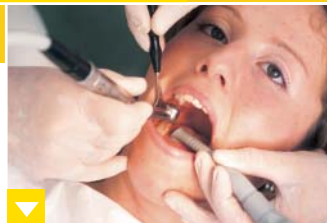


# Suction without disruptive extraneous noises

THE NEW GENERATION OF SMALL AND EFFICIENT SEPARATING SYSTEMS



Reliable technology in elegant attire - CA 1, CAS 1 and CS 1



Dürrent suction systems deliver low-noise and trouble-free suction in the practice



Flexible and space-saving integration into leading treatment units

# The secret of advanced treatment units

## RELIABLE SEPARATING SYSTEMS FOR SUCTION IN THE PRACTICE

### Silent stars in the unit

With the introduction of the C generation of separating systems Dürr Dental has set new standards for "dry" suction systems. The noises from the spittoon caused by the separation process are reduced to a barely audible minimum: "silence inside". And because of their reliable continuous operation the C separating systems generally ensure "peace" in the practice as well. This progress goes by the names of:

- ▶ CS 1 Combi-Sepamatic
- ▶ CAS 1 Combi-Separator

They are quick and easy to install and make a valuable addition to any treatment unit.

The separating performance of the C generation shows off the benefits of "dry" Dürr suction systems to their best advantage:

- ▶ Flexible installation conditions because the separating systems are integrated into the treatment units
- ▶ Short transport distances for the aspirated substances
- ▶ Complete separation of air-solid-liquid constituents in the centrifuge
- ▶ Amalgam separation rate of almost 98% with the CAS 1
- ▶ Dry, clean air channels to the suction machine with no deposits in the pipes
- ▶ High suction performance within seconds
- ▶ Robust and trouble-free during continuous operation.



CS 1 Combi-Sepamatic – purely a separating system



CAS 1 Combi-Separator – a separating system with integrated amalgam separator



Dürr V suction machines - central vacuum generators of the "dry" Dürr suction systems

## CS 1 – a small and compact separator

The CS 1 Combi-Sepamatic has a quiet but powerful motor enabling it to process without difficulty high volumes of fluid for hours at a time. The two-stage separator not only separates the secretions and solid particles, e.g. filling materials, from the exhaust air. It also protects the “dry” suction machine by preventing blood from being carried along during aspiration. Where surgical treatment is being carried out or with frequent use of powder jet devices, a rinsing unit can be connected to increase operational reliability. The small quantity of water continuously supplied by the unit dilutes the blood and prevents particle deposits.

- ▶ Consistently high separating performance
- ▶ Low-noise operation
- ▶ Two-stage separation
- ▶ High foam tolerance
- ▶ Flexible installation because of the unit's compact construction and because the required position selection valve can be installed independently in the spittoon or even at the floor box.

## Separator and amalgam separator in one unit – CAS 1

Small, compact, quiet and easy to install, the CAS 1 Combi-Separator combines air-water separation and amalgam separation. The two-stage system with a cyclone separator and dynamic separation turbine achieves a much higher separation capacity than conventional technology. The amalgam separator is on the same shaft as the air-

water separator but not directly connected to it, thus saving the use of a spittoon valve. The ISO standards define the minimum European requirements for amalgam separators. In Germany this is regulated by the extensive construction and test principles of the German Institute for Structural Engineering (DIBT) Berlin. The amalgam centrifuge of the CAS 1 meets these conditions with its proven separation rate of almost 98 %. As with the CS 1, connecting an additional rinsing unit to the CAS 1 can also prevent deposits and coagulation of blood. Apart from extending the components' service life this also significantly improves the hygienic condition of the overall suction system.

- ▶ Two functions in a compact form
- ▶ Cushioned hose connections ensure low-noise, vibration-free operation
- ▶ Amalgam centrifuge is self-cleaning
- ▶ High foam tolerance
- ▶ Amalgam separation rate of 97.9%, test no. Z 64.1-20 from the DIBT, Berlin
- ▶ Fully integrated display module
- ▶ No spittoon valve required
- ▶ Position selection valve can be flexibly installed.

## CA 1 – amalgam separation behind the suction unit

Because of the installation conditions at their practices some dental practices favor a “wet” suction system with secretion-conducting paths up to the suction unit with combined separation and vacuum generation. Now these practices too can use the new technology of the Dürr C separating systems

for amalgam separation. For example, the CA 1 amalgam separator installed behind a Dürr VS 300 (S) attains the same proven separation rate as the CAS 1 and also dispenses with sensitive electronic conductivity sensors of conventional separators which frequently tend to be less reliable.

- ▶ CA 1 amalgam separator
- ▶ Low-noise operation with/without housing
- ▶ Amalgam centrifuge is self-cleaning
- ▶ Amalgam separation rate of 97.9% test no. Z 64.1-20 from DIBT, Berlin
- ▶ Can be installed as an auxiliary device or behind a VS 300 (S) or Cattani Turbo-Jet 1, PAL 14.\*



The CA 1 provides amalgam separation for the combination suction unit Dürr VS 300 (S).



Dürr Dental recommends waste disposal companies that are able to accept filled amalgam collection vessels.

\*At a max. Ø total water throughflow rate of 4 l/min.

# The technology at a glance

## DÜRR C SEPARATING SYSTEMS

| C separating systems  | CS 1<br>7117-70/-71 <sup>1</sup>   | CAS 1<br>7117-20/-21 <sup>1</sup>    | CA 1<br>7117-80/-81 <sup>2</sup>     |
|---|------------------------------------|--------------------------------------|--------------------------------------|
| Voltage (V)   | 24                                 | 24                                   | 24                                   |
| Frequency (Hz)  | 50 – 60                            | 50 – 60                              | 50 – 60                              |
| Electrical power (W)  | 60                                 | 60                                   | 60                                   |
| Current consumption (A)                                       | 2.5                                | 4.0                                  | 4.0                                  |
| Max. rate of fluid flow (l/min)                               | 2                                  | 4                                    | 4                                    |
| Dimensions (H x W x D, cm)<br>without housing<br>with housing | 12.5 x 15 x 12<br>43.5 x 25.5 x 16 | 25.5 x 15,1 x 11<br>43.5 x 25.5 x 16 | 25.5 x 15,1 x 11<br>43.5 x 25.5 x 16 |
| Weight<br>without housing (kg)<br>with housing (kg)           | 1.4<br>7.4                         | 2.7<br>8.7                           | 2.7<br>8.7                           |
| Separation rate (%) <sup>3</sup>                              | –                                  | 97.9                                 | 97.9                                 |
| Test no.  | –                                  | Z64.1-20                             | Z64.1-20                             |

<sup>1</sup> with/without rinsing unit

<sup>2</sup>-81: Special kit for installation behind VS 300 (S)

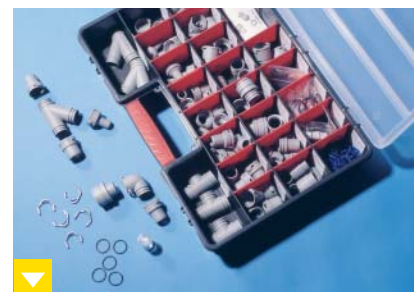
<sup>3</sup> Separation rates measured by the TÜV [technical monitoring authority] Essen in accordance with the German standard test at maximum rate of fluid flow



CS 1, CAS 1 and CA 1 can be used externally in the practical housing.



Rinsing unit for producing a fine film of water that protects the separation machine from deposits.



Carrying case for DürrConnect and Dürr-Connect Special.

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