## The next generation. Tyscor V/VS suction systems.





## The story of a new radical development

Over fifty years ago, ergonomic treatment reached a whole new level thanks to the dental suction systems from Dürr Dental. Using an innovative technological approach, the new generation of suction systems is now taking a quantum leap in terms of energy efficiency.

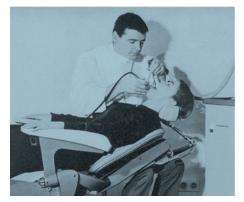
In 1964, Dürr Dental developed a new suction system that allowed patients to be treated in a supine position for the first time. Back then this was a sensational development, now we take it for granted. But it's far from the end of our quest to continue to be the best in class, or rather to be the best in class time and time again. We are committed to improving the things that are already good or embarking on new paths when the time is right so that our clients can pursue new avenues. Rising to this challenge that we have set for ourselves, we have developed a completely new suction system with radial technology: the Tyscor V and VS suction systems from Dürr Dental.

## OF DENTAL SUCTION UNITS FOR MORE THAN HALF A CENTURY









#### Wet

#### suction systems

A Dürr Dental VS suction unit is a power pack you can rely on. It concentrates all of the suction and separation in the practice into a single, compact unit. It can effortlessly handle the amounts of liquids processed by up to four therapists at the same time. In the process, thanks to the integrated two-stage separation system, the aspiration of secretions and blood foam into the turbine space is reliably prevented.

The reliable drive of the unit runs exceptionally quietly, and all important functional elements are protected against corrosion. Central installation in a multi-room practice places high demands on the cleaning and hygiene of the pipe network. With the flow accelerator developed by Dürr Dental, the suction system automatically eliminates the risk of deposits, odours and hygiene problems.



Tyscor VS 1 Plus





Wet suction unit for entry into the world of radial technology for a single user. Upgradable via licence key to two users working at the same time (Tyscor VS 2).

Tyscor VS 2





The compact and lightweight suction solution for two users. Intelligent control allows two suction units to be operated on a single suction pipe.

Tyscor VS 2 Plus





Wet suction unit for 2 therapists. Integrated touch screen display. Upgradable via licence key to 4 therapists working at the same time (Tyscor VS 4).

#### Tyscor VS 4



Wet suction unit for 4 therapists. Intelligent control allows two or three suction units to be operated on a single suction pipe.

#### Radially brilliant

#### Dental technology is undergoing a radical transformation

In addition to Dürr Dental's usual quality and reliability, the newly developed suction systems with radial technology in the Tyscorpremium range are up to 50% lighter and deliver potential energy savings of up to 75%\*. They truly are setting standards in terms of performance and efficiency.

#### Versatile

Whatever the conditions in the dental practice – star-shaped or linear pipe layout, dry or wet suction – Tyscor suction units are always the right choice. The Tyscor VS systems with attached rinsing unit can also be used in mixed systems with both dry and wet treatment units.

#### Tyscor V 4

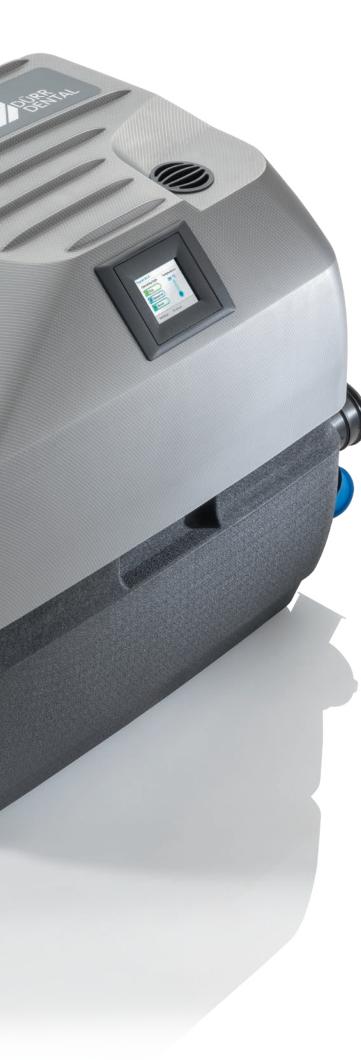
The dry suction systems from Dürr Dental combine extremely powerful performance with exceptionally quiet operation. For reliable protection against condensation water, all models are equipped with a condensation separator as standard. Thanks to the modular layout, it is easy to change over from a dry suction system to a wet one.



#### A good dentist thinks of everything - including safety

Safety is paramount: With certification in accordance with ISO 10637, the Tyscor V/VS 2 Plus and V/VS 4 fulfil international safety standards that are essential for the operation of a modern dental practice. This standard ensures that the devices used fulfil the highest requirements and offer reliable protection. In addition, our devices are certified as Class IIa medical devices in accordance with the MDR (EU 2017/745). They therefore fulfil all regulatory requirements and offer you security.





#### **Energy saving**

The radial technology of the Tyscor V and Tyscor VS units delivers outstanding performance, particularly in terms of energy consumption. Its load-dependent automatic adjustment provides constant suction at all times – and saves money in the process.

#### Network compatible

With network connectivity as standard, Tyscor V and Tyscor VS are not only ready for plug & play installation, but they can also be integrated just as easily via VistaSoft Monitor into the digital monitoring of practice supply systems. This means that staff always know the status of the devices.

#### Quiet

With a housing made of noise-absorbing, foamed plastic and an engineering design focused on quiet running, the Tyscor V and VS are two of the quietest suction units in their class without additional sound protection.

#### Plug & play

The compact and modular design not only makes commissioning and setup really easy, but also offers quick and easy maintenance. Thanks to the 230 V  $1^{\sim}$  supply, no three-phase AC current is required.

#### This is what counts:

- Up to 75% energy saving potential through the use of a radial compressor\*
- Perfect heat management low heat emission to the machine environment, thus the room is heated up less
- Upgrade capability and scalability thanks to the electronic control system
- Quick and easy plug & play installation thanks to the already integrated control system and 230 V supply (no three-phase AC current required)
- Increased operational reliability thanks to early warning messages and automatic maintenance reminders
- Modular layout, option of converting from a dry to a wet suction system

<sup>\*</sup> Measured on the Tyscor VS 4 and a comparable side channel compressor by the Fraunhofer Institute

## A system that grows with its challenges

The electronic control system in the Tyscor suction units offers a great degree of scalability. Starting with one therapist (Tyscor V/VS 1 Plus), upgradable via licence key to two therapists (Tyscor V/VS 2). If demand grows, it is possible to operate two Tyscor V/VS 2 units on a single suction pipe for use by up to four therapists simultaneously.

Tyscor VS 4 and VS 2 Plus offer full performance for four therapists with two suction stages. When operated in tandem, they can even supply reliable suction performance to up to eight therapists – and three Tyscor VS 4 units can be combined to deliver full power to twelve therapists.

# 1 user 2 users VS 2 Plus VS 2 Plus VS 1 Plus VS 2 VS 2

## Tyscor Tandem Flex. Scalability at all levels

#### Flexible and easy expansion for growing practices

With the simple expansion of a Tyscor to an existing suction system, our proven Tyscor systems offer full flexibility for the future of your practice.

This new function ensures that nothing stands in the way of expansion as your practice grows.

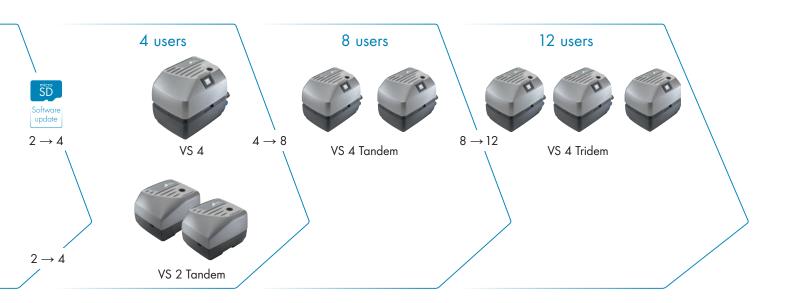
#### Cost-efficient and safe

Expanding existing devices instead of replacing them reduces investment costs and eliminates the need to install a second suction pipe to the suction unit. Automatic switching to the second device ensures uninterrupted treatment, even in stressful situations. Tandem operation ensures the operational reliability of the practice, even in the event of a device failure.

#### This is what counts:

- Reduces investment costs by expanding instead of replacing existing devices
- Adaptation to growing practice needs through uncomplicated expansion options
- Thanks to tandem operation, the practice can continue to operate even in the event of a device failure
- No installation of a second suction pipe from the assemblies to the suction unit is required

 $<sup>^{\</sup>star}$  This function is only available for the Tyscor V/VS 2 Plus and V/VS 4  $\,$ 





Expand your suction system effortlessly to include two or four users with the Tyscor suction systems.\*

#### Quality you can trust

#### Groundbreaking technology, made in Bietigheim-Bissingen

As an innovation leader, Dürr Dental constantly sets new standards in its development of products and services. In everything it does, Dürr Dental strives to deliver maximum quality and absolute reliability. Certified to ISO standards, nearly all of our production takes place in Germany.







Operational

reliability with 2 suction

stages\*

#### Hybrid ball bearings with ceramic balls designed to meet the highest demands

Even the simplest of parts have the highest level of quality and precision. The hybrid ball bearing combines steel with high-quality ceramic balls for smooth and reliable operation, even at high speeds. It helps to ensure that our suction unit works efficiently and requires minimal maintenance.



#### Controller [1]

An integrated control module adapts the power of Tyscor suction systems to demand, thereby delivering energy efficiency. The standard network connection and the software provide a continuous overview of the operating status and allow the desired suction mode (Eco, Balanced or Boost) to be selected with ease. With Tyscor V/VS 4 the settings can be adjusted directly via the integrated touch screen.

#### Housing [2]

As always with Dürr Dental, the design principle of form follows function also applies to the housing. The half-shell chassis made of foamed plastic is extremely lightweight. The embedded modular interior comes out without having to remove any fixed screws, which not only enables easy operation (simply connect the hoses and the plug), but also allows for easy maintenance and any repairs.

#### Suction unit [3]

A vacuum compressor with radial technology is used for the first time in the suction unit of the Tyscor V and VS systems. This technological innovation delivers spectacular performance, in particular where energy consumption is concerned. In addition, the small impeller with high air gaps and the hybrid engine mounts allow for a compact design and maximum reliability.

#### Separation [4]

For the separation unit of the Tyscor VS systems, tried-and-tested Dürr Dental technology has been perfectly adapted to suit the new machine concept. An integrated speed monitor controls the speed of the separation unit and even switches off the machine before a defect can occur. Thanks to their modular design, the dry Tyscor V systems can be easily converted to wet Tyscor VS systems, offering maximum flexibility and investment protection.

### Stay relaxed with a clear view of everything - with VistaSoft Monitor

#### Ensuring forward-looking surgery operation

VistaSoft Monitor, the smart home for the dental practice, assists with the collection, transmission and analysis of status-based equipment data, thereby enabling practices to respond and act with an efficiency never seen before.



The innovative cloud-based software solution from Dürr Dental integrates every device in the practice network – from supply systems to hygiene units and imaging systems. ensuring that a constant overview of the current status of monitored systems is always provided. Potential sources of errors are detected in good time and reported to the practice team, and, if required, directly to the specialist partner. This is based on a concept that enables a forward-looking, condition-based service and can thus ensure reliable operation of the dental practice.

#### This is what counts:

- Increased operational safety of devices thanks to early warning messages and automatic maintenance reminders
- User-friendly adjustment of device settings to the conditions in the practice (e.g. suction power modes Eco, Balanced or Boost)
- Efficient communication with the Service department, rapid analysis and fast problem solving via remote maintenance or through on-site visits by technicians who come perfectly prepared.
- Automatic notification of maintenance intervals and messages





## Keep your suction system in good shape!

Around half of all suction units suffer from restricted performance due to deposits and blockages. This is because most units are disinfected but are not cleaned as well. This results in substances such as blood, secretions, tooth material, filling materials and prophylaxis powder forming a dense sludge. In turn, this leads to blockages (obstruction of the suction unit), which can lead to a drop in performance and – in the worst case – complete standstill of the surgery.





#### The solution from Dürr Dental: Orotol plus and MD 555 cleaner

In combination, Orotol plus and MD 555 cleaner protect all components of a suction unit (including the lines) against deposits, contamination and encrustation. If used regularly, they can prevent a reduction in performance and extend the life of your suction unit.

For more information please visit: duerrdental.com/orotol

#### Dürr Dental recommends:

- For disinfection and cleaning: Orotol Plus and Orotol ultra
- For cleaning: MD 555 cleaner

Only these products have been tested by Dürr Dental. When using prophy powders, Dürr Dental recommends the water-soluble Lunos Prophy Powders in order to protect the Dürr Dental suction systems.



#### Technical data at a glance

Tyscor suction system	V 1 Plus	VS 1 Plus	V 2	VS 2	V 2 Plus	VS 2 Plus	V 4	VS 4
Voltage (V)	230 (1~)	230 (1~)	230 (1~)	230 (1~)	230 (1~)	230 (1~)	230 (1~)	230 (1~)
Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Max. electrical output (kW)	0.68	0.77	0.68	0.77	1.3	1.4	1.3	1.4
Current consumption (A)	3.0	3.3	3.0	3.3	5.8	6.2	5.8	6.2
Max. vacuum mbar (hPa)	150	150	160	160	145	145	145	145
Number of operators	1	1	2	2	2	2	4	4
Dimensions without housing (H x W x D cm)	49 x 36 x 61	32 x 36 x 46	49 x 36 x 61	32 x 36 x 46	62 x 45 x 78	51 x 45 x 69	62 x 45 x 78	51 x 45 x 69
Dimensions with housing (H x W x D cm)	52 x 45 x 71	39 x 45 x 52	52 x 45 x 71	39 x 45 x 52	-	-	-	-
Weight without housing (kg)	9	11	9	11	19	24	19	24
Noise level <sup>1</sup> without housing [dB(A)]	Approx. 55	Approx. 53	Approx. 57	Approx. 55	Approx. 62	Approx. 61/64	Approx. 62	Approx. 61/64
Noise level <sup>1</sup> with housing [dB(A)]	Approx. 49	Approx. 48	Approx. 52	Approx. 50	-	-	-	-

<sup>1)</sup> The noise level applies to the suction unit and is affected by the room in which the unit is installed. In a reverberant room (e.g. tiled walls), the noise level may be higher.











#### Accessories



Noise reduction hood Tyscor V/VS 1/2



Upgrade kit for Tyscor V/VS 1 and Tyscor V/VS 2 Plus



Exhaust air virus-bacteria filter





