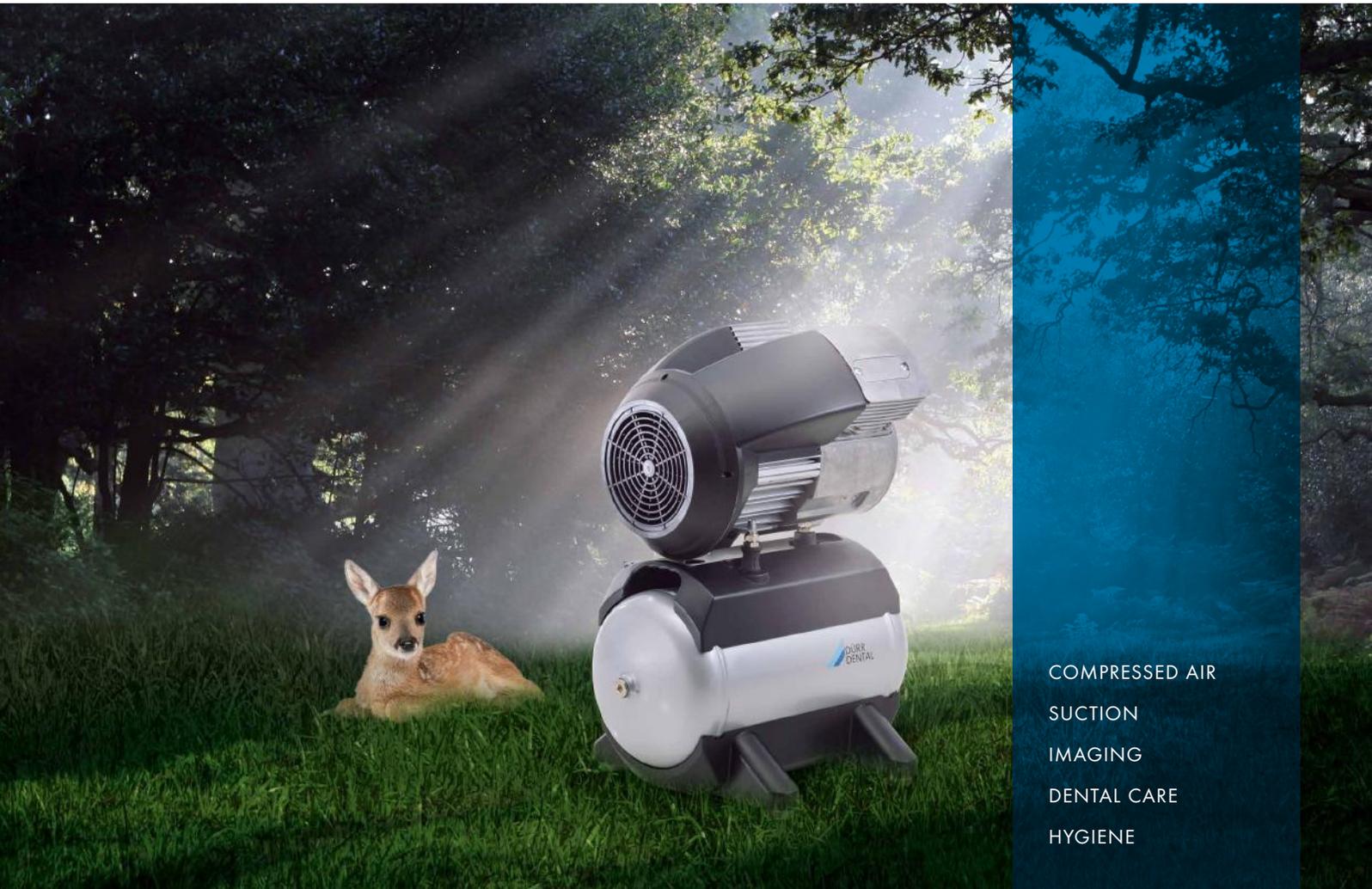


Tornado Compressors from Dürr Dental

Super silent, super efficient

Dental compressed air to meet the highest requirements



COMPRESSED AIR
SUCTION
IMAGING
DENTAL CARE
HYGIENE

Outside a first-class design. On the inside forward-looking technology.

For over 50 years, compressed-air systems from Dürr Dental have been used extensively in practices and clinics around the world. Their superb performance and air quality – *oil-free, dry, hygienic* – has made them market leaders.

Dürr Dental have been at the forefront of compressor development for over 50 years. Even their appearance belies their extraordinary quality, setting standards worldwide. In 1965 Dürr Dental developed the first completely oil-free compressors suitable for dentistry. This innovation set the standard and today the efficient membrane-drying unit is just one example that demonstrates Dürr Dental's commitment to innovation.

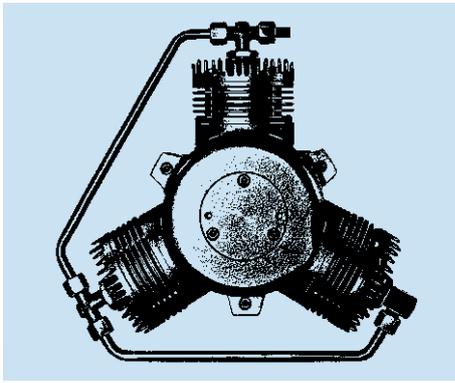


FOR OVER 70 YEARS:
100%
COMMITMENT

PROGRESS STARTS
WITH IDEAS



To the
Image clip



OUR CLAIM: BEST IN CLASS



reddot design award
winner



OUR INNOVATIONS
ARE THE RESULT OF CONSTANTLY
THINKING ABOUT
TOMORROW TODAY

Quality creates trust – leading-edge technology for the heart of the practice

Compressed air for the highest demands in dentistry

Dental compressed air must be hygienic. Moisture content must thus be kept to a minimum and contamination by oil or particulates eliminated. This would jeopardise the stability of materials as well as the operation of delicate instruments. The hygienic and aseptic expectations of patients must also be met.

The membrane-drying unit on the compressor prevents moist environments becoming breeding grounds for organisms. It not only provides constant, dry compressed air, but also provides a continuous supply of power that does not need to be interrupted. The low pressure condensation point ensures hygienic, tasteless and odourless compressed air.

Robust and durable –made for continuous operation

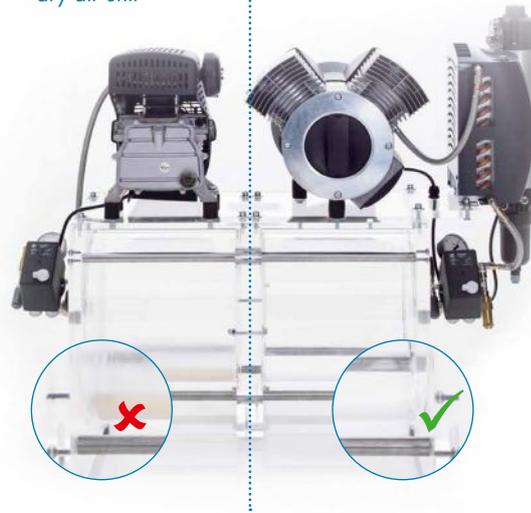
Reliability is an essential requirement when selecting a compressor. In the Tornado all important functions are contained in a multi-functional monoblock cylinder. The central intake filter in the closed crankcase prevents particles from infiltrating into the compressor set. This makes the Tornado reliable and very long lasting. A change of the piston sleeve every five years helps to improve the value of the compressor.

Features:

- Oil-free, dry, hygienic
- One of the quietest of its kind
- Very reliable thanks to the closed crankcase
- Hygienic, taste and odourless compressed air

oil-lubricated
compressor without
dry-air unit

oil-free Tornado compressor
with membrane-drying unit



Clean air, uncontaminated by water, oil or particulates, is an important hygiene factor in dental treatment. Additionally it maintains the value of your compressor and instruments.



To clip
Filter change

Easy change of central intake filter for worry-free
operation and long service life.

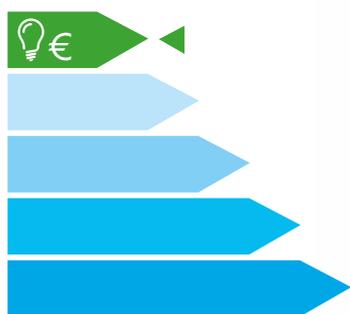
Quiet as a whisper – as efficient as ever

High output, but barely audible. The new Noise Reduction Hood

The Tornado is one of the quietest compressors in dentistry, yet it is still very powerful. The highly developed compressor set is extremely quiet, and can have a calming effect on both patient and practitioner. But how quiet is quiet? The answer is exceptionally so! The Tornado has a new aerodynamic noise reduction hood which ensures the unit does not exceed 54db(A) whilst in use. This equates to the volume of a light summer rain shower. According to the measurements of the Fraunhofer Institut für Bauphysik IBP, the Tornado 1 is the quietest compressor in the entire test series.

Less consumption, more efficiency

For decades the Tornado Compressor Programme has stood for quality at an attractive price. Efficiency was again boosted in the new model and energy consumption efficiently reduced by approx. 15%. Good for your operating costs and environmentally friendly.



ENERGY EFFICIENT



The optional Exhaust air system pulls warm air out of the installation area, thus creating optimum operational conditions for long service life.



WE NOT ONLY DEVELOP
FORWARD-THINKING SYSTEM SOLUTIONS,
WE ALSO TAKE THE ENVIRONMENT
INTO ACCOUNT

The membrane-drying unit – patented technology from Dürr Dental

Continuous performance thanks to the membrane-drying unit

Equipped with the innovative membrane-drying unit from Dürr Dental, the Tornado provides two unbeatable benefits:

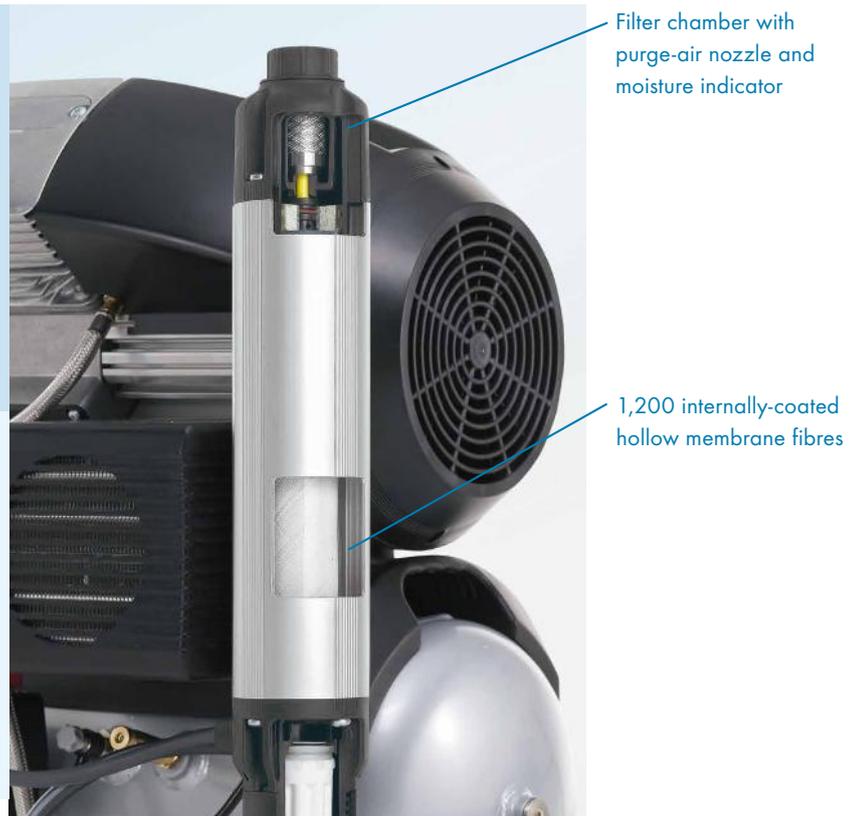
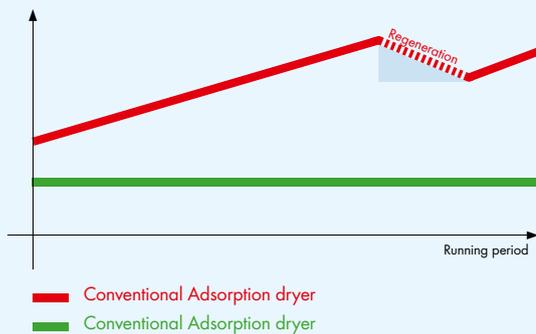
- Continuous performance at constant dryness, even during continuous operation.
- The membrane-drying unit creates constantly dry compressed air with a pressure condensation point of 5°C at 40°C ambient temperature, thus eliminating in the piping under normal conditions.

Since the membrane-drying unit prevents the formation of moist environments, microorganisms are denied a breeding ground. Dry air protects your instruments, conserves their value and helps ensure hygienic treatment conditions.

Result: The membrane-drying unit preserves your valuable instruments and prevents moisture effecting your treatments.

Features:

- Continuous performance even when operated by a large number of connected users
- Constantly dry compressed air, even during continuous use
- Protection of valuable instruments and treatment results
- Maintenance free, just one filter change per year



After longer operation of the compressors, moisture in the adsorption dryer increases. Yet the membrane dryer remains constantly dry and requires no interruption to supply.

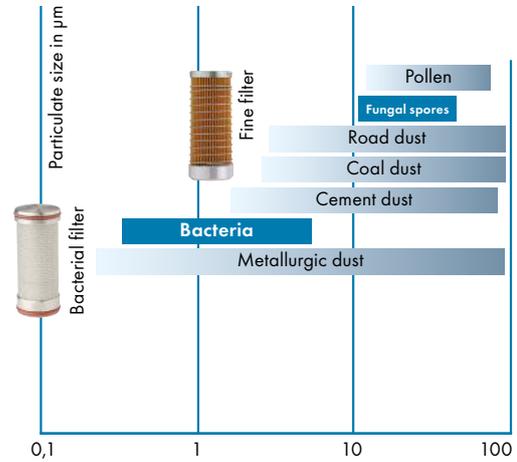
OUR CUSTOMERS MAY NOT BE TOO INTERESTED
IN OUR QUEST FOR PERFECTION.

BUT THEY PROBABLY ARE IN
MAINTAINING THE QUALITY
OF THEIR INSTRUMENTS
AND THEIR WORK

Small component. Big impact. Change filter once a year!

For full power, efficiency and value retention

The air-intake, sinter and fine filters for the membrane drying unit and compressor aggregates ensure the constant performance of your compressor. The bacterial filter rules out additional contamination by microorganisms such as fungi and bacteria in connection with the membrane drying unit. These filters are easy to change and must be done so only once a year – for full power, efficiency and value-retention.



Dürr Dental bacterial filter retain 99,9 % of the particles >0,22 µm.

The sinter filter in the membrane-drying unit performs an important role in the dry-air system, acting as an inflow filter. It should be replaced annually.

Water collector vessel with sinter filter

Working as an inflow filter, the sinter filter protects the subsequent components of the membrane-drying unit. The water is transported through a valve via the collector vessel.



1,200 interior-coated membrane hollow fibres

After the sinter filter, the compressed air is dried by the membrane hollow fibres.

open section of membrane-drying unit

Automatic condensate drain

Condensed water collects in the tanks of systems without a dry-air unit. They must regularly be emptied via a manually-operated valve.

The easily retrofitted automatic condensate drain has three advantages:

- You gain time. The drain takes care of the manual draining of water entirely on its own.
- The operating frequency of the compressor is reduced, since the available tank volume becomes ever smaller if the water is not drained. The compressor switches on less frequently with automatic condensate drain.
- Condensation from the tank is prevented from being transferred via the piping to the air consumers.



Technical data and accessories at a glance

Model	Tornado 1	Tornado 2	Tornado 4
Voltage (V)	230 (1~)	230 (1~)	230 (1~)
Frequency (Hz)	50/60	50/60	50/60
Cylinder	1	2	4
Flow rate at 5 bar (l/min)			
without membrane-drying unit	67/77	124/140	235/270
with membrane-drying unit	60/70	110/126	205/230
Tank capacity (l)	20	20	50
Pressure range¹⁾ (bar)	6-7,8	6-7,8	6-7,8
Noise level ²⁾ [dB(A)]	64	68	70
Noise level in the cabinet [db(A)]	54	56	
Dimensions (H x W x D cm)			
without membrane-drying unit	66 x 48 x 37	64 x 48 x 37	72 x 76 x 53
with membrane-drying unit	66 x 49 x 43	64 x 49 x 43	72 x 76 x 60
with noise reduction hood without membrane-drying unit	84 x 63 x 53	84 x 63 x 53	
with noise reduction hood and membrane-drying unit	84 x 63 x 60	84 x 63 x 60	
Weight (kg)			
without membrane-drying unit	32	38	85
with membrane-drying unit	37	43	90
with noise reduction hood without membrane-drying unit	45	51	
with noise reduction hood and membrane-drying unit	50	57	

¹⁾ Optional pressure reducer is available

²⁾ Averaged values at 5 bar without dryer



Tornado 1
with membrane-drying unit



Tornado 2
with membrane-drying unit



Tornado 4
with membrane-drying unit



All tornado-models also available without membrane-drying unit



Filter change required only once per year



Tornado 1 and 2 models are optionally available with the noise reduction hood.



Exhaust Air System for noise reduction hood with 150 mm connection (hose not included)

