

Spares brochure





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1.

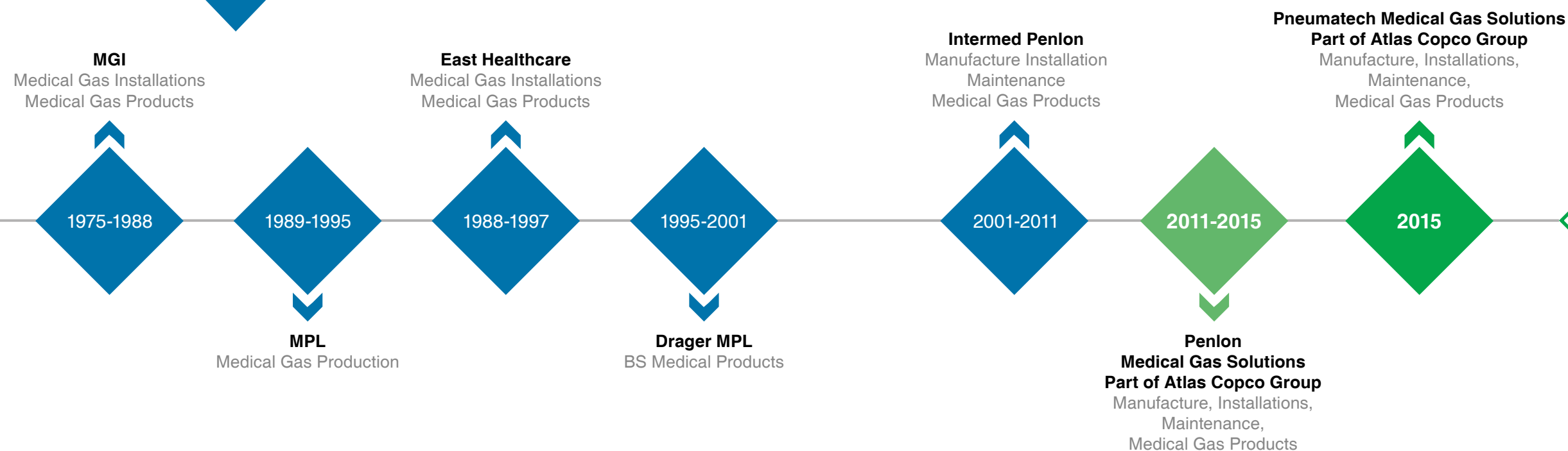
Healthcare of your equipment

When it comes to accessories and spare parts, quality particularly matters. Only genuine accessories and spare parts guarantee your medical gas equipment's optimum performance, operational security, and warranty.

We offer a wide range of genuine accessories and spare parts for almost every possible medical gas equipment requirement of yours - from air and oil filters to lubricants and service kits. So, take advantage of our expertise, and we will support you in selecting the right part.

In this brochure, we will look at why you should use genuine accessories and spare parts to ensure that the equipment remains in an 'as new' condition and is serviced to the highest standards.

Our history



1.

1.

The importance of maintenance

Being an expert in aftermarket service providers, we understand the issues/questions that you are dealing with in this industry.

We are proud of our transparency as we publish our service schedules for our whole product range where scheduled maintenance is required; we are the only company to do so. This transparency gives our customers the ability to plan and budget for the necessary parts per the manufacturer's recommendation for maintenance.

So, some questions
that we can ask are:

1

Why should
we service the
equipment?

2

How do we
know when
to service the
equipment?

3

How do we
know what to
change?

Why, when and what?

1. Why should we service the equipment?

We would service the equipment to maintain the quality of the performance, increase the equipment's life, and reduce high costs for breakdowns.

2. How do we know when to service the equipment?

We would first look at the manufacturer's recommendations or service schedule to understand the requirements. We should also consider the local standards and conditions and, finally, any contractual agreement that may warrant an earlier replacement of parts.

3. How do we know what to change?

Again, the manufacturer's recommendations or service schedule is the best source for information. Parts may also be needed when there is a drop in the equipment's performance that may indicate a worn part and, of course, a breakdown or failure on the equipment.

For more information on the manufacturer's recommendations or service schedule, refer to the section at the back of this brochure.



Genuine spare parts

Why are genuine parts so important?

It is imperative to maintain your systems in line with the manufacturer's recommendation to achieve the desired and designed supply level. Correct and timely maintenance will help prolong your investment's life cycle and avoid costly breakdowns and repairs.

2.

Lubricants

When we look at the most used part on our source equipment - lubricants - it is important to remember that we do not just simply select an existing lubricant and re-label it.

Why do we use lubricants?

Qualitative lubricants are indispensable for the operation of any oil-injected air compressor. They keep the compression block cool and protect the machine from wear and tear; they eliminate dirt and seal all sections from the air. In short, qualitative lubricants realize a compressor's full potential, maximize its lifetime, and keep operational costs to a minimum.

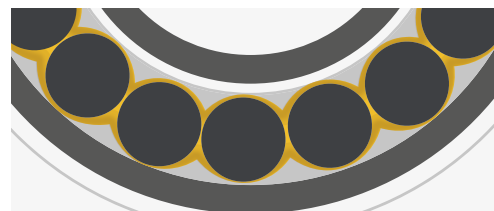
Stay cool

The number one function of compressor lubricant is to cool down the operational temperature of the compressor.



Stay lubricated

The oil forms a protective layer to reduce wear and tear of the bearings.



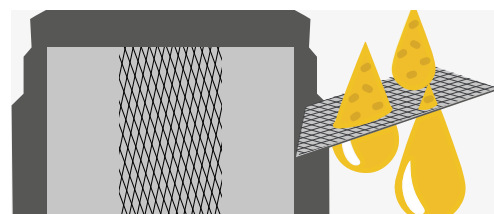
Stay sealed

Oil seals all moving parts in the compressor element, ensuring optimum energy efficiency.



Stay clean

The oil solves deposits and carries floating dust and metal particles to the oil filter, where it is cleaned and prevents damage to the compressor.



Selecting the right lubricant

Mineral versus synthetic oils

Although both mineral and synthetic oils can be used in compressors, they each have their own characteristics. Depending on the operation conditions of your compressor, you can make the right choice.

- Synthetic oils stay more viscous than mineral oils at higher temperatures resulting in better lubrication.
- At low temperatures, synthetic oils become less viscous than mineral oils, resulting in less cold start-up problems.
- Mineral oils contain more volatile components than synthetic oils. They evaporate faster and carry over into the air more easily with the air contamination and higher oil consumption.
- Synthetic oils, like RS Xtend Duty, repel water while mineral oils attract water more easily, which leads to faster oxidation for mineral oils, making them less suitable for humid conditions.
- Mineral oils adhere better to metal surfaces compared to some synthetic oils and create a better protective layer. The negative effect on lubrication of mineral oils at higher temperatures due to low viscosity is compensated.

Ambient conditions

Temperature, humidity, and dust are all factors that jeopardize the quality of the oil and determine the oil change interval.



Performance Tables

Temperature	Humidity	Dust	Type
<30° C / 86° F	N	N	MILD
<30° C / 86° F	Y	N	MILD
<30° C / 86° F	N	Y	MILD
<30° C / 86° F	Y	Y	DEMANDING
>30° C / 86° F - <40° C / 104° F	N	N	DEMANDING
>30° C / 86° F - <40° C / 104° F	Y	N	DEMANDING
>30° C / 86° F - <40° C / 104° F	N	Y	DEMANDING
>30° C / 86° F - <<40° C / 104° F	Y	Y	EXTREME
>40° C / 104° F	-	-	EXTREME

	Mild			Demanding			Extreme		
	2,000 Hrs	4,000 Hrs	8,000 Hrs	2,000 Hrs	4,000 Hrs	8,000 Hrs	2,000 Hrs	4,000 Hrs	8,000 Hrs
RIF Ndurance	★	★		★					
RS Xtend Duty	★	★	★	★	★	★	★	★	★



Humidity

Humidity is influenced by rain and other weather conditions. It's advised to use the following geographical indications for guidance only:

- **Not humid:**
Locations that are not humid most of the year.
- **Humid:**
Locations that are humid most of the year
 - Tropical and mega thermal climates
 - Tropical rainforest climates (Northwest Pacific, Central America, Malaysia)
 - Tropical monsoon climate (Jakarta, Miami, South America)



Dust

The quality of the air depends in large part on the amount of dust. Use the following indications of dust levels in production environments for guidance only; local circumstances may influence the average dustiness.

- **High dust levels:**
Mining and Cement, Metal, Steel manufacturing, and Foundries
- **Normal dust levels:**
Food and Beverage, Automotive, Electronics, Petrochemical, Gas purification, etc.

2.b

Air filter, oil filter and oil separator elements service kits

All of the parts within our service kits have been designed specifically for the compressor on which it is to be used. We do not use common industrial parts designed to be used across a whole range of industrial and mechanical equipment.

The parts within our service kits have all been tested and proven to perform effectively in the equipment on which it is to be fitted. There will not be any drop in performance during the intended life span of components. Please see the service schedules for more information on when you should replace these parts.

Air filter element

Genuine manufacturers' air filters are designed specifically for your equipment. These genuine air filters will provide an exact fit to the equipment to ensure a good seal. You can also rest assured that the very best quality material is used to avoid any dust carry over and protect the element from any damage that will ultimately lead to a failure in your compressor. The air filter design will also offer effective filtration with a minimum pressure drop that will save energy and money.

Oil filter element

Genuine manufacturers' oil filter elements are designed specifically for your equipment. The oil filter in your equipment has a big role to play in protecting your compressor. Inferior filter material could lead to oil circuit contamination due to poorly filtered oil; this results in oil deposits clogging up the oil circuit leading to insufficient cooling of the element. Another important component within the oil filter is the bypass valve – if the quality of this valve is compromised, the following could happen:

- Bypass valve opens too early, which will allow the unfiltered oil to pass and reduce the quality and the life span of the oil.
- Bypass valve opens too late and could lead to insufficient oil and excessive temperature to the element, resulting in element failure.

Oil separator element

Genuine manufacturers' oil separator elements are designed specifically for your equipment. The material used in these oil separator elements has been selected to ensure low pressure drops, efficient separation, and grounded for static electricity. Poor grounding on the oil separator element makes static electricity a real danger which could pose a risk of fire within the compressor.

Filtration

Compressed air is one of the most important and widely used utilities in the world. Often labeled the 'Fourth Utility' due to its widespread use, compressed air and gas are used in industries ranging from automotive and mining to food and beverage and most important to us, medical.

The proper functioning of a compressed air system is vital to its effectiveness, but many users often forget about the importance of regular filter maintenance and its effect on both production quality and system longevity. The below guide tells you everything you need to know about replacing your filter elements:

Why replace filter elements?

You might think that delaying the replacement of filter elements would be a quick and easy way to reduce operating costs. However, by not replacing filter elements according to the manufacturer's recommendations, you could be subjecting your customers to further costs down the line.

Filter Elements remove contaminants such as water vapor, oil, dust, and micro-organisms from the air stream. As they impact the filter media, potentially harmful and damaging particulates in the air become trapped between the filter media fibers. This can lead to the filter media becoming blocked, causing a lower differential pressure and an increase in the cost and energy needed to run the system.

During operation, the filter element is also exposed to extreme and changing conditions, such as:

- **Vast temperature fluctuations**
- **Moisture**
- **High pressure**
- **Damaging chemicals/vapors**

Over time, these conditions degrade the filtration media, leading to reduced operational effectiveness and performance, and product spoilage. Even the smallest of holes in the media can cause it to rupture and for contaminants to travel downstream into the air system. If this were to happen, the differential pressure indicator would not alert you to the problem as there will be no drop in differential pressure.

Most modern filter elements can withstand 8,000 hours or 12 months of use, whichever comes first, and Activated Carbon models can withstand 6000 hours.

Dangers of failing to replace your filter elements

Failure to replace your filter elements within the advised timeframe could cause a significant lack of filtration quality which could prevent standards from being achieved, leading to major setbacks for your customers.

Some of the main risks that you may face as a result of failing to replace your filter elements include:

- **End use contamination**
- **Damaged machinery – for example, absorption dryer beds**
- **Damaged products**
- **Health risks to personnel**
- **Increased long term costs**
- **Increased downtime**

Benefits of regular filter element change outs

Besides the avoidance of the above risks, there are many benefits to be gained from regularly changing your filter elements. These include:

- **Optimum filtration performance**
- **Protection of downstream equipment**
- **Peace of mind**
- **Reduced repair and replacement expenses**
- **Higher uptime**

One of the main reason's customers give for forgoing element change-out is the costs of replacement parts and maintenance. However, these costs are much lower than those caused by old, ineffective filter elements.

A clean filter works significantly more efficiently than one obstructed with months' worth of particulate matter and debris. These 'clogged' filters require more pressure to push air and gas through the media, incurring higher operating costs and a greater risk of failure. By replacing your filter elements regularly, you could avoid excess running costs, reduce the risk of machinery failure, and avoid the possibility of product spoilage and associated costs. Furthermore, by ensuring your compressed airlines' smooth running, you will be improving your energy efficiency, reducing your customers carbon footprint.

2.d

Vacuum

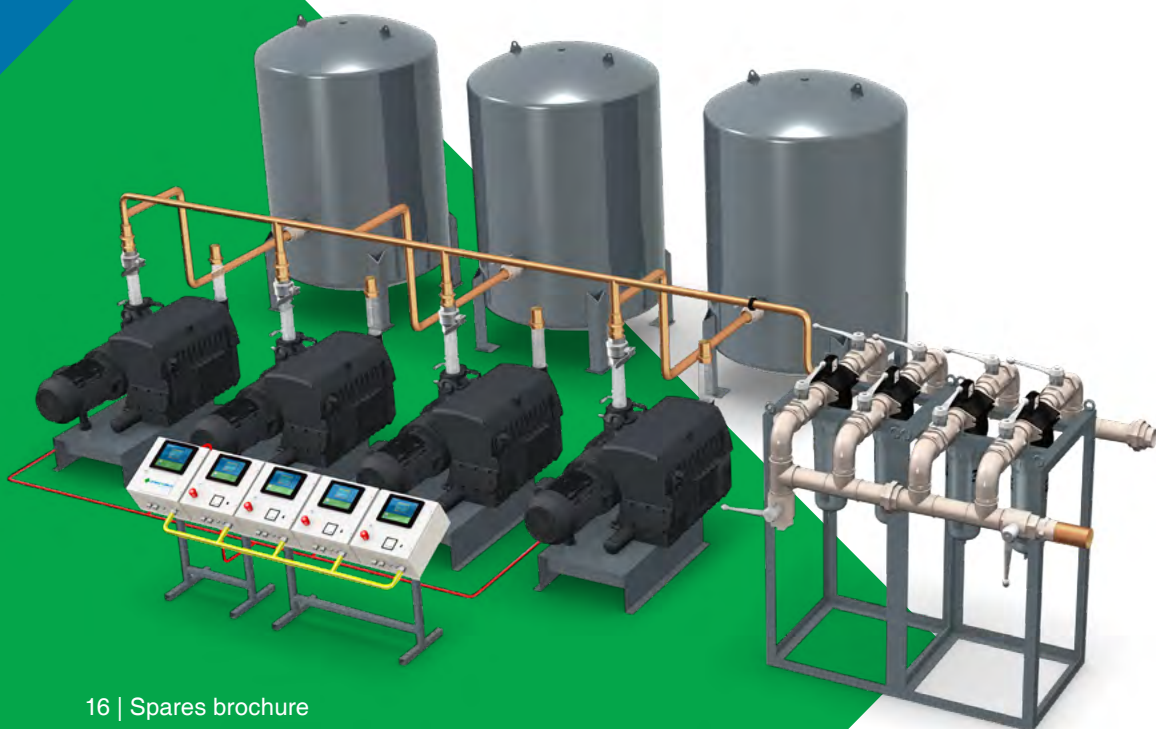
Our vacuum partners genuine accessories are individually adapted to match each particular product and increase its performance. They are an easy and cost-effective solution and are available for a wide range of our vacuum pumps. Our vacuum partners genuine accessories include vacuum filtration technology, gauges, connections, valves, silencers, control units, gas-ballast valves, alternative cover plates, and many more to ensure optimum performance and reduce lifetime costs.

For example, counterfeit oil mist filters can be cheaper than genuine OEM parts, but you need to consider the effects of the cost difference. Counterfeit filters do not capture as much oil mist leaving the environment and working areas significantly more contaminated. They also fail more quickly, meaning more filter changes and ultimately higher costs through parts, downtime, and labor costs. They also pass less air, causing back pressure, requiring additional motor power to achieve air throughput, raising energy consumption and carbon footprint, meaning additional but hidden costs. Slower pumping speed could also impact cycle times and production levels, incrementally small by each cycle but large in total over time.

Scheduled preventative maintenance helps keep the vacuum pump running smoothly and efficiently. Preventative maintenance of mechanical vacuum pumps by utilizing regular, scheduled oil and filter changes is beneficial in many ways:

- **Reduces expensive downtime**
- **Optimises process times**
- **Untimely, expensive, preventable major repairs are greatly reduced**
- **Performance is improved and predictable**

During the operation of the vacuum pump, the oil, which acts as a lubricant, coolant, and sealant for your vacuum pump, can get contaminated by any solids and condensable carried over from the process. As the contamination builds up, the oil performance deteriorates, which has a negative impact on the operating vacuum levels and mechanical wear.



2.e

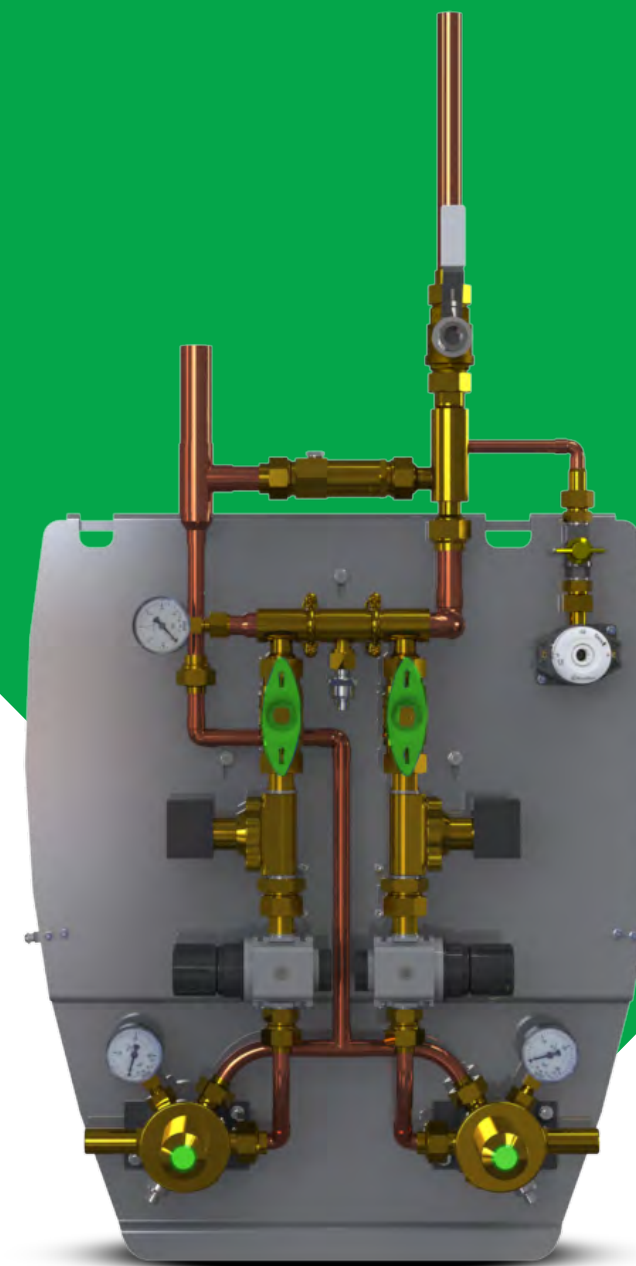
Manifolds

The Pneumatech Medical Gas Solutions range of Manifolds is designed to have minimum maintenance. The majority of the components that are used are chosen to last the lifetime of the product.

However, some components will need replacing during the lifetime due to the manufacturer's recommendations and the specifications of HTM – these are the regulators and pressure relief safety valves.

Our regulators are designed for medical use and are gas-specific. These have undergone stringent long-time testing and have proven to over-perform and last longer than the recommended 5-year replacement cycle.

We also recommend a seal kit to be kept locally for any leaks that may occur over time.





Main **features
& benefits**

3.

Spare parts

Designed to work in Pneumatech Medical Gas Solutions equipment

Benefits

The benefit of a genuine spare part is to keep customers' expectations (on equipment output, energy consumption, etc.) of PMGS equipment the same after a service interval as if it was new equipment.

How does it do that

- Alternative (or pirate parts) are designed for multiple purpose.
- For example, an oil filter from our competitors is designed to work both in a compressor and in a diesel engine.
- In order to make the part able to work in both compressors and diesel engines, manufacturers need to over-specify, accommodating both types of equipment.
- This makes the product less efficient than a filter designed to work in a compressor only.
- Since the selection of a Pneumatech Medical Gas Solutions product is based on a set of customer expectations (on output, energy consumption, etc.), once those are not met, the whole production process is impacted.

Highlights

Quality approved parts	Uptime and maximum performance	<ul style="list-style-type: none"> • By not using the genuine spare parts the machine may not present the same performance as designed. • For example, a 25 mbar pressure drop, due to a non-genuine air filter, can generate a decrease of up to 2% of the compressor output. • In the same logic, a 1 bar of pressure drop in the separator element can lead to a 7% increase of the energy consumption.
Single point of contact for all your compressor parts	Less administration and less complexity to manage the supplier for your compressor parts	<ul style="list-style-type: none"> • By having several suppliers for equipment parts, the customer will have to invest time in managing several vendors (negotiation, lead-time discussion, delivery discussions, etc.) • On top of that, in case of quality problems, those manufacturers won't be responsible for anything else than the product that they supplied (a filter supplier would be responsible only for the filter), while PMGS has responsibility for the full machine.





Non-genuine
spare parts

4.

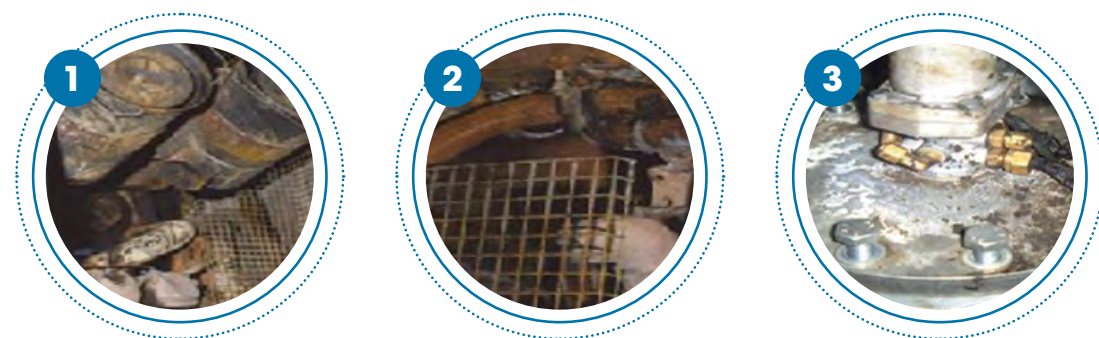
Spare parts

Oil separator: electrical grounding

The genuine oil separators that we use within our maintenance kits are designed to have the correct grounding to avoid the serious risk of fire. Most non-genuine oil separators do not have the correct grounding to confidently reduce the risk of fire.

Genuine spare part	Alternative
	
<ul style="list-style-type: none"> • Separator properly grounded • Electrical continuity 	<ul style="list-style-type: none"> • Separator poorly grounded • Electrical continuity compromised • Serious risk of fire

Risk of fire



Oil

Sludge and deposit formation

Sludge or deposit

- These are large agglomerations of particles (mix of oxidized oil, metals and other impurities) that are attached to the compressor oil circuit causing the malfunction.
- The main parts affected are:
 - Filters (clogging)
 - Oil separator element (clogging and risk of implosion)
 - Elements
 - Coolers

No compatibility on rubber and metal parts

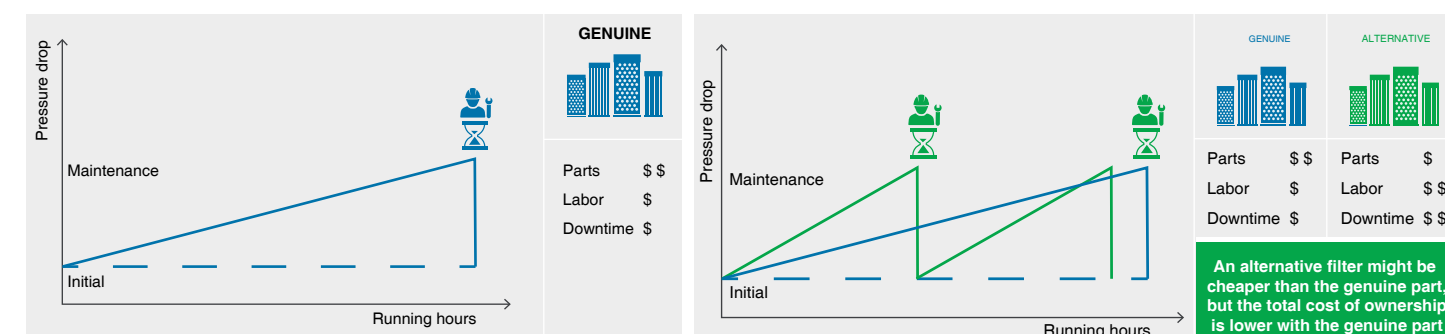
- Any lubricant / oil reacts with the different components of the compressor.
- Both in rubber parts (present in gaskets and O-rings) and metal parts, the oil might generate corrosion, causing leakages and malfunction of the moving parts.

High surface activity

- After a mixture of air and oil leaves the compressor element, it will be separated in the oil vessel.
- If the oil doesn't have the proper additives, excessive foam will saturate the oil separator resulting in higher oil residual, and decreased lifetime of the oil separator.

Consequence of using competitors

Genuine versus alternative parts: Increase of Total Cost of Ownership

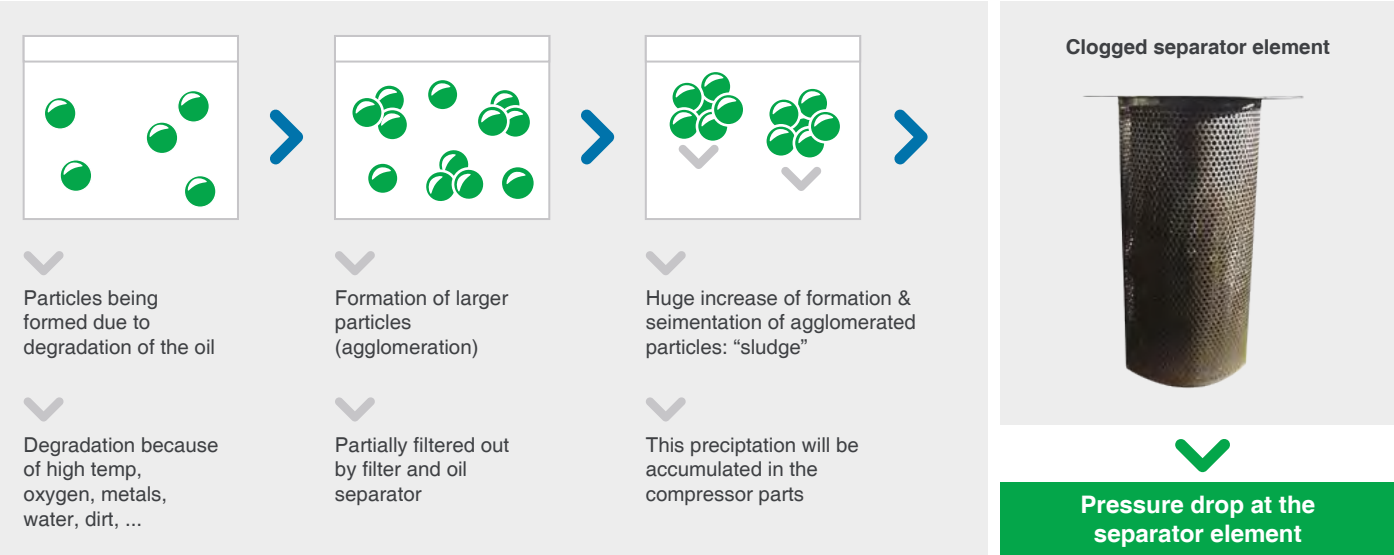
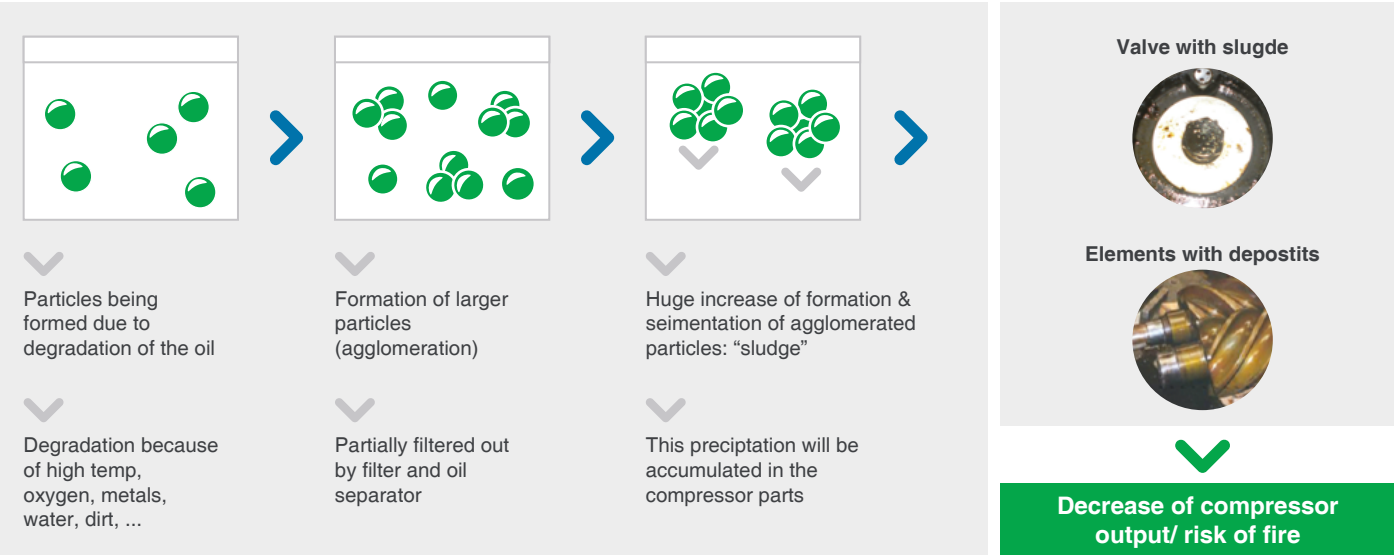


The graph on the left shows a typical total cost of ownership of your equipment when genuine parts are supplied to be used during the recommended maintenance schedule. On the right shows the possible total cost of ownership where non-genuine spares are used.

You can see that by using the non-genuine and possibly less expensive parts, you have a higher total cost of ownership. This is due to the non-genuine parts failing or affecting the system resulting in higher pressure drop, which will mean more energy being used, equaling higher running costs. (applicable for both graphs)

Risk of not using genuine oil

Sludge and deposit information



Service Kits

Pirate kits

- They provide preventive maintenance to our compressors.
- They don't have deep technical knowledge on our machines.
- Their kits can be:
 - A mix of original and alternative/pirate parts.
 - Only alternative and pirate parts.
- These kits don't have all the parts for an intervention.
 - Pushing the customer for more than one production stop.
- The alternative parts
 - Don't perform as the original
 - Don't fit in the compressor
- Pirate parts
 - Fake logos, boxes and labels



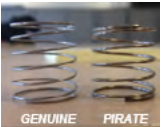
Genuine



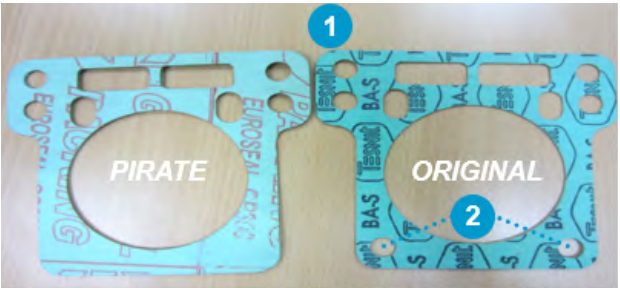
Pirate

Pirate part, box and labels

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



8,000 h kit 2901129300



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



Things to
remember

5.

5.

Why choose Pneumatech?

As Pneumatech Medical Gas Solutions is part of the Atlas Copco Group of companies within the medical industry, we have a full complement of departments to be able to design, manufacture, install and service medical gas systems on a global scale.

Our divisional structure allows us to offer spare parts for almost all major global manufacturers of medical gas equipment. This also includes compressors, vacuum pumps, and all associated products.

We have a global network of distributors who are highly trained on all medical gas equipment and qualified to a minimum of CP level to ensure competence in the workplace environment.

PMGS prides itself on only using genuine original equipment manufacturer spare parts to ensure the equipment receives the very best spare parts specifically designed for the intended application.

Our service and spare parts department has a combined knowledge of over 100 years of medical gas knowledge to rely on, so we are confident that we are a leading provider in this global medical market.

We want to ensure that you, your customers and end-users receive the correct solution, and we believe we can supply the parts, tools, and knowledge to fulfill your needs. Our mission is to ensure the service provider receives the supply and support to leave the equipment in an “as new” condition after every visit, and to achieve the full return of investment for the complete life-cycle of the equipment and beyond.





Frequently asked
questions

6.

Top 10 questions

1. Who can I contact for more information or support with regards to spare parts?

You can contact your local authorised distributor (www.p-mgs.com/en/contacts) alternatively send an email to acm.spares@atlascope.com.

2. Do I need to carry out a service as my equipment has only done 1000 hours in the first year?

The service intervals are based on hours or years – whichever comes first. Almost all our equipment would be based on yearly service.

3. I have my plant in storage for over a year – what do I need to do on start up?

For an airplant before starting up, a service should be carried out which should include at least: oil, oil filter and oil separator element.
For a vacuum plant, the pumps should be powered up and rotated, also oil and filters should be changed.

4. How can I be sure of getting genuine spare parts?

To be sure of receiving genuine spare parts you should use the same supply channel from where the equipment was purchased.

5. I am having some technical issue with my equipment – who can I contact for support?

The first point of contact is our Technical Support Department: acmedtechdept@atlascope.com

6. How do I know what to change and when?

Please follow the issued recommended service schedule these can be found in Section 7.

7. I have other manufacturers equipment that I service – can you provide spare parts for these?

Yes, we can provide maintenance packages for almost all major manufacturers of medical gas equipment – please contact your local authorised distributor (www.p-mgs.com/en/contacts) alternatively send an email to acm.spares@atlascope.com.

8. Should I be holding some stock locally in case of equipment breakdowns?

We encourage all customers and end-users to hold critical and emergency stock due to lead times and distance from the main warehouse. For further information on this please contact your local authorised distributor (www.p-mgs.com/en/contacts) alternatively send an email to acm.spares@atlascope.com.

9. I need some training on the equipment – where can I get this?

Please contact our Technical Support Department: acmedtechdept@atlascope.com for information on available training courses.

10. If I carry out the maintenance as per the recommendations – how long will my equipment last for?

All products have different lifecycle lengths – please contact your local distributor for more information on these or refer to the overview in the Service Schedules section.



Service schedules

7.

Service schedules

PMGS is one of few medical gas manufacturers in the UK with its own dedicated spare parts division. We have a team of specialists waiting to help identify and supply the correct parts at the correct time.

At PMGS we pride ourselves on our knowledge, customer service and price. We always supply original equipment manufacturer spare parts so you can rest assured that you are receiving the very best spares for your machines, avoiding any expensive repeat failures and costly return visits and breakdowns.

We have a combined industry knowledge of over 100 years waiting to help you with your spare part requirements. We can supply OEM spares for all the industry leading manufacturers including Atlas Copco, Busch Vacuum Pumps, Becker, Gardner Denver and many more.

Air plant service schedule – GA-VSD+ MED

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - If fitted</i>					
Oil	◆	◆	◆	◆	◆
Air filter	◆	◆	◆	◆	◆
Oil filter	◆	◆	◆	◆	◆
Oil separator element	◆	◆	◆	◆	◆
V belts		◆		◆	
Unloader valve kit		◆		◆	
MPV kit		◆		◆	
Dryer filter kit	◆	◆	◆	◆	◆
Dryer silencer kit	◆	◆	◆	◆	◆
Dryer valve and purge kit					◆
Dryer seal kit					◆
Dryer desiccant kit					◆

Air plant service schedule – GA-MED

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - If fitted</i>					
Oil	◆	◆	◆	◆	◆
Air filter	◆	◆	◆	◆	◆
Oil filter	◆	◆	◆	◆	◆
Oil separator element	◆	◆	◆	◆	◆
V belts		◆		◆	
Unloader valve kit		◆		◆	
MPV kit		◆		◆	
Dryer filter kit	◆	◆	◆	◆	◆
Dryer silencer kit	◆	◆	◆	◆	◆
Dryer valve and purge kit					◆
Dryer seal kit					◆
Dryer desiccant kit					◆

Air plant service schedule – SF-MED

	Year 1	Year 2	Year 3	Year 4	Year 5
Change - if fitted					
Air inlet filter	◆	◆	◆	◆	◆
V-belt		◆		◆	
Check valve kit		◆		◆	
Grease cartridge kit		◆		◆	
Tip and dust seals		◆		◆	
Dryer filter kit	◆	◆	◆	◆	◆
Dryer silencer kit	◆	◆	◆	◆	◆
Dryer valve and purge kit					◆
Dryer seal kit					◆
Dryer desiccant kit					◆

Air plant service schedule – ZT-MED

	Year 1	Year 2	Year 3	Year 4	Year 5
Change - if fitted					
Roto-z oil - 5 ltrs		◆		◆	
Service kit A	◆		◆		◆
Service kit B		◆			
Service kit C				◆	
Dryer filter kit	◆	◆	◆	◆	◆
Dryer silencer kit	◆	◆	◆	◆	◆
Dryer valve and purge kit					◆
Dryer seal kit					◆
Dryer desiccant kit					◆

Pressure reducing set service schedule

	Year 1	Year 2	Year 3	Year 4	Year 5
Change - if fitted					
Line pressure regulator					◆
Pressure safety valve					◆

Oxygen generator plant service schedule

	Year 1	Year 2	Year 3	Year 4	Year 5
Change - if fitted					
Oil	◆	◆	◆	◆	◆
Air filter	◆	◆	◆	◆	◆
Oil filter	◆	◆	◆	◆	◆
Oil separator element	◆	◆	◆	◆	◆
V belts		◆		◆	
Unloader valve kit		◆		◆	
Mpv kit		◆		◆	
Ud+ filter kit	◆	◆	◆	◆	◆
Qdt filter kit	◆	◆	◆	◆	◆
Pdp filter kit	◆	◆	◆	◆	◆
Ogp service kit B	◆		◆		◆
Ogp service kit C		◆		◆	
Ogp service kit D					◆
Booster service as per manufacturer	◆	◆	◆	◆	◆

VIE control panel service schedule

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - if fitted</i>					
Line pressure regulator					◆
Pressure safety valve					◆

Vacuum plant service schedule

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - if fitted</i>					
Pump oil	◆	◆	◆	◆	◆
Pump service kit 'B'	◆	◆	◆	◆	
Pump service kit 'C'					◆
On duty bacterial filter element	◆	◆	◆	◆	◆
Bio safety clothing kit	◆	◆	◆	◆	◆

Automatic Manifold service schedule

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - if fitted</i>					
Seal kit	◆	◆	◆	◆	◆
Manifold overhaul kit					◆

Emergency reserve Manifold service schedule

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - if fitted</i>					
Line pressure regulator					◆
Pressure safety valve					◆

Semi-auto Manifold service schedule

	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Change - if fitted</i>					
1st stage regulator					◆
Line pressure regulator					◆
Pressure safety valve					◆

Product Lifecycles

Source Equipment

	5 years	10 years	15 years	25 years
GAMEDs			◆	
SFMEDs			◆	
ZTMEDs			◆	
Global Dryer			◆	
Medical Vacuum Systems		◆		
LOX Tanks			◆	
Vaporisers			◆	
VIE Control Panel PMGS			◆	
AGSS Plants Wuxi			◆	
AGSS Plants UK			◆	
Pressure Vessels and Code			◆	

Patient Environment Products

	5 years	10 years	15 years	25 years
Multimovement Pendants			◆	
Retractable Pendants		◆		
Rigid Pendants		◆		
Flexible Pendants		◆		
Medical Hose Assemblies	◆			
Flow Meters and Accessories		◆		
Suction Controllers and Accessories		◆		
Theatres Suctions		◆		
Rail and Accessories		◆		
Medical Supply Trunking			◆	

Pipeline Equipment

	5 years	10 years	15 years	25 years
Medical Gas Outlets			◆	
Automatic Manifold Control Panel			◆	
Emergency Reserve Manifolds			◆	
Header Racks			◆	
Tailpipes			◆	
AVSU Box			◆	
AVSU Modules			◆	
Isolation Valves			◆	
NIST Tee Asssmeblies			◆	
Copper Tube and Fittings				◆
Area Alarms LED			◆	
Central Alarms LED			◆	
Area Alarms Digital			◆	
Central Alarms Digital			◆	
BMS Interface Units			◆	

