



Smart By Design Flexible By Nature

A Suction System With **Serious Smarts**

The Cattani Turbo SMART is the most powerful semi-wet suction system of its kind*. It's also the smartest. Its variable speed drive senses changes in how the suction is being used and automatically adapts to provide you with powerful vacuum and high airflow.

The Turbo SMART can also be supplied with (or retro-fitted at a later date) the Cattani ISO-18 Amalgam Retention system, which is compliant to ISO 11143 and has a retention rate of 98.1%.

**Cattani Turbo SMART has a maximum pressure of -210 mbar.*



How SMART?

Turbo SMART is as smart as a suction systems get. It constantly detects the demand on the system by sensing the vacuum level in the suction line. When the vacuum level drops, indicating that the number of surgeries using the suction has increased, Turbo SMART reacts by increasing the speed of the suction motor. When the vacuum increases, indicating that less surgeries are using the suction, Turbo SMART slows down. And it all happens instantly and automatically.

Smarter than a fixed speed system



Just as you drive your car at different speeds for different situations, so too does your suction system benefit from being able to react to varying performance conditions, such as volumes of fluids in the main pipe or the volume of air being aspirated into the system.

Power and consistent performance are SMART. But so too are flexibility and efficiency.



One machine, two possibilities

Two models of Turbo SMART are available:



Turbo Smart A

- Turbo SMART A for 2 surgeries (max speed 4800 rpm)



Turbo Smart B

- Turbo SMART B for 3-4 surgeries (max speed 6200 rpm)*

Both machines have the same hardware, the only difference between the A and B is their maximum speed. As your surgery expands, you can upgrade your Turbo SMART A to a Turbo SMART B by simply purchasing and entering a Password.

**Turbo SMART B is recommended for 3 surgeries when connected to a suction line with a diameter of 40mm, and 4 surgeries when connected to a suction line with a diameter of 50mm. Please contact your Cattani dealer for further information.*



SMART Performance

Turbo SMART provides powerful performance, both in terms of airflow and vacuum levels. Whereas in the past clinics selecting a suction system had to decide between which performance characteristic they would prefer (either high airflow or strong vacuum levels), Turbo SMART provides both in the one unit.

Vacuum

Turbo SMART has a maximum vacuum level of -210 mbar (the ISO standard for Dental Suction, ISO 10637, states -250 mbar as the maximum permissible vacuum level). This level of vacuum is most noticed when working with smaller tips, and aspirating fluids. It also assists in aspirating fluids along suction lines.

Airflow

Thanks to its variable speed drive, Turbo SMART provides you with high airflow at the suction tip. The system varies its speed, and therefore airflow, dependent on how many surgeries are using the suction at that time.



Managing Amalgam

The ISO-18 Hydrocyclone has been specially designed to separate amalgam particles aspirated by Turbo SMART. Without the need for a pump or motor, the system achieves retention centrifugally, by harnessing the fluid pressure generated by the Turbo SMART air-fluid separator.

The Hydrocyclone can be purchased together with the Turbo SMART, or retro-fitted at a later date. It's the SMART choice.

The ISO-18 complies to ISO 11143 and achieves a retention rate of 98.1%.

Simple design and effective retention

Rather than use extra motors or drives, the ISO-18 relies on fluid pressure generated by Turbo SMART to achieve retention. The result is an amalgam retention system that is simple and effective.



Turbo SMART with ISO-18



Turbo SMART without ISO-18



SMART control



As well as monitoring how the suction is being used and controlling performance to suit, Turbo SMART's control system provides the clinic with flexibility and important information on the equipment.

Flexibility

Through the Turbo SMART control system, several parameters can be set to suit the clinic and work being performed. The time that the system runs on once all suction hoses are replaced in the surgeries can be adjusted up to several minutes (particularly useful for long suction lines and basement plant-rooms). So too can the maximum vacuum level be adjusted, if the clinic requires less operating pressure.

Information

Through the unit's screen and touchpad, information on the running of the unit can be accessed. Information includes unit temperature, maximum temperature reached, amalgam cup level (either 95% full or 100% full), hours run and operating pressure.

Coming Soon – SMART Connectivity

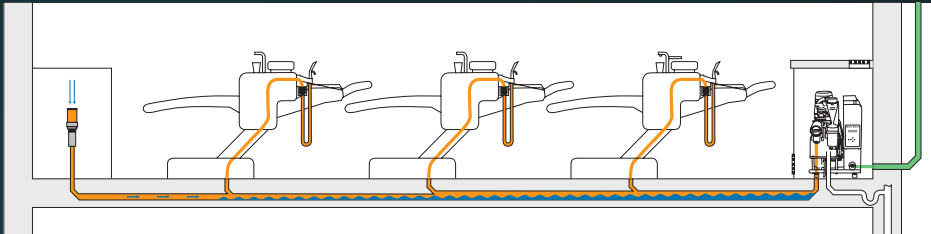
Turbo SMART will soon have the functionality to connect to your clinic's computer via a wireless network. Once connected, running data and information on the unit can be easily monitored from a computer in the clinic, making information such as full amalgam cups, plant-room temperatures and other running data easily accessible. Warnings and other alarms can also be viewed on the computer connected to the system.

Please check with Cattani as to when Turbo SMART will be available with connectivity to your clinic's computer. Generation III Turbo SMARTs will be upgradeable to SMART connectivity when this system is released.



Installation

To ensure the optimal performance and reliability of your system, it is essential that your Turbo SMART unit be installed correctly. Your Cattani dealer will discuss with you the various installation options available and recommend that which best suits your clinic. Below are some of the installation factors to be considered:

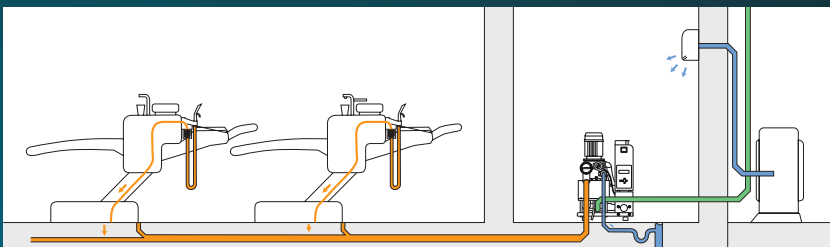


Air Injection

At times when there is little or no air being aspirated into the suction system, fluids in the pipeline can greatly slow or even completely stop. To facilitate the movement of fluids towards the plant-room we recommend that an air injector be fitted somewhere near the end of the main suction line. The air injector is a small, spring loaded valve, which opens under negative pressure. During normal operation, when one or several HVE tips are being used, the valve remains

closed, however when there are only small volumes of air entering the system, the valve opens and allows air to be aspirated through the main suction line, keeping the fluids moving towards the Turbo SMART.

Air injection is of particular use when spittoon valves (which introduce a relatively high volume of fluids into the suction system) are present in the system.



Air Conditioned Plant-Room

The optimal solution for both your suction unit and compressor is a sealed and air-conditioned plant-room. The controlled temperature has a big impact on the longevity of your equipment. Furthermore, noise emitted from the plant-room is greatly reduced, as there are no vents (through which noise escapes) as is required for a normal installation.

Air-conditioning can be fitted to both inside plant-rooms and external plant-rooms. Many existing plant-rooms with standard ventilation systems can also be upgraded to have air-conditioning. Speak to your Cattani dealer for more information or advice on what will best suit your clinic and equipment.

CAPS

CAPS is a sealed, weatherproof plant-enclosure, fitted with an air-conditioner and designed to house a Turbo SMART and Cattani compressor. The unit is lined with acoustic foam to reduce noise levels, and comes standard with keyed locks and an internal light. CAPS can house a Turbo SMART and either K200 or K300 compressor.



Doubly Smart. Our Tandem Systems.





The standard Turbo SMART is equipped to work in tandem with other SMART units. As the system monitors vacuum levels in the suction line and adapts performance to suit, two or more Turbo SMARTs can be connected to the same line and work together, without the need for any electrical communication between them. Not only does this mean no extra control panel, but that you have built in back-up should there be an issue with one unit.

We can supply Tandem SMART units as a kit, supplied on a frame of extruded aluminium. The kit includes all plumbing required to connect the systems (for suction inlet, waste and exhaust air). Such kits can be supplied for the Tandem and Triple SMART systems. Such kits can be supplied for the Tandem and Triple SMART systems, and come at no extra cost.

Multiple Turbo SMART Units

Number of surgeries

Up to 5	2 x Turbo SMART A
Up to 8	2 x Turbo SMART B
Up to 12	3 x Turbo SMART B
Up to 16	4 x Turbo SMART B

Frames can also be made to accommodate a compressor atop the SMARTs. Please speak to your Cattani dealer for further information.





Plant Room

Cattani SUPPORT

We are here to assist you with the design and planning of your plant-room and pipeline in order to ensure performance and longevity of equipment.

Feel free to contact our Technical Support Team at any time to discuss any part of your installation and associated equipment.

To assist you in the planning and design of your clinic, we have a plant-room website, which presents the main concepts and issues to be aware of in designing a plant-room that works for your clinic, your staff and your equipment.

You can access the website at

www.plantroom.com.au



Turbo SMART Technical Data

MODEL	Turbo SMART A	Turbo SMART B
Number of operators	2	3 with 40mm main suction line 4 with 50mm main suction line
Rated current	7 Amp	9.8 Amp
Rated kW	1.45 kW	1.87 kW
Suction control	Variable speed suction	Variable speed suction
Maximum RPM	4800 RPM	6200 RPM
Maximum negative pressure*	-210 mbar	-210 mbar
Sound level**	68.2 dB(A)	69.6 dB(A)
Sound level with cover**	67.3 dB(A)	68.7 dB(A)
Dimensions	Height: 650mm Depth: 355mm Width: 400mm	Height: 650mm Depth: 355mm Width: 400mm
Weight	39.5 kgs (with ISO)	36 kgs (no ISO)

ISO-18 Amalgam retention system	Turbo SMART A	Turbo SMART B
Maximum flow	18 l/min	18 l/min
Minimum flow	0.5 l/min	0.5 l/min
Retention rate	98.1%	98.1%
Standard	Complies to ISO 11143 – Dental Equipment Amalgam Separators	

* Maximum negative pressure can be easily lowered through the control system.

** Sound pressure level tested according to the standard ISO 3746-1979 (E).

Parameters: r or d = 1,5 – background noise: 34 dB (A) – instrument Bruel & Kjaertype 2232.
Sound pressure level registered at maximum speed and head.



Turbo SMART with
ISO-18 amalgam retention



Turbo SMART without
ISO-18 amalgam retention



**For further information please visit
our website at www.cattani.com.au**

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...because we're the specialists



Cattani Warranty

This Cattani Warranty is given by Cattani Australia Pty Ltd ACN 004 715 315315 of 280 Dundas Street, Thornbury Vic 3074 Ph: 03 9484 1120 Fax: 03 9484 4052. **All warranty claims must be made through the Cattani distributor from which the products are purchased or ordered.**

Warranty Terms

1. Definitions

In this warranty:

ACL means Australian Consumer Law.

Cattani means Cattani Australia Pty Ltd ACN 004 715 315 of 280 Dundas Street, Thornbury Vic 3071.

Distributor means a distributor who is authorised by Cattani to sell Cattani Products and accept Cattani warranty claims.

Product(s) means a Cattani product sold by Cattani or its distributors from time to time.

Purchaser means the purchaser of a Product from Cattani or a Distributor.

Warranty Period means (unless otherwise stated):

- (a) for the Cattani range of compressors - 5 years, parts and labour;
 - (b) for the Cattani range of suction systems – 2 years, parts and labour;
 - (c) in respect of all other Cattani products – 1 year, parts and labour;
 - (d) in respect of repairs undertaken to Cattani products by Cattani or its authorised representatives– 6 months, on the parts repaired;
- from the date of purchase of the Product.

2. Defects Liability

Cattani warrants to the Purchaser that the Products will be free from faulty design, material and workmanship during the Warranty Period provided always that:

- (a) such Products have been properly handled and used under normal operating conditions and have been maintained in accordance with the operating manuals and instructions;
- (b) such defects are not caused by incorrect use of operating material or faulty civil or mechanical work, unsuitable environmental conditions or other chemical, electrochemical and/or electrical influences which have not been provided for in any supply contract or the operating manuals and instructions;
- (c) the defects do not result from the use of a design specified by the Purchaser;
- (d) the Distributor from which the Product was purchased or Cattani if clause 3(e) applies has been promptly notified in writing when the alleged defect occurs;
- (e) the Purchaser has fulfilled the Purchaser's contractual obligations;
- (f) such defects do not result from unauthorised repairs, work undertaken by an unqualified person or alterations to the Products;
- (g) such defects are not caused by the use of equipment and/or materials supplied by the Purchaser;
- (h) Cattani shall not be obliged to repair goods of a consumable nature, goods liable to deterioration or those having a low rated service life such as electric lamps, rubber items, intensifying screens, batteries, flexible leads, vacuum elements, crystals, electronic valves and glass components;
- (i) Cattani shall not be obliged to repair defects due to fair wear and tear, improper storage, excessive heating, inadequate ventilation, mechanical vibration, overloading or contravention of the rules established in standard electrical practice;
- (j) such defects are not caused or materially contributed to by the use of cleaners, disinfectants or detergents not recommended by Cattani;
- (k) this warranty is subject to any of the manufacturers specific restrictions and conditions.

3. Making Claims

To claim under this warranty you must:

- (a) in respect of any Product which is defective in materials or performance at the time of delivery:
 - (i) report visible damage and shortages to the carrier and to the Cattani Distributor within 24 hours after delivery;
 - (ii) report concealed damage or shortages involving cartons or packages received intact within 7 days after receipt;failing which the shipment shall be deemed accepted;
- (b) in all other cases, promptly notify the Distributor from which the Product was purchased or ordered when the defect occurs.

Claims must be made to:

- (c) the Distributor from which you purchased or through which you ordered the Cattani equipment; or
- (d) the Distributor (if any) nominated at the time of purchase as being responsible for processing any warranty claims; or
- (e) Cattani, if the Distributor from which the Product was acquired is no longer a Cattani distributor or is unable to provide warranty services in respect of the Product or the Product was purchased direct from Cattani.

Where this warranty is given at the time of purchase or ordering Cattani equipment through a Cattani Distributor the relevant contact details for the Distributor through which any warranty claims should be made in respect of this Product are as set out below.

4. Repair or Replacement

- (a) Where any defects of the type referred to in clause 2 arise during the Warranty Period, Cattani must at its option:
 - (i) make good the defect by repair or replace the Products or supply replacement Products;
 - (ii) replace the Products or supply equipment Products by replacement Products; or

- (iii) pay the cost of replacing or acquiring Products; or
- (iv) pay to repair the Products; or
- (v) supply the service again; or
- (vi) pay the costs of that service;
- (b) Any credits provided by Cattani for defective Products will be based upon the original purchase price of the Products charged to the Purchaser.

5. Return of Defective Product or Parts

If the Purchaser makes a claim in accordance with clause 3 of an alleged defect which cannot be rectified onsite, the Purchaser shall if Cattani so requires promptly, return the defective Product to the factory as specified by Cattani for repair. Where the Warranty in clause 2 applies, Cattani shall remove the defective part(s) and install a new repaired or replacement part(s) at its own expense and all removed defective part(s) shall become the property of Cattani upon their removal.

Delivery of defective Products (of the type referred to in clause 2) as directed by the Distributor or Cattani or the return of new, repaired or replacement Products to the Purchaser shall be at Cattani's expense and risk. Reasonable expense incurred by the Purchaser when returning a defective Product will be refunded to the Purchaser when submitted to the Distributor or Cattani with evidence of payment by the Purchaser.

If the Purchaser is a consumer under the ACL:

- (a) our goods come with consumer guarantees that cannot be excluded under the ACL. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure;
- (b) but if the Products or services supplied are respectively not of a kind ordinarily acquired for personal, domestic or household use or consumption:
 - (i) then the Purchaser's rights shall be governed by the provisions of the ACL or any such other federal, state or territory laws of Australia to the extent that such liability may not be excluded by express agreement;
 - (ii) any claim for compensation is limited to:
 - (1) replacing the Product;
 - (2) repairing the Product;
 - (3) payment of the cost of replacing the Product; or
 - (4) payment of the cost of having the Product repaired;at the election of Cattani.

The benefits to the Purchaser given by this warranty are in addition to other rights and remedies available to the Purchaser under the Australian Consumer Law or any other relevant law.

6. Limitation of Liability

Other than as specified in clause 5, Cattani shall not be under any liability whether in contract, tort (including negligence) or otherwise for any injury, damage or loss including indirect and consequential loss or damage or loss of profit or revenue arising out of or in connection with breach of warranty (including any work performed under it), breach of contract, negligence or otherwise.

7. Product Updates

Information in relation to Cattani product updates and in particular concerning safety are available on the Cattani website www.cattani.com.au.

Details of Cattani Distributor (to be completed when Cattani equipment is purchased or ordered through a Cattani Distributor)

Name:
Address:
Telephone No.:
Email:

Warning: It is the responsibility of the Distributor from which a Purchaser purchases a Cattani Product to process warranty claims. Cattani does not accept responsibility for reimbursing labour charges where the Distributor from which the Product is purchased does not provide or arrange the provision of any required warranty repairs and such charges will be the responsibility of the Purchaser unless the seller is no longer an authorised Cattani distributor and Cattani has given prior approval for another Cattani distributor to process the warranty claim.