



**Optimize** your  
Medical Air System  
Performance

**PMA Medical Air Supply System**





## A trusted leader

BeaconMedaes is a leading specialist in the design, supply and installation of piped medical gas distribution systems. We proudly play a vital role in hospitals around the globe in sustaining patients when they are at their most vulnerable.



### The BeaconMedaes promise:

- Industry expertise
- Commitment to innovation
- Product quality
- Flexibility and customization
- Design that puts patients and healthcare professionals first
- Service excellence
- Best-in-class solutions

## PMA : Modular Solution for a Medical Air Supply System

If you're looking for a medical air supply system that can be optimized to your requirements, the BeaconMedaes PMA delivers the right solution. In-house developed by our experts, the PMA is a duplex air purification system with central controller and your choice of optimal compressor technology (screw, tooth or scroll). Thanks to its modular design, the PMA comes as an easily configurable package that offers the reliable performance you count on every day.



Easy configuration with modular design



Optimal compressor technology



Unique leak-free build



Small footprint

## Features

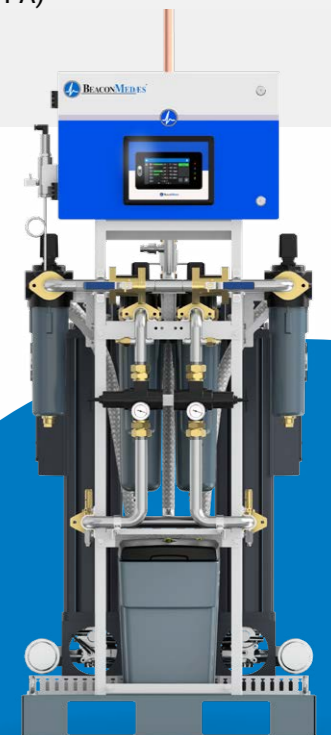
- Medical central controller with touchscreen
- Remote monitoring
- Stainless steel piping
- Low purge losses (maximum purge 16%)
- Purge saver function
- Optional Hopcalite filter
- Optional gas quality monitoring
- Efficient micro-structured carbon filter
- Low pressure losses
- Integrated oil-water separator

## Applications

- Surgical air 7 bar or 10 bar (HTM)
- Combined 7- and 10-bar medical and surgical air system with external 4-bar pressure reduction set
- Medical air 4 bar (HTM)
- Instrument air (NFPA)

## Certifications and standards

- System certified as EU MDR Class IIa Medical Device
- HTM 02-01 Medical Gases Health Technical Memorandum
- ISO 7396-1:2016 Medical Gas Pipeline Systems
- Complete system, including compressors, is made at a facility certified to produce medical products according to ISO 13485
- NFPA 99 (Instrument Air)
- European Pharmacopoeia. (Eu. Ph. 11th edition, 2023)
- EN 62304 software verification and validation
- EN 60601 electrical safety and electromagnetic compatibility



# Premium technology, optimal performance

BeaconMedaes' PMA Medical Air Supply System offers high-quality, proven technology in an easily configurable package with your choice of compressor type.



## Stainless steel pipework

The PMA is built with stainless steel pipework for extra reliability and seal-tape free connections.



## EMC-tested

The cubicle and controller are tested according to the EN 60601-X electrical safety and electromagnetic compatibility standards.



## Advanced medical controls

The PMA's EN 62304-validated software is specifically designed for medical application. It comes with the MK5 Touch controller, with color touchscreen display, built in, multi-level redundancy to ensure continuous operation and real-time monitoring with SMARTLINK.



## Integrated Oil-water separator

Thanks to its multi-stage filtration, the Atlas Copco Oil-water separator (OSC) range removes oil from your compressor condensate, allowing for the water to be drained away and the oil to be disposed of in an environmentally friendly manner.



## Gas quality

To ensure gas quality, the PMA can be optionally equipped with CO, CO2 or O2 sensors.



## Easy service access

All serviceable elements are easily accessible, including the adsorption dryer for desiccant replacement.



## Leak-free operation

The PMA's connections don't require sealing with tape. This reduces the risk of leaks and makes service operations much more efficient.



# A Compressor solution for every need

BeaconMedaes and Atlas Copco continue to innovate and provide best-in-class product solutions for the healthcare sector. By making use of the wide range of Atlas Copco compressor technologies, we can provide a bespoke modular system with the pressure or flow you require and the technology of your choice.



## Oil-injected Screw - G MED

Working pressure: 7-13 bar

Capacity FAD: 786-3750 l/min

Installed power : 7-22 kW



## Oil-injected Screw - GA VSD+ MED

Working pressure: 7-13 bar

Capacity FAD: 852-9420 l/min

Installed power : 7-45 kW



## Oil-free Tooth - ZT (VSD) MED

Working pressure: 8.6-10 bar

Capacity FAD: 1182-8328 l/min

Installed power : 15-55 kW



## Oil-free Scroll - SF MED

Working pressure: 8-10 bar

Capacity FAD: 204-2440 l/min

Installed power : 2.2-22 kW

## Eliminating any risk

As the industry leader committed to meeting the needs of the most demanding customers, Atlas Copco requested the renowned TÜV institute to type-test its range of oil-free compressors. Using the most rigorous testing methodologies available, all possible oil forms were measured across a range of temperatures and pressures. The TÜV found no traces of oil at all in the output air stream. Thus, Atlas Copco is not only the first compressor manufacturer to receive CLASS 0 certification, but also exceeds ISO 8573-1 CLASS 0 specifications.

### Class 0 Means

- ✓ Zero risk of contamination ✓ Zero risk of damaged or unsafe equipment
- ✓ Zero risk of losses from operation downtime

CLASS	Concentration Total Oil (aerosol, liquid, vapour) mg/m <sup>3</sup>
0	As specified by the equipment user or supplier and more stringent than class 1
1	< 0.01
2	< 0.1
3	< 1
4	< 5

Current ISO 8573-1: 2010 classes (the main five classes and the associated maximum concentration)

# Options & specifications



## Flow range

The flow range of the PMA medical air supply system is from 263 l/min to 9223 l/min.

## Dryer specifications

### Dryer General Data - All types

Parameter	Value
Atmospheric Dew point (°C)	-46
Air quality	Meets European Pharmacopeia
Dryer type	Duplex desiccant dryer with purge saver
Purge	16% (maximum, purge saver deactivated)
Controllers	MK5s Touch Central controller, 2 2 (two) independent dryer controllers
Test point	BS341 or DIN
Pressure regulators	Duplex integrated pressure regulators
Connectivity	MyMedGas embedded
Outlet connection	22 mm copper stub extension
Inlet connection	22 mm copper stub extension
Voltage/Frequency	400V±10%/50Hz; one single phase lead for main cubicle
Medical device Certification	MDR Class IIa
Piping material	Stainless steel
Condensate drains	Electronic



Life is in the details.®

