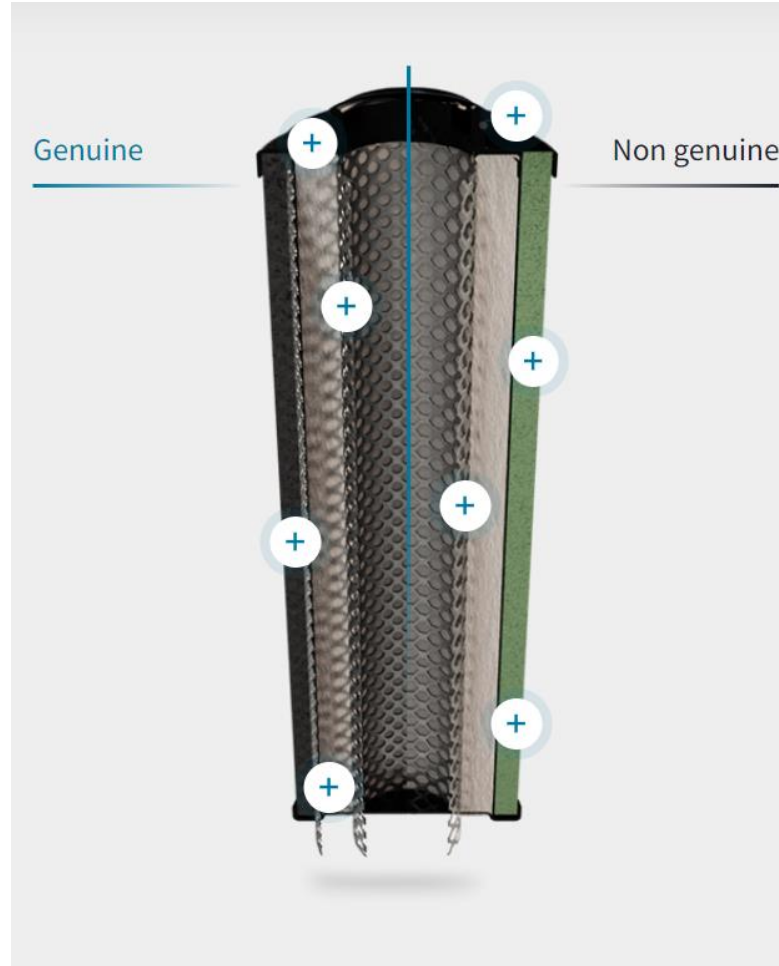
# Genuine vs Non genuine

## Line Filter



### Heavy-duty design

Our stainless steel filter cores are designed to withstand pressures differences, protecting the integrity of the filter. The protective paper prevents damage to the glass fiber filter material.

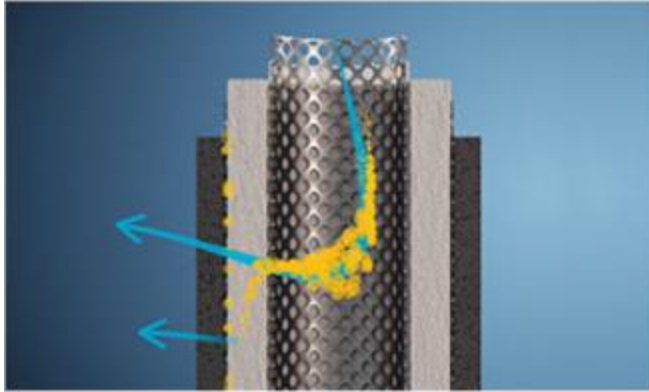


### Weak core structure

Filters made of expanded sheet metal are not equipped to withstand pressure pulses, which may cause them to implode.

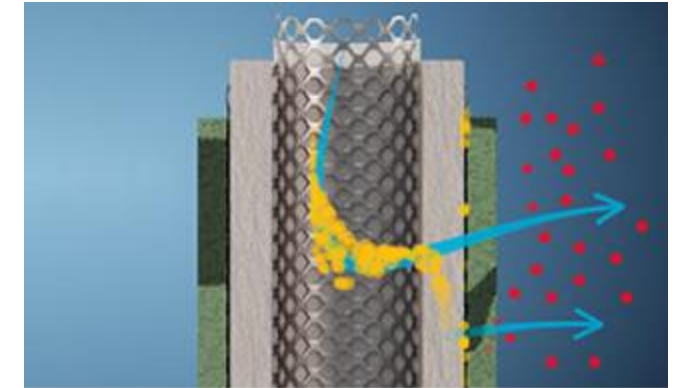
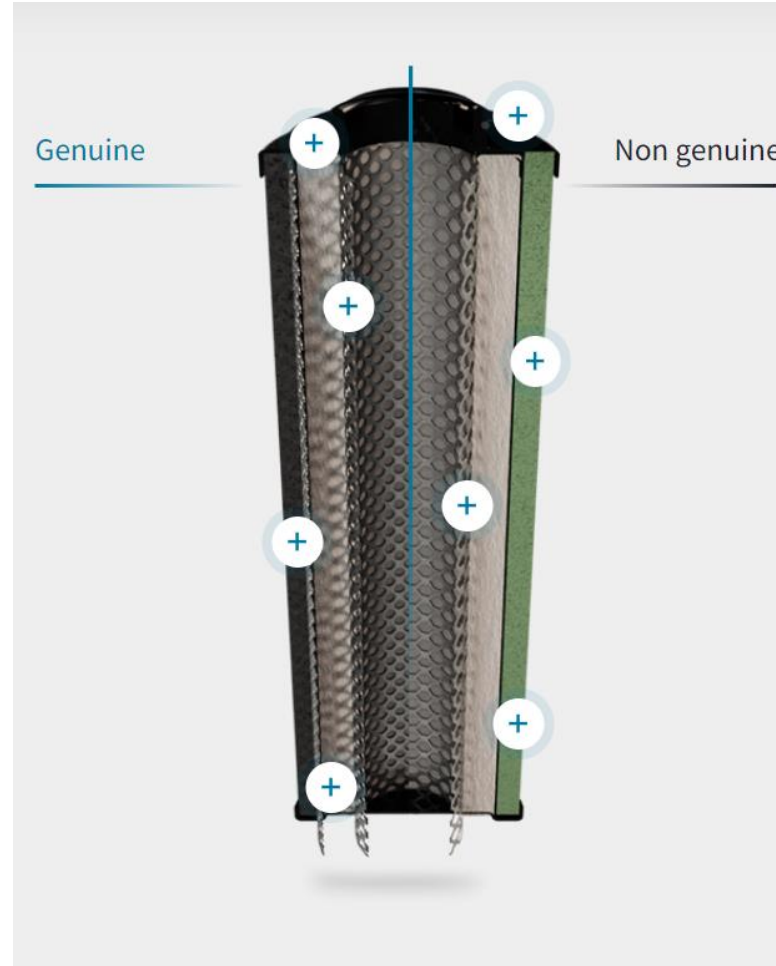
# Genuine vs Non genuine

## Line Filter



### The right filter media

Optimal filtration and low pressure drop over the filter's lifetime are ensured by a smart combination of glass fiber media for oil coalescence and dust, and impregnated activated carbon to eliminate oil vapor. The open foam is placed up- or downstream depending on the need to drain remaining moisture or to capture larger dust particles in dry conditions.



### Inadequate filter material

Wrongly selected or low-quality filter material will translate into poor filtration performance and high pressure drop. In short: high energy costs and poor air quality, affecting end products and production equipment.

# ISO 8573-1:2010

## International standard for compressed air purity classification

7 purity classes from 0 to 6. The lower the class, the higher the air purity.

In these classes the maximum contamination level of solid particles, water and total oil amount are defined.

PURITY CLASS	Solid particles			Water		Total oil*
	Number of particles per m <sup>3</sup>			Pressure dewpoint		Concentration
	0,1 < d ≤ 0,5 μm**	0,5 < d ≤ 1,0 μm**	1,0 < d ≤ 5,0 μm**	°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	≤ 10	≤ -70	≤ -94	≤ 0,01
2	≤ 400.000	≤ 6.000	≤ 100	≤ -40	≤ -40	≤ 0,1
3	-	≤ 90.000	≤ 1.000	≤ -20	≤ 4	≤ 1
4	-	-	≤ 10.000	≤ 3	≤ 37,4	≤ 5
5	-	-	≤ 100.000	≤ 7	≤ 44,6	-
6	≤ 5 mg/m <sup>3</sup>			≤ 10	≤ 50	-

\* Liquid, aerosol and vapor.

\*\* d = diameter of the particle.

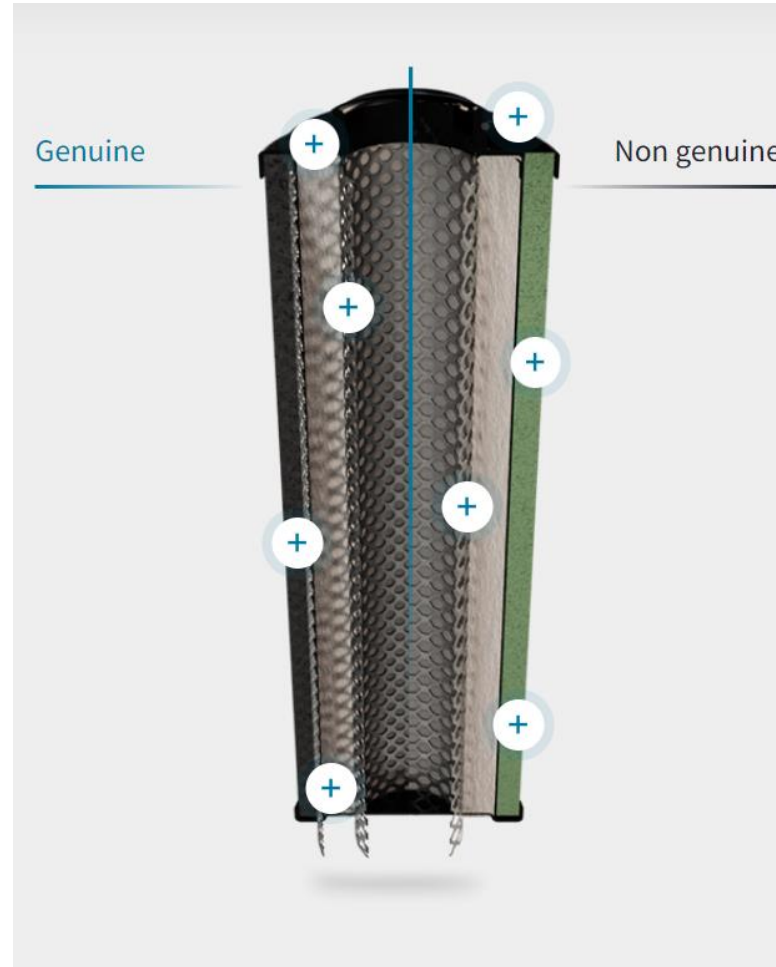
# Genuine vs Non genuine

## Line Filter



### Certified performance

The quality and lifetime performance of Atlas Copco line filters are awarded ISO8573 and ISO12500 certification by trusted organizations.



### ‘Certified?’

Non-genuine filter manufacturers often claim certification, referring to ISO8573-1.

This however does not reflect the same level of testing and certification.



# ISO 12500

## Filters for compressed air - Test methods

### Abstract

ISO 12500-1:2007 specifies the test layout and test procedures required for testing coalescing filters used in compressed-air systems to determine their effectiveness in removing oil aerosols.

ISO 12500-1:2007 provides the means to indicate performance characteristics of the pressure drop and the capability of removing oil aerosols.

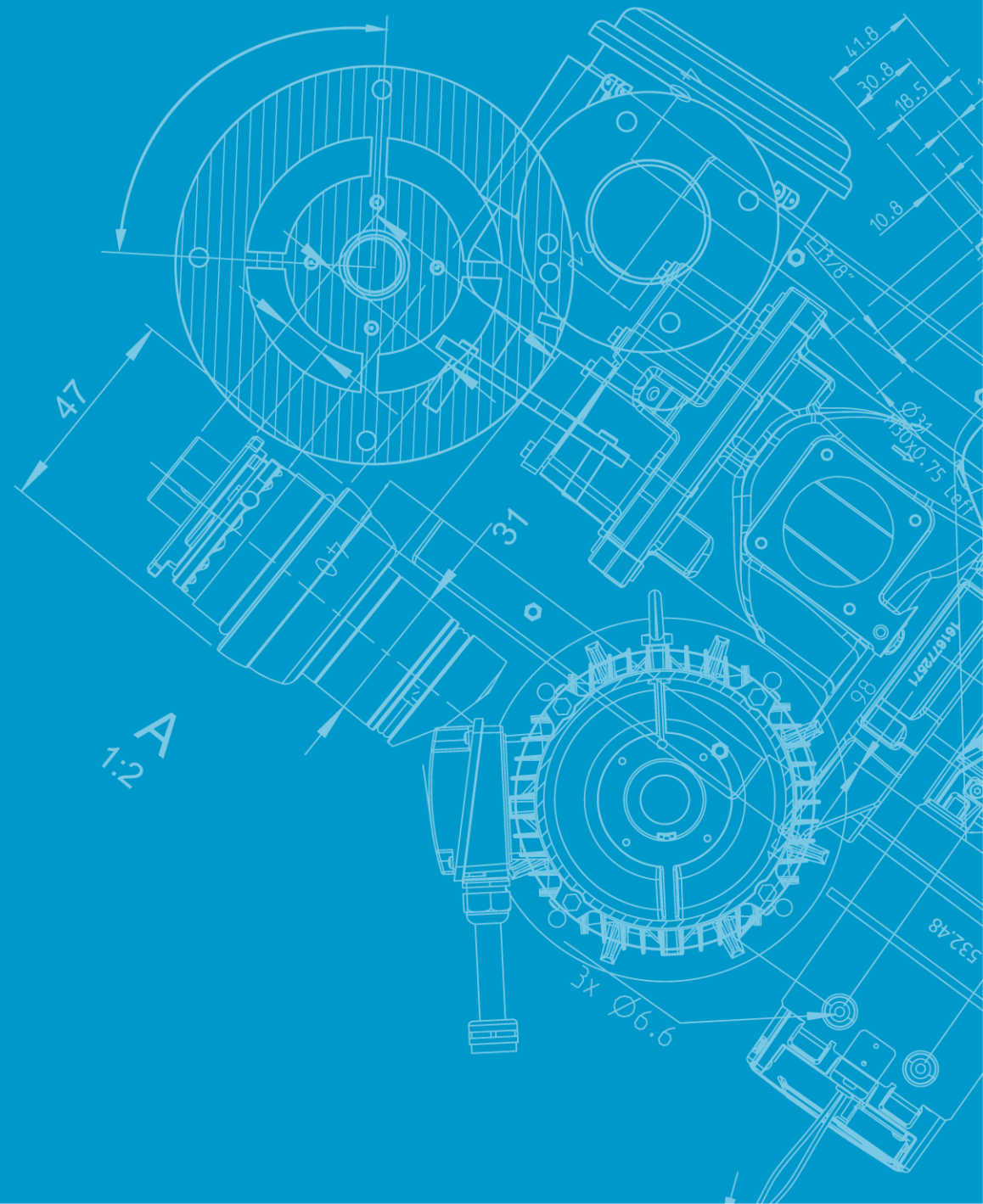
ISO 12500-1:2007 defines one method of presenting filter performance as outlet oil aerosol concentration stated in milligrams per cubic metre from results obtained under standard rating parameters.





# Conclusion

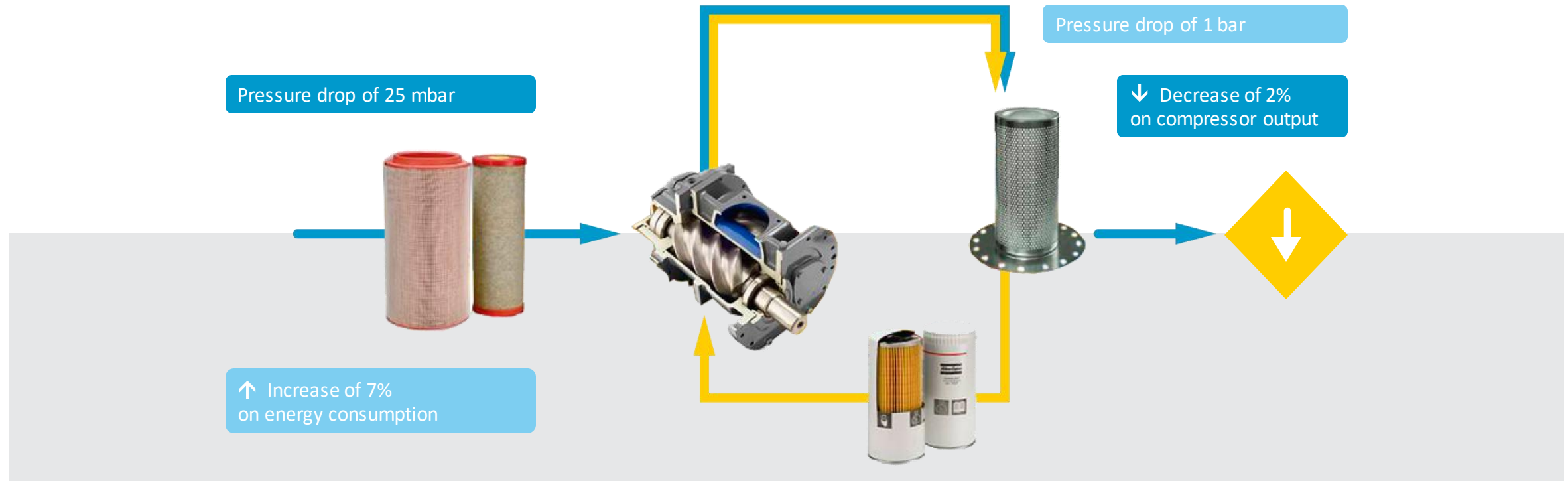
# Conclusion



# Consequence of using competitors

## Impact on compressor performance

- A pressure drop of 1 bar over the oil separator will increase the energy consumption by 7%
- Every 25 mbar pressure drop over the air filter will decrease the compressor output by 2%



# Can you verify genuine or non genuine part ?

Pirates or genuine ?

Where you can identify genuine parts ?

- Print quality ?
- Visual looks ?
- Parts number ?
- Certificate ?
- Packages boxes ?
- Label ?



# Pirate packaging

## Pirate part, box and label



Genuine

Pirate

- Typical packing methodology: when we have individual bags inside the main bag, the individual bags are typically not branded and so blank, only the main bag will be branded. (as shown in picture to the right) In this example of kit 2901 0298 01, it is used in Atlas Copco and Brand Portfolio machines and so the main bag is unbranded.



- Part number correct but naming in system 'Maintenance kit' and not 'Unloader valve kit'

- Pirate spring has more robust coils (are thicker) than the genuine, causing the unloader not to function according to specs



Genuine

Pirate

- Several parts missing on the pirate kit
  - Grease
  - Extra rubber parts and springs for different unloader variants
  - Instructions how to service

# Valve

8,000 h kit 2901129300



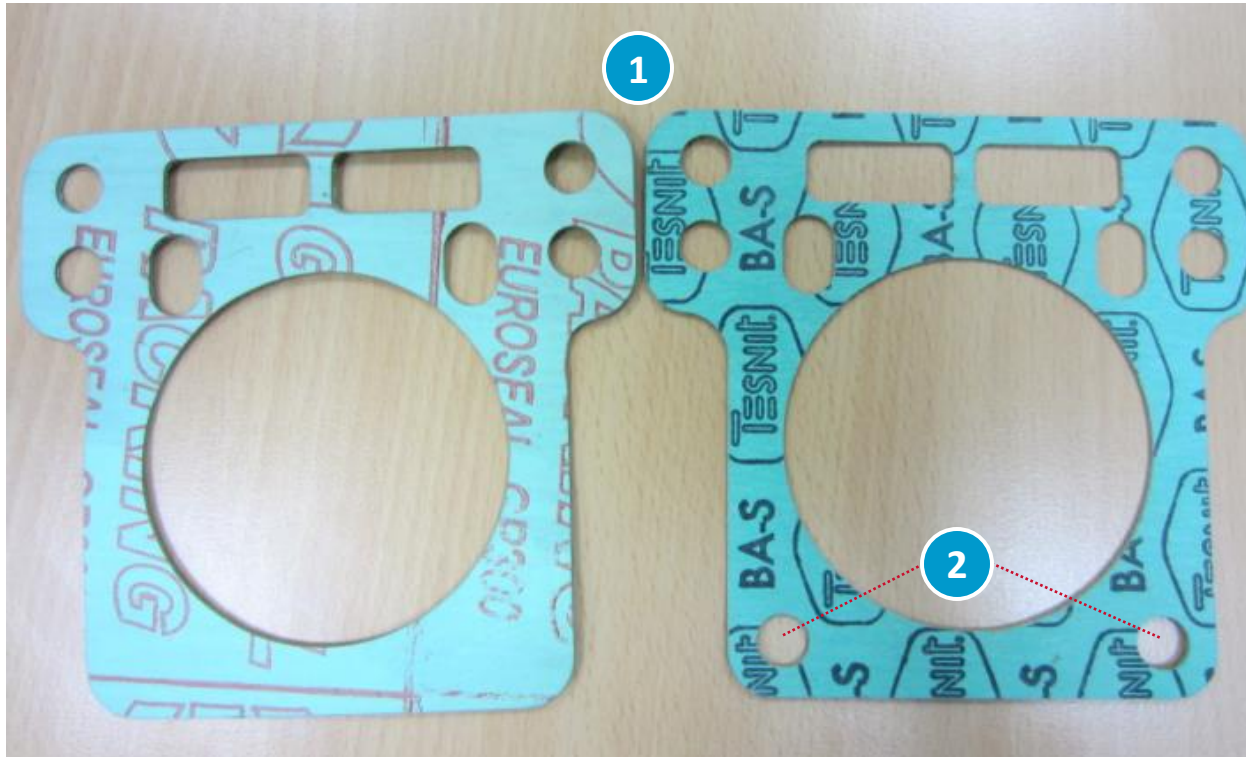
Pirate

Original

N	Difference	Impact
1	Doesn't have surface treatment (difference in color)	Higher friction between the moving parts, causing pressure drops and increase energy consumption
2	The part is machined out of a black part	The part is less robust, increasing the risk of breakdown
3	The rubber is to place on the part, not vulcanized	It will peel off during the valve operation, causing the unloader to break down

# Gasket

8,000 h kit 2901129300



Pirate

Original

N	Difference	Impact
1	Part doesn't have the same material (different color)	Risk of leakages due to incompatibility with our lubricants
2	Part doesn't have the same holes	The part cannot be assembled in our unloader



# Springs

8,000 h kit 2901129300



Original



Pirate

N	Difference	Impact
1	Part doesn't have the same thickness	Risk of unloader breakdown
2	Part doesn't have the same number of helix	The valve will open and close sooner than designed, making unloader work in an improper way

# Can you verify genuine or non genuine part ?

Pirates or genuine ?

**Ask genuine parts from legal Atlas Copco's distribution channel to assure all parts and consumable are genuine with warranty protection to keep your machine running safely at the highest performances**





WANT TO KNOW MORE?  
SCAN HERE!



# Contact Us

## PT. Atlas Copco Indonesia

Head Office:

Cilandak Commercial Estate kav. 203, Jl. Raya Cilandak Kko no. 13,  
RT.13/RW.5, Cilandak Tim., Kec. Ps. Minggu,

Kota Jakarta Selatan, DKI Jakarta 12560



[atlascope.com/id-id](https://atlascope.com/id-id)



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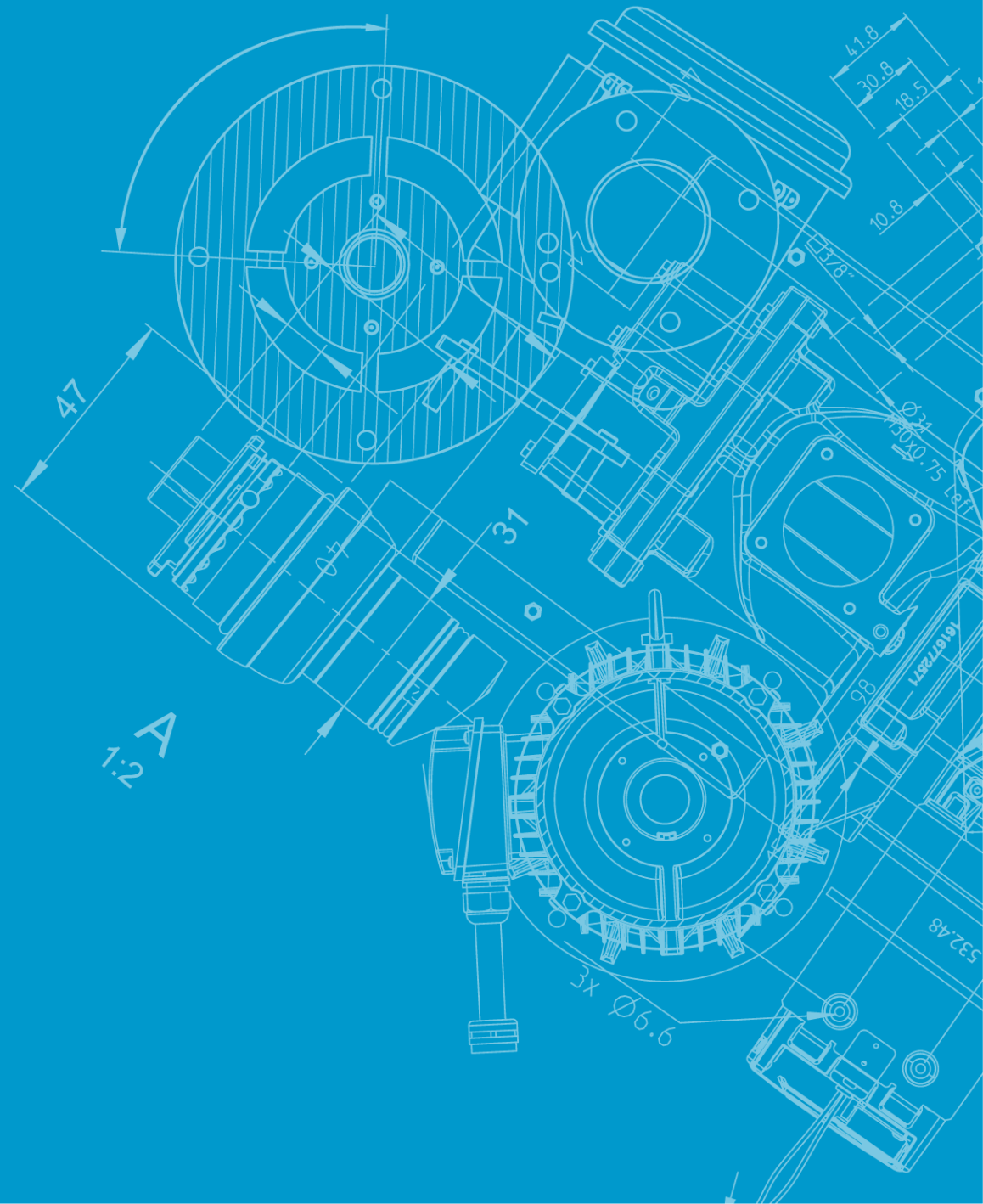


Atlas Copco Indonesia

Phone number: 021-780 1008

Call Center: 1500 287

Email: [atlascope.indonesia@atlascope.com](mailto:atlascope.indonesia@atlascope.com)



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