

Tornado Compressors by Dürr Dental – unbelievably powerful, super silent

Dental compressed air to meet the highest requirements



reddot design award
winner 2011



Power and air quality – for more than half a century

For more than 50 years, Dürr Dental compressed air systems have been shaping dental surgeries and hospitals around the world. Thanks to their great performance values and air quality – oil-free, dry, and hygienic – Dürr Dental products enjoy a leading market position.

For over half a century, Dürr Dental has been supplying state-of-the-art compressed air systems. Their great optics reflect the excellent quality and their technical design features have set global standards!

In 1965 Dürr Dental developed the first completely oil-free compressor for use in dentistry. This innovation soon became standard technology. Today, the highly efficient membrane-drying unit is one of many examples of the ever-present innovative spirit of Dürr Dental.



This is what counts:

- More than 50 years of experience
- From the inventor of oil-free dental compressors
- Antibacterial inner tank coating
- Up to three years guarantee
- 100% continuous operation possible
- State-of-the-art dry-air system thanks to membrane technology
- "Made in Germany" quality seal

Compressor range

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The Tornado compressor range: 4x "Made in Germany" quality – for 1 or 2 operator workstations; with or without membrane-drying unit.

Membrane-drying unit

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The innovative membrane technology by Dürr Dental provides high-performance drying and constant availability.

Inner tank coating

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The inside of the tank of each Dürr Dental compressor is coated with a special antibacterial material that ensures the highest possible level of safety and protects against corrosion.

Technical data and accessories

Page 08



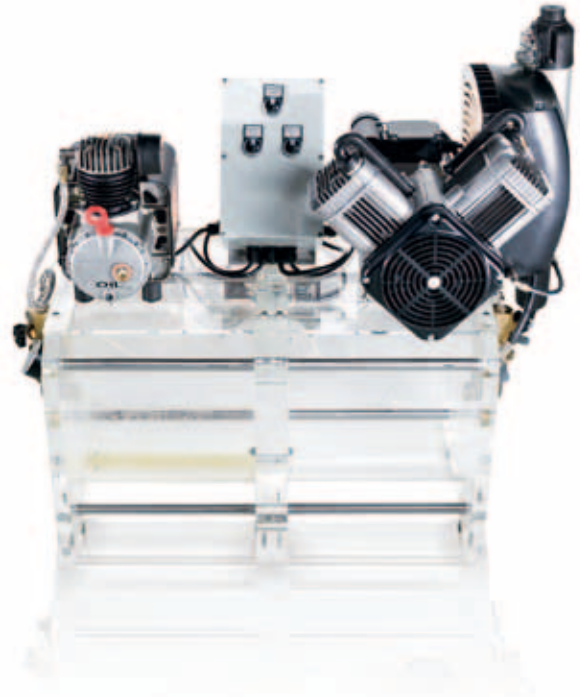
The technology and great accessories of the Tornado compressor range at a glance.

Quality you can trust – top technology for the heart of the practice

Dental compressed air for the highest requirements

Dental compressed air must be hygienic. The moisture content must therefore be reduced to a minimum and any contamination caused by oil or solid particles must be completely prevented. Any such contamination would have a negative effect on the durability of high-quality preparations and the function of delicate instruments. In addition, the hygiene and sterility requirements of the patient must be met.

The membrane-drying unit on the compressor prevents a moist environment, which would provide the ideal breeding ground for organisms. As well as ensuring dryness at all times, it provides constant availability with no regeneration time. The low pressure dew point ensures the impeccable, taste- and odour-free supply of compressed air.



Air that is contaminated with water, oil and particles is not suitable for use in dental treatment!

Really powerful, extremely quiet

The Tornado is one of the quietest compressors for dentistry on the market – yet it is extremely powerful. The aerodynamic ventilation fan hood around the compressor unit ensures really quiet running, thus improving the comfort of both dentist and patient.

This is what counts:

- Oil-free, dry, and hygienic
- One of the quietest of its kind
- Central intake filter
- High reliability thanks to closed crankcase
- Taste- and odor-free compressed air



Robust and long-lived – designed for continuous operation

When choosing a compressor, reliability is the most important consideration. In the Tornado, all important functions are combined in a multifunctional mono-block cylinder. Thanks to the central intake filter in its closed crankcase, dirt particles are prevented from entering the compressor unit. This makes the Tornado more reliable and extremely long-lived.

Easy replacement of intake filter

Really quiet – and available in four versions



Economical and efficient

For decades now already the Tornado compressor series has stood for high quality at a great price. For the new generation of compressors, cost-effectiveness has been increased even further and their energy consumption has been reduced by approx. 15%. So you save on costs whilst protecting the environment!


This is what counts:

- Approx. 15% less energy consumption
- Individual voltage variants for easy installation
- Technology that has proven itself over decades



 Tornado 1




 Tornado 1
with membrane-drying unit



 Tornado 2



 Tornado 2
with membrane-drying unit

The membrane-drying unit – patented technology by Dürr Dental

Constant full-power availability thanks to membrane-drying unit

The Tornado is equipped with the innovative Dürr Dental membrane-drying unit and has an unbeatable advantage: Constant power availability. Because the drying process is based on diffusion through layers of membrane fibres, the regeneration step required when using traditional drying procedures is superfluous. The membrane-drying unit generates dry compressed air with a pressure dew point of $\leq 5^\circ\text{C}$ constantly at an ambient temperature of 40°C . This prevents condensate forming in the line system in normal conditions.

Since the membrane-drying unit prevents moistness, microorganisms have no breeding ground. The compressors are equipped with fine filters in order to remove even really small particles from the air. The annual replacement of the filter is the only maintenance measure required – otherwise, the drying unit is maintenance-free. An optional sterile filter is also available for further protection against contamination by microorganisms.

To sum up: Unlike traditional drying procedures for dentistry, the pressure dew point at 40°C is a constant $\leq 5^\circ\text{C}$. This means that there is no risk of condensed water building up in the tank and pressure lines.

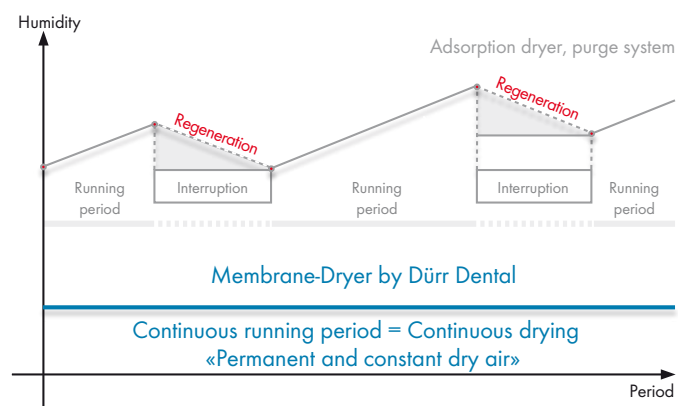


Filter system with purge
air nozzle and humidity
indicator

1,200 hollow membrane
fibres with coating on the
inside

This is what counts:

- Constant power availability, no regeneration times
- Constant dryness of compressed air
- Pressure dew point of $\leq 5^\circ\text{C}$ at ambient temperature of 40°C
- Maintenance-free other than an annual filter change

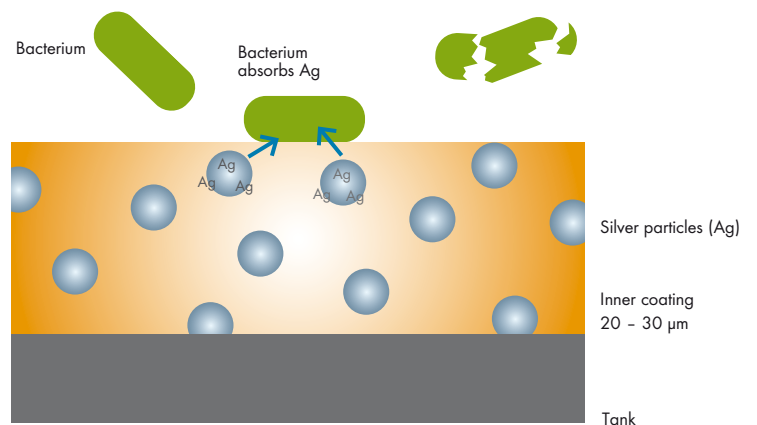


Even more protection against infections thanks to nanotechnology



Antibacterial inner tank coating

Bacteria always pose a certain risk. In the worst case scenario, they can cause infections. The inside of the tanks of Dürr Dental compressors are therefore coated with a special antibacterial material that is also used in domestic and industrial appliances. The fine coating is used to create a germ-reducing effect in refrigerators and textiles and on light switches and socket outlets. Silver nanoparticles block the enzymes that enable bacterial metabolism. In the tanks of Dürr Dental compressors, the antibacterial coating further increases safety and prevents corrosions.



Technical data and accessories at a glance

Model	Tornado 1	Tornado 2
Voltage (V)	230 (1~)	230 (1~)
Frequency (Hz)	50-60	50-60
Cylinders	1	2
Flow rate at 5 bar¹⁾ (l/min)²⁾	67	125
Tank content (l)	20	20
Pressure range³⁾ (bar)	6-7.8	6-7.8
Noise level⁴⁾ [dB(A)]	64	68
Dimensions (H x W x D cm)		
without membrane-drying unit	66 x 48 x 37	64 x 48 x 30
with membrane-drying unit	66 x 49 x 43	64 x 48 x 38
Weight (kg)		
without membrane-drying unit	32	38
with membrane-drying unit	38	44

¹⁾ The discharge flow without dry air ²⁾ Power bandwidth results from the mains frequency 50/60 Hz

³⁾ A pressure reducer is available as an option ⁴⁾ Average values at 5 bar



Central intake filter, only requires changing once a year



In addition to great accessories and an innovative filter system, Dürr Dental offers an extended guarantee of up to three years – simply send in the installation record.