



Oil-free compressed air for medical  
and laboratory applications





# Hospital and Medical Practices

With oil-free compressors from Dürr Technik you can generate high-quality compressed air for highly sensitive applications



## Experience counts

Whether in a hospital, clinic or doctor's practice – clean, dry and continuously supplied compressed air is essential in the medical sector.

With more than 75 years of experience in the dental and medical sector, Dürr Technik has comprehensive know-how and meets the particularly high demands on the availability and purity of the compressed air with special products.

Dürr Technik compressors have optimal characteristics for the use of compressed air in medicine:

### Zero oil. Zero problems.

Oil-free piston compressor technology stands for high compressed air quality (ISO 8573-1) and sustainability.

### Dry and clean

The combination of oil-free piston compressors with fine filter units and our patented membrane drying system is perfectly suited for the production of medical compressed air according to DIN ISO 7396-1.

Medical compressed air in hospitals ventilates patients, drives surgical and medical tools and instruments, supplies anesthesia systems and is part of many different treatment processes.

### High quality made in Germany

Many years of experience and a highly qualified project planning and engineering team for your customer-specific solutions.

### Reliable, quiet, compact and efficient appliances

We work according to recognised standards and fulfil numerous certifications, for example:

- DIN EN ISO 13485
- DIN EN ISO 9001
- Medical device approval in accordance with the Directive 93/42/EEC

Dürr Technik ■ Quality  
■ Made in  
■ Germany



## OUR PRODUCTS IN USE

### Application examples

- Compressed air supply for phaco devices
- Compressed air for pharmaceutical equipment
- Vacuum for suction devices
- Operation of medical tools



SICOLAB med

#### 1 Compressed air for ventilators

Quiet and clean compressed air supply for highly sensitive ventilators. Certified medical device of the class IIb in accordance with Directive 93/42/EEC



KK8 / KK15 series



P2B-304M



SICOLAB



SICOLAB mini ENDO

#### 2 Compressed air for shock wave therapy with ESWT devices

Low noise generation mechanical shock waves

#### 3 Central compressed air supply

Compressed air system for the permanent supply of small hospitals, day clinics and joint practices

#### 4 Supply of drying and sterilisation cabinets

Drying of medical instruments with oil-free compressed air is recommended by the independent group "Arbeitskreis Instrumentenaufbereitung" (AKI)

#### 5 Drying of endoscopes and MIC instruments

Manual drying of the endoscopy channels with filtered, oil-free compressed air. Certified Class I medical device in accordance with the Directive 93/42/EEC

### Hospital

Further information can be found online on our website





## WE PUT PRESSURE IN THE LABORATORY

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Laboratories today are equipped with a variety of measuring devices, tools and instruments. They are used, among other things, for pharmaceutical, chemical or medical examinations and analyses, experiments and quality controls. Many applications require high-quality oil-free compressed air.

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Dürr Technik compressors have optimum properties for the use of compressed air in the laboratory:

### Zero oil. Zero problems.

Oil-free compressors are an advantage for reliable operation of instruments and measuring devices as well as reliable results. Oil vapors damage valves, obstruct nozzles and contaminate or distort measurement results.

### Quiet and compact

Space-saving design for use directly at the workplace. Extremely quiet due to special sound insulation.

**Economical & low-maintenance** thanks to efficient design and to modern components.

### High quality made in Germany

The compressors from Dürr Technik supply compressed air with air quality up to class 1:3:1 (ISO 8573-1). For this reason, they are ideally suited for sensitive laboratory applications.

### Dry compressed air

is due to the use of a patented membrane dryer.

# LABORATORY

Space-saving and quiet, the oil-free compact units from Dürr Technik bring high-quality compressed air into your laboratory

Dürr Technik ■ Quality  
■ Made in  
■ Germany



## OUR PRODUCTS IN USE

### Application examples

Compressed air for

- Auto-samplers
- Blood analysis
- CO<sub>2</sub>, DSC, COT analysis
- Dosage devices
- ELSD detectors
- Foodstuff inspection



SICOLAB

**1** Compressed air for gas chromatography and LC-MS analysis

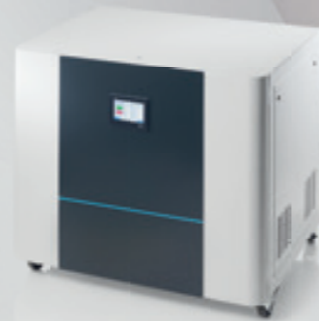
For the analysis of chemical components

**2** Compressed air for particle measurement and shape analysis

For the analysis of particle properties

**3** Compressed air for rheometers

For the analysis of the viscosity of liquids



HF30A



SICOLAB mini



KV15 series



P4B-304MS

**4** Nitrogen generator for LC-MS analysis

On-site production of nitrogen of the highest nitrogen quality

**5** Compressed air for analytical instruments such as spectrometers

Constant and dry compressed air supply as working medium

**6** Vacuum for vacuum furnace

Optimum vacuum for fast and gentle drying of temperature-sensitive materials

**7** Central compressed air supply

Compressed air system for the permanent supply of medium-sized laboratories

### Laboratory

Further information can be found online on our website





## SICOLAB Silent. Compact. Mobile.

Noise at the workplace disturbs concentration and can make you ill. The quiet, low-vibration SICOLAB provides pleasant working conditions in the laboratory and practice.

The compressor station practically disappears under the laboratory table and finds the necessary space even in small rooms.

### Advantages

- Compact to fit under the lab desk
- Adjustable outlet pressure simply set the desired pressure up to 8 bar
- Endurance – designed to run at 100% duty-cycle
- Automatic condensate evaporator – elimination of manual drainage
- Air tank with anti-bacterial and anti-corrosion coating
- Secondary rear panel outlet connection
- Maintenance-free – except easy-to-replace filter

Type	Delivery rate at 5 bar (l/min)	Noise level at PN dB (A)	Nominal voltage (V)	Frequency (Hz)	Weight (kg)	Compressed air class according to ISO 8573-1
SICOLAB 062	37	48	230	50	66	4:x:1
SICOLAB 100	70	52	230	50	76	4:x:1
SICOLAB 200	145	54	230	50	93	4:x:1
SICOLAB 062M	32	48	230	50	68	4:3:1
SICOLAB 062MF	36	49	115	60	77	4:3:1
SICOLAB 100M	59	52	230	50	78	4:4:1
SICOLAB 100MF	67	53	115	60	89	4:4:1
SICOLAB 200M	122	54	230	50	95	4:5:1
SICOLAB 062MFA	32	48	230	50	68	1:3:1
SICOLAB 100MFA	59	52	230	50	78	1:4:1
SICOLAB 200MFA	122	54	230	50	95	1:5:1

Nominal pressure (PN) 7 bar  
Volume of vessel 25 l  
Dimensions LxWxH (mm) 510x580x653

M = Models with membrane dryer  
MF = Models with membrane dryer and fine filter 0.01 µm  
MFA = Models with membrane dryer, fine filter 0.01 µm and activated carbon filter

### SICOLAB

Further information can be found online on our website



# Our products

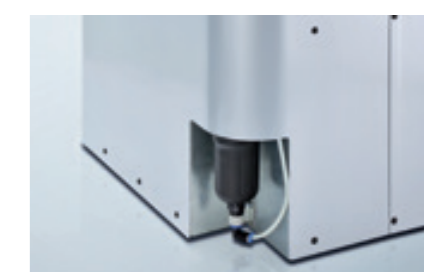
The right solution for every application



**Don't let them stress you out**  
With its particularly low sound pressure level, SICOLAB is the ideal compressed air station for use in laboratories and practices. High performance in whisper mode

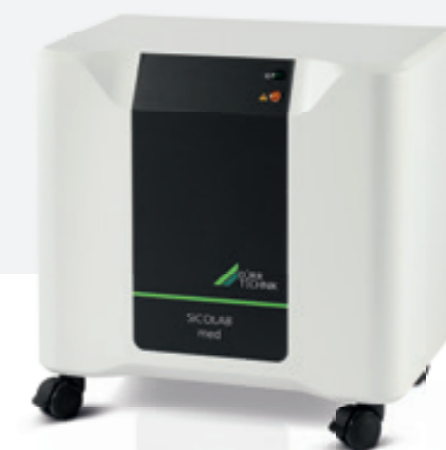


**Stay flexible**  
Swivel castors and carrying handles ensure mobility, and thanks to plug-and-play the station is ready for use everywhere



**Keep all options open**

- Integrated membrane dryer 100% duty-cycle (optional)
- Fine filter (optional) filtration grade 0.01 µm
- Activated carbon filter (optional) removes odor and other impurities from the compressed air



## SICOLAB mini

### SICOLAB mini ENDO Class I Medical Device in accordance with 93/42/EEC

The compact SICOLAB mini models are light-weight and portable. The oil-free, ready-to-connect compressor unit is built into a ventilated sound insulation box and offers maximum flexibility with minimum maintenance.

The SICOLAB mini ENDO model is particularly suitable for drying endoscopes and is preset at 1 bar to protect highly sensitive equipment parts.

- Advantages**
- Oil-free plug-and-play compressor unit ready for connection
  - Compact dimensions
  - Maintenance-free (except filter exchange)
  - Extremely quiet
  - 100% duty-cycle

#### SICOLAB mini

Further information can be found online on our website



#### SICOLAB mini ENDO

Further information can be found online on our website



Type	Delivery rate at 5 bar (l/min)	Noise level at PN dB (A)	Nominal voltage (V)	Frequency** (Hz)	Weight (kg)
SICOLAB 025 mini	10	49	230	50	15
SICOLAB 038 mini	20	50	230	50	16
SICOLAB 038 mini	20	52	115	60	16
SICOLAB 062 mini	36	51	230	50	20
SICOLAB 062 mini	41	54	115	60	20
SICOLAB mini ENDO	34*	50	230	50	16

\* Deliver rate at 1 bar  
 \*\* Models with 230V also 60Hz capable, delivery rate approx. 18% higher

Nominal pressure (PN) SICOLAB mini 7 bar | Volume of vessel 2 l  
 Outlet pressure SICOLAB mini ENDO 1 bar | Dimensions LxWxH (mm) 396x295x321



- SICOLAB mini ENDO**
- Class I Medical Device in accordance with 93/42/EEC
  - Comes as standard with fine filter, compressed air hose and stainless steel compressed air pistol
  - Various optional attachments for other applications



- Simple operation**
- On and off switch
  - Quick coupling
  - Readable working pressure



- Ready for use anywhere**
- Light-weight, plug-and-play device
  - Carrying handles

## SICOLAB med

### Class IIb Medical Device in accordance with 93/42/EEC

SICOLAB med provides compressed air to supply ventilators. Our compressors for ventilators can be used as either a standby device or directly as the main air supply for the ventilator.

Medical devices must meet strict standards to ensure patient safety and product integrity. Our SICOLAB med has the necessary certification as a Class IIb medical device, in accordance with the 93/42/EEC directive.

The generated quality of compressed air for ventilators has been tested and approved according to the biocompatibility standard ISO/FDIS 18562.

#### Advantages

- Very quiet with 47 dB (A)
- Dry air through the integrated membrane dryer
- High filtration efficiency thanks to three filtration steps up to max. 0.3 µm
- Automatic condensate evaporation (no manual emptying of the condensate necessary)
- Pressure control for an even, energy efficient operation

#### SICOLAB med

Further information can be found online on our website



Typ	Delivery rate at 3 bar (l/min)	Nominal pressure PN (bar)	Volume of vessel (l)	Noise level at PN dB (A)	Weight (kg)	Dimensions LxWxH (mm)
SICOLAB med	30	3	3	47	40	348x515x440

**Pressure reduction:**  
 5°C at ambient temperature at ≥ 30 l/min and max. ambient temperature from 40°C  
 15°C at ambient temperature at ≥ 15 l/min and max. ambient temperature from 40°C

**Available voltages:**  
 220-240V, 220-230V, 115-120V, 127V, 110V, 100V

**Supply pressure (standby mode):**  
 2.7 to 6 bar



- Mobile, if you wish**
- Trolley (optional)

## Oil-free compressor stations ready for connection

You have the choice: In addition to our standard equipment, Dürre Technik offers the possibility of developing customized compressor designs especially for your application together with our specialized project planning and development engineers.

Our diverse product range with ready-to-connect compressor stations are available with a membrane dryer, DürreTronic, sound-insulated housing or as a mobile unit mounted on a robust stainless steel frame with a foldable handle for convenient handling.

We use high-quality pressure vessels from 3 to 90 litres. Compressor stations are available from 25 - 860 l/min at 5 bar pressure.



### Compressor stations

Further information can be found online on our website



## DürreTronic – electronic control and monitoring

DürreTronic monitors your compressor station for safe and reliable operation.

The electronic control system controls the function of the system and ensures the effective condensate management. The automatic monitoring shows the most important operating parameters and performance statistics, providing warns if there is a high frequency of switching cycles and it shows the optimal time for the replacement of components and thus ensures an optimum service life of the system.



### DürreTronic

Further information can be found online on our website



A selection of our standard models with membrane dryer can be found here:

Type	Delivery rate at 5 bar (l/min)	Nominal pressure PN (bar)	Noise level at PN dB (A)	Volume of vessel (l)	Nominal voltage (V)	Frequency* (Hz)	Dimensions LxWxH (mm)	Weight (kg)	Compressed air class** according to ISO 8573-1	Electronic control
TA-065M	35	7	68	25	230	50	615x435x670	36	4:3:1	X
TA-100M	59	7	68	25	230	50	615x435x670	52	4:4:1	X
TAG-132M	63	7	70	25	230	50	615x475x670	40	4:4:1	X
TA-160M	124	7	71	25	230	50	650x510x666	52	4:4:1	X
TA-200M	122	7	69	25	230	50	630x475x670	54	4:5:1	X
TB-100M	73	6	66	25	400	50	620x429x666	66	4:4:1	
TB-200M	122	7	69	25	400	50	660x460x660	70	4:5:1	
HA-200M	122	7	69	55	230	50	925x450x720	70	4:5:1	X
HB-200M	122	7	69	55	400	50	920x480x720	65	4:5:1	X
H2A-160M	230	7	69	55	230	50	760x790x520	90	4:4:1	
H2B-160MS	230	7	69	55	400	50	760x790x520	90	4:4:1	X
HB-304M	215	9,5	77	55	400	50	920x480x720	83	4:5:1/4:4:1	
PB-304MS	215	7	70	90	400	50	760x1020x620	98	4:5:1/4:4:1	X
P2B-304M	430	7	74	90	400	50	1020x620x820	143	4:5:1/4:4:1	
P4B-304MS	860	7	78	90	400	50	1150x770x1140	285	4:5:1/4:4:1	X
WAG-132M	65	7	71	10	230	50	545x180x400	37	4:4:1	

\* Models with 60Hz on request, delivery rate at 60Hz approx. 18% higher  
 \*\* 1:-: with optional fine filter 0.01 µm  
 -:1 in oil-free environment

M = Models with membrane dryer

## Compressed air quality – dry and clean

The quality of compressed air in hospitals, practices and laboratories is of great importance. The ISO 8573-1:2010 standard (compressed air class) classifies the quality and purity of compressed air in the following three categories: Oil content, moisture and solid particles.

The compressors from Dürre Technik supply oil-free compressed air with air quality up to class 1:3:1. For this reason, they are ideally suited for sensitive laboratory and medical applications.

### Patented membrane drying

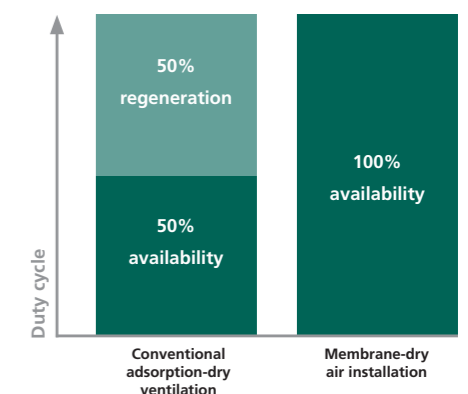
The Dürre Technik membrane drying plant supplies dry and clean air. The membrane dryers are very convinant and have an economical purge (low consumption) which gives 100% availability in continuous operation.

### Advantages

- Dry air protects sensitive instruments, promotes their value retention and ensures hygienic conditions. Measurement results are not falsified
- Maintenance-free, except annual filter exchange



Performance comparison of one-chamber drying systems and membrane dryers







## Completely carefree with Dürr Technik

### Service

Further information can be found online on our website



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