



# **MICRO SMART** **SINGLE SURGERY**

FLEXIBLE RELIABLE POWERFUL



# FLEXIBLE, RELIABLE AND POWERFUL SINGLE SURGERY, VARIABLE SPEED SUCTION SYSTEM

## CATTANI MICRO SMART

Designed with three different preset vacuum settings: 70, 100 and 210 millibar, Micro Smart can easily adjust to different demand for the surgeries. These preset values have been set according to some experts suggestion however, different settings can be programmed by the operator at any time.

By pressing the desired preset button on the control panel, the vacuum level can be easily set according to the type of procedure being performed. The system can also be controlled remotely via the WI-FI connection.



### **70 MBAR**

Is recommended for the use of the saliva ejector to maintain a low level of fluids at the base of the mouth, without damaging delicate tissues.



### **100 MBAR**

Is recommended for the use of the HVE spray interceptor which aspirates the stream of water and air from the syringe and rotating instruments, such as the sprays from scalers. Keeping discomfort and noise caused by the aspirated air to a minimum.



### **210 MBAR**

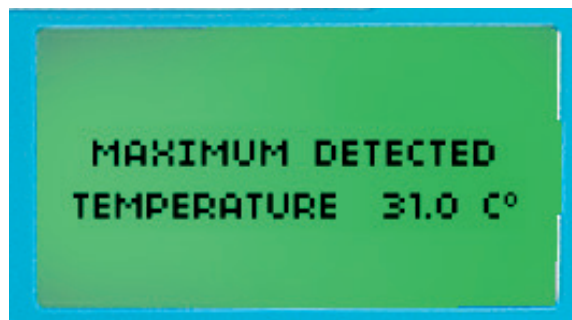
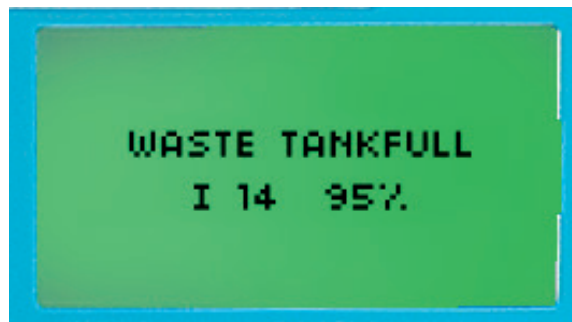
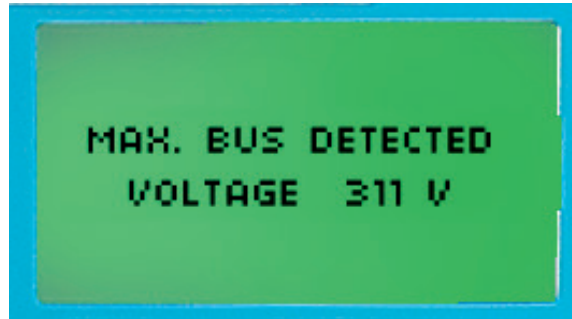
Recommended for the use of the surgical tip, which keeps the operating area clear and provides good visibility, also aiding in cross infection control.



Cattani Micro Smart units are supplied with a 3 year warranty\* (subject to terms and conditions of servicing schedule).

## A DISPLAY THAT COMMUNICATES

Through simple and easy operations on the keypad you can monitor the operating status of the suction system. The unit's software monitors a range of technical parameters, allowing precise analysis of any possible anomalies. The unit also has a memory function, which records a log of any errors.



**Thanks to the inverter control and computerised program Micro Smart is able to handle a range of unexpected situations.**

- 1.** In difficult operational conditions, for example high temperatures, Micro Smart continues to operate without any damage to the unit. It does this through automatically decreasing the vacuum level until the temperature returns to normal.
- 2.** In the case of excessive fluids from the surgeries entering the Micro Smart, an auto-protection system operates, momentarily opening a re-circulation valve, thus stopping the unit from being flooded. This also causes a momentary decrease in the speed of the suction motor, with the surgeries only noticing a minimal fluctuation, if any at all, as the system goes back to its previous speed once the fluids are processed.
- 3.** In cases of sudden voltage fluctuations and/or current overload within the system's parameters, the system continues to operate, thanks to Micro Smart's computerised control.
- 4.** Possible operating anomalies are shown on the display during operation and will be recorded. This 'self-diagnosis' greatly helps clinic staff and service technicians to identify and rectify an issue.

## ACTIVE SELF-PROTECTION

Through the inverter control system and a computerized programme which monitors the operational parameters of the machine, Micro Smart can adjust to cope with various extreme conditions.

This unique feature allows Micro Smart to continue running, unlike fixed speed aspirators which will fail over time.

For example:

- In environmental conditions, such as high temperature, the suction unit will not stop and will suffer no damage, it automatically decreases vacuum for the time needed to restore the correct operating temperature;
- If there is a sudden wave of liquid from the surgery, the suction unit will not overflow but goes into active self-protection, the recirculation valve opens, suction slows down, the centrifugal separator absorbs the current spared by the suction unit and, once the wave has been dealt with, the suction unit will resume regular operation;
- If there is any sudden voltage change or power surge, within pre-set limits, the electronics protects the machine allowing operation to continue;

Any problems occurring during operation are highlighted on the display.



### WI-FI CONNECTION

Micro Smart can be connected wirelessly to a computer within the clinic, from this computer the dentist can check and modify the functioning of the aspirator without leaving the surgery. This allows the dentist to work more efficiently, providing the correct level of vacuum for the procedure being carried out.

The wifi connection will also alert the dentist to any problems and can also be used to send an email as a reminder that an annual service is due, this in turn further ensures the reliability of the unit.



## ADDITIONAL EXTRAS

**Sound-Reducing Cover** for motor can reduce noise levels to 63 - 68.5 dB(A)

**Sound-Reducing Cabinet** can reduce noise levels to 41 - 48 dB(A)

**Outdoor Housing** which is temperature controlled with a thermostatic cooling fan

## Micro Smart

No. of Surgeries:	1 surgery
Output power:	1.12kw 8A 230V 50Hz
Max. flow:	900 l/min
Max. vacuum level:	210mbar (continuous service)
Noise level:	64-71dB(A)
Dimensions:	W370 D340 H590 (mm)
Net Weight:	23kg
Gross Weight:	33kg
TUV certified:	98.9% amalgam retention

## MICRO SMART IS A SUCTION SYSTEM DESIGNED AROUND THE PRINCIPLES OF ECO-SUSTAINABILITY:

- reduction in materials used to produce the unit;
- the use of VSD (Variable Speed Drive) technology results in longer motor life, reduction in electrical consumption and operating costs;
- unique flexibility and new performance options to the clinic that were previously unavailable.

Micro Smart's suction motor weighs only 7kg, however thanks to VSD technology it outperforms suction motors of double its weight and dimensions. The VSD facilitates optimal utilisation of the motor and reduces operating costs.

The energy saving is most evident when the suction is underutilised; when the demand on the suction decreases the VSD reduces the power frequency to reduce speed. A reduction in motor speed results in a reduced energy absorption by the motor, providing a saving in electrical consumption.



WE HAVE BEEN SPECIALISING WITH AIR TECHNOLOGY  
FOR OVER 50 YEARS:  
SPECIALIZATION HAS GIVEN EXCELLENT RESULTS.

**HOW IS IT WE LEAD IN OUR FIELD, WHEN WE COST LESS THAN THE ALTERNATIVES? THIS IS HOW:**

**Constant research:** this lets us apply the latest technology in all of our products and solutions.

**We enhance performance:** electronic and information technology allow us to increase the performance and reliability of our products.

**We reduce costs:** less maintenance and energy costs mean on a cost-benefit analysis we are always the most economical.

**We reduce environmental impact:** we save 50% on raw materials in the production stage and our customers save between 30% and 50% on electrical consumption thanks to inverter drive technology.