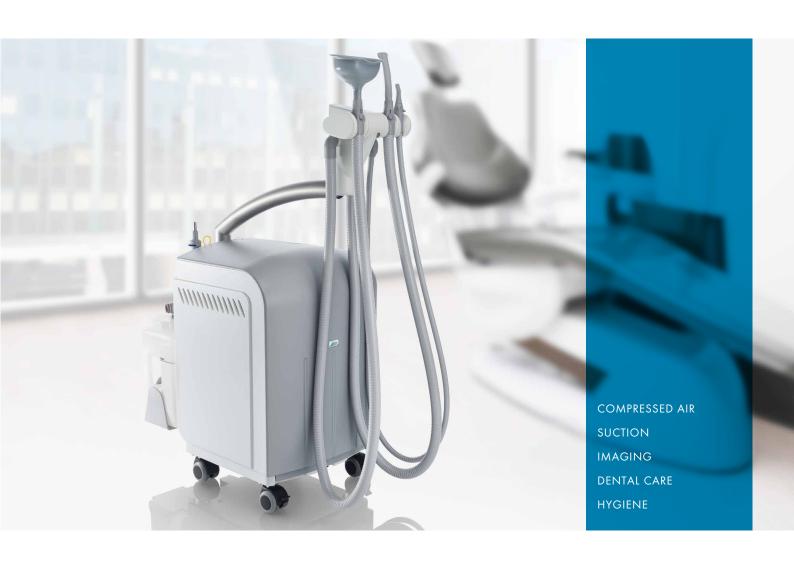
# Intraoral high volume suction Variosuc - Safety with 300 l/min





# Mobile & flexible spray mist suction - Safe treatment at every location

Depending on the conditions in the dental practice or the area of application, the question of adequate infection protection arises, above all through a highly efficient aspiration of germ-contaminated aerosol. With the Variosuc, Dürr Dental offers a mobile and ready-to-use spray mist suction system for one dental chair that can be used flexibly and without prior installation effort in the dental practice. Plug in – get going! This means that even under extraordinary conditions, there is no need to do without a highly efficient Dürr Dental suction system. For difficult installation conditions in a dental practice the Variosuc can also become a permanent stationary solution, e.g. in the prophylaxis room.

#### This is what counts:

- Mobile high volume spray mist suction with 300 l/min
- Only electricity is needed, no other requirements necessary
- Vacuum generation and separation in one compact unit, even comes with amalgam separtion on request
- Integrated secretion vessel, also adaptable for direct drainage if required
- Integrated virus-bacteria filter for hygienic exhaust air
- Sound-absorbing hood for low-noise operation
- Comfort hose manifold with up to 3 hose components (e.g. large suction hose, saliva cannula and spittoon)



Variosuc: The mobile high volume spray mist suction system for one dental chair and immediate use.

The Variosuc builds on the established Dürr VS-technology with separation and vacuum generation on one drive shaft and in the case of VSA with amalgam separation as well. The robustness of this technology ensures that this reliable system is always ready for use. Secretions are collected in the secretion vessel or alternatively can be discharged directly into the waste water outlet.

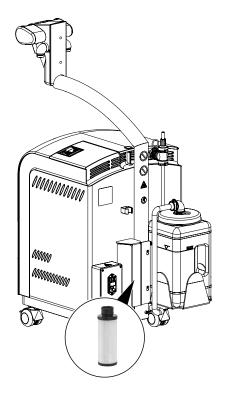


# So that you remain healthy – intraoral spray mist suction for up to 100% aerosol reduction\*

Without spray mist suction, cooling spray from fast-running and ultrasonic instruments can cause an aerosol cloud to spread throughout the entire treatment room. Thanks to intraoral suction systems with a suction performance of around 300 l/min, the resulting risk of infection is efficiently reduced. It is important that the spray mist becomes aspirated within the patient's mouth, so that no aerosol can be emitted in the first place\*. Because what does not leave the mouth does not have to be eliminated afterwards. Thus, using the correct intraoral suction with spray mist cannula, makes an important contribution to infection protection for the dentist, the surgery team and the patient.



Suction with a powerful spray mist suction system is the only effective way to reduce aerosols (Source: Tillner, 2016). In addition, always work with a large suction cannula.



#### What you should consider:

- High suction volume of around 300 l/min per therapist
  (Source: Barnes, J. B., Harrel, S. K., Rivera-Hidalgo, F. (1998))
- Consequent use of a high-volume suction system with a Suction cannula of at least 10 mm diameter (Source: S1-Leitlinie Aerosol-übertragbare Erreger", AWMF-Register-number: 083-046 from march 2021)
- Working with a large suction cannula with secondary air inlet
- Robust suction units for reliable, continuous operation
- Working with a saliva ejector only or venturi system (volume flow
  200 l/min) is not sufficient to reduce aerosols\*
- Proper and regular cleaning and disinfection of the suction system with Orotol® plus and MD 555 cleaner

#### Integrated exhaust air virus-bacteria filter

For hygienic reasons we recommend installing a virus-bacteria filter in the exhaust air line. The Variosuc already has this integrated as standard - for an entirely hygienic suction system.

The Università di Camerino has tested the virus-bacteria filter with the bacterium Staphylococcus aureus ATCC and a retention of >99.999% was confirmed. With the virus PhiX174 (size of 25-30nm) a retention of >99.99% was confirmed.

Filter quality HEPA H14 according to EN 1822-1:2019-10.

<sup>\*</sup>Measurement results from internal study, September 2020, Dürr Dental

## Technical Data Variosuc

|  | Variosuc VS    | Variosuc VSA     |
|--|----------------|------------------|
| Voltage (V)  | 230 (1~)       | 230 (1~)         |
| Frequency (Hz)   | 50/60          | 50               |
| Electrical output (kW)                                     | 0,58           | 0,58             |
| Current consumption (A)                                    | 2,9            | 2,9              |
| Max. flow rate (I/min)                                     | 4              | 4                |
| Vacuum (mbar)  | 180            | 180              |
| Number of operators  | 1              | 1                |
| Effective volume of secretion collector (I)                | 3              | 3                |
| Effective volume of amalgam collecting vessel (cm³)        | -              | ca. 150          |
| Replacement interval of amalgam collecting vessel (months) | -              | 6 - 9            |
| Dimensions (H x W x D cm)                                  | 90 x 36,5 x 64 | 90 x 36,5 x 64   |
| Weight (kg)  | 31             | 32               |
| Noise level¹ [dB(A)]                                       | ca. 54         | ca. 54           |
| Separation efficiency² (%)<br>Quality mark                 | -              | 99<br>Z 64. 1-15 |

<sup>&</sup>lt;sup>1</sup> Total noise level depends on the room where installed. In a reverberant room (e.g. tiled walls) the noise level may be greater.

#### Cannulas for hygienic suction





### Effective reduction of contaminated spray mist using secondary air inlets to prevent reflux from the suction system

When treating adults, a cannula with a large diameter (16 mm) should always be used. A saliva ejector or a cannula with a very small diameter will reduce the suction volume and therefore eliminate much less spray mist.



 $<sup>^{\</sup>rm 2}$  Separation rate by ISO 11143.