



AMALGAM **RETENTION**

FOR SMART SYSTEMS



THE CATTANI HYDROCYCLONE



ISO-5.5 for Micro SMART

The ISO Hydrocyclone is a centrifugal amalgam retention system designed especially for SMART suction systems. It uses the fluid pressure created by the air-fluid centrifuge (pumping fluids to waste) to achieve retention.

Once fluids have entered the ISO Hydrocyclone centrifuge, they are forced in a downward spiral motion, in which amalgam particles fall into a collection canister at the base of the unit (see following page for full explanation of how it works).

The ISO-18 Hydrocyclone:

- complies to ISO 11143
- is rated for use at Maximum Flow and Minimum Flow
- Minimum Flow is 0.5 l/min

AMALGAM RETENTION FOR MICRO SMART

The ISO-5.5 is the ISO Hydrocyclone designed for Micro SMART, and can be purchased with the Micro SMART, or fitted at a later date.

NB: If upgrading an existing Micro SMART to amalgam retention, please be aware that in order for the ISO-5.5 to work correctly, the Micro SMART must be fitted with the TOUCHSCREEN. All Micro SMARTS purchased with ISO-5.5 fitted (CMH) come standard with TOUCHPAD. Upgrade takes around 1.2 hours.



Micro SMART
without ISO-5.5



Micro SMART
with ISO-5.5



Turbo SMART
without ISO-18



Turbo SMART
with ISO-18

AMALGAM RETENTION FOR TURBO SMART

The ISO-18 is the ISO Hydrocyclone designed for Turbo SMART, and can be purchased with the Turbo SMART, or fitted at a later date.

All electronics required for the ISO-18 are already incorporated in the Turbo SMART control panel. Upgrade takes around 1 hour.

ISO-18 HYDROCYCLONE OPERATION

The advantage of the ISO-18 Hydrocyclone is its simplicity – it has no motors or drives; it instead relies on the fluid pressure generated by the Turbo SMART centrifuge.

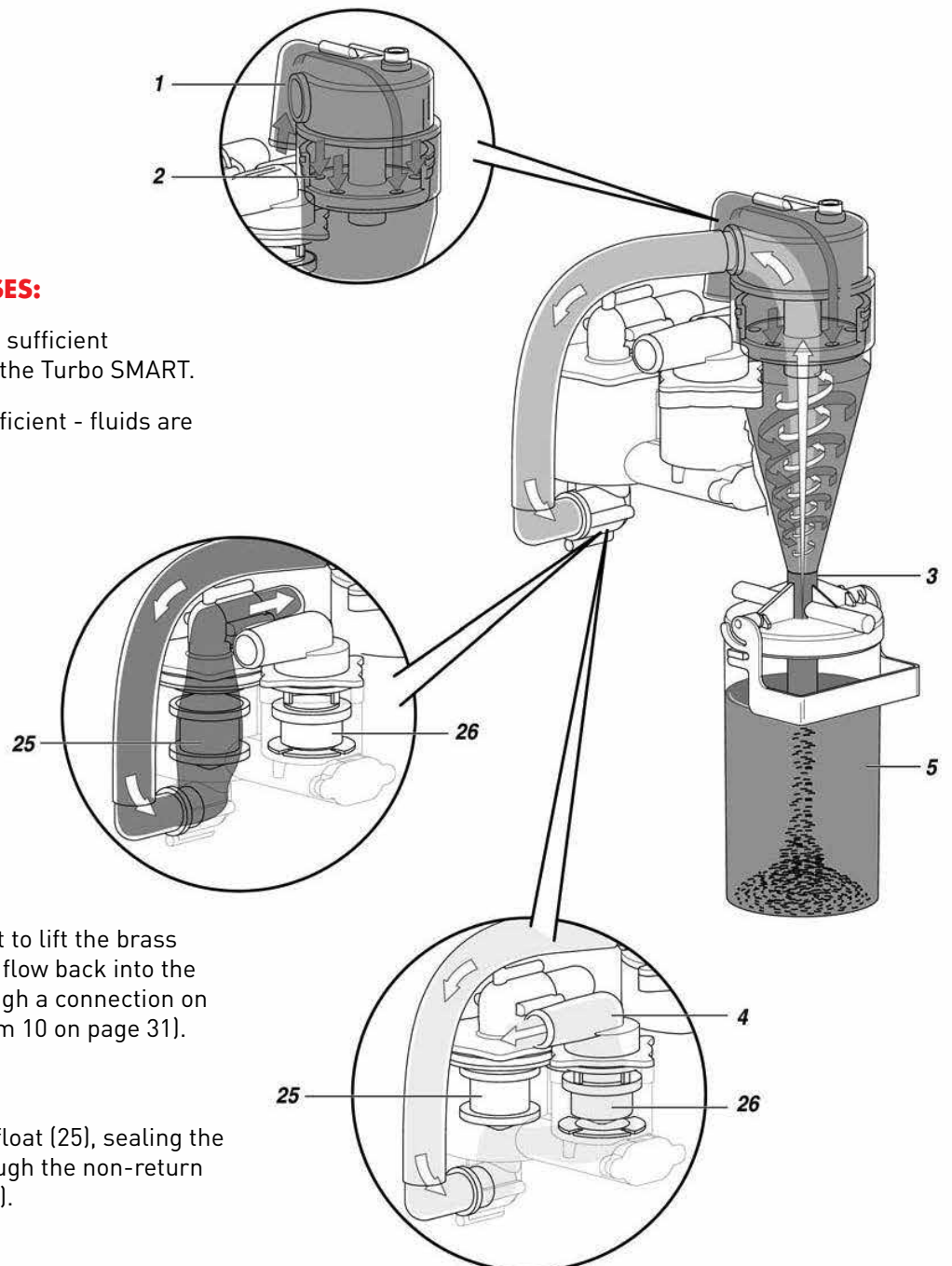
Fluids enter the ISO-18 from the Turbo SMART, under pressure (1) and are forced through a series of holes with a 5.5 mm diameter (2), which set the fluids in a downward spiral motion. When the fluids reach the bottom of the cone they are forced to make a rapid change in direction (3). At zero fluid speed amalgam particles (being heavier than the fluid) continue in their direction and fall into the canister (5). Fluids then go upwards and exit through the centre of the cone.

Since the ISO-18 relies on fluid pressure to achieve retention, optimal retention occurs when there is a high volume of fluids being discharged. Therefore, when there is low flow (meaning the ISO-18's retention will not be optimal) the ISO-18 redirects fluids back into the Turbo SMART (Phase 1). The system continues to do so until there is enough fluid (and therefore fluid pressure) to achieve optimal retention (Phase 2). The Turbo SMART handles this process without any problem (it is designed to work this way), so there is no risk of putting the pump under too much strain.

THE UNIT HAS TWO PHASES:

Phase 1 - fluid pressure is not sufficient
- fluids are directed back into the Turbo SMART.

Phase 2 - fluid pressure is sufficient - fluids are discharged to waste.



PHASE 1

Fluid pressure is not sufficient to lift the brass float (25). Subsequently fluids flow back into the Turbo SMART centrifuge, though a connection on the base of the centrifuge (item 10 on page 31).

PHASE 2:

Fluid pressure lifts the brass float (25), sealing the hole above it. Fluids flow through the non-return valve (26) and then to waste (4).

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

To find out which unit suits your surgery's individual needs, head over to www.cattani.com.au 'Find Your Surgery Solution' page. You can work out the right plant solution for your surgery.

CATTANI TURBO SMART – INTELLIGENT SUCTION NOW IN ASIA

Cattani utility room equipment has been the beating heart of dental surgeries for 50 years, and now, finally, our suction systems and compressors are available in Asia.



Smart technology you can rely on

Based in Italy, Cattani is a family business where we believe in traditional values like loyalty and respect, so your satisfaction is very important to us. Our machinery is renowned for its performance and efficiency, and we have an outstanding reputation for service.



High quality products and service

The smooth operation of every dental practice depends on its utility room equipment, so Cattani takes the greatest care when it comes to design and manufacture, and to show how much we stand by our products, we back them with a generous warranty.



The plant room equipment of choice – for Asia

We are honored to be in Asia, and excited to bring you the air technology equipment that countless dentists around the world prefer.

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

Constant research: this enables us to apply the latest technology to all of our products and solutions.

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

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

We reduce environmental impact: we save 50% on raw materials, so that you can save between 30% and 50% on electrical consumption.