

## Why Laboratories choose the Scentroid SS600 over the competition



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## What are the criteria when selecting a new olfactometer?

- Analysis Time
- Accuracy
- Flexibility
- Repeatability
- Reliability
- Contamination Control
- Ease of Use
- Built-In Quality
- Training & Support



# ANALYSIS TIME

Do the work of 3 olfactometers with just one SS600

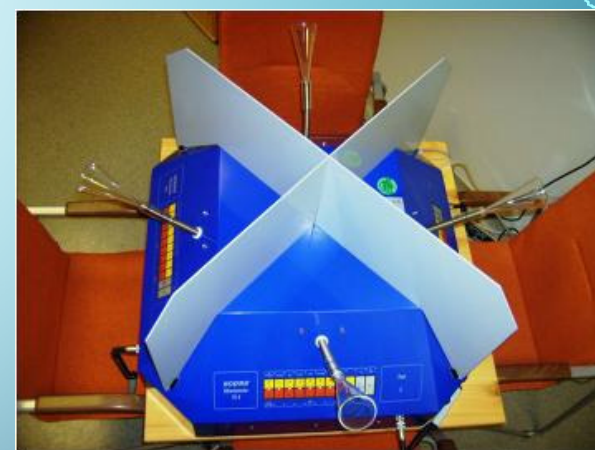


## Odour Analysis Time to full EN13725 Standard



### Scentroid SS600

✓ 10 Samples per hour



### Competitor

✗ Only 3 Samples per hour

## Why is Analysis time important?

- Analysis time directly affects your cost, your profitability and the total number of samples you can analyze in one day.
- The SS600 can complete more than 3 times as many samples per hour as the Competitor's.



## Case Study #1

- Air Spectrum of UK opened a new laboratory using the Scentroid SS600 with capacity of 100 samples per day.
- The Speed of their SS600 allows them to price 50% below competition and still make the same profit.

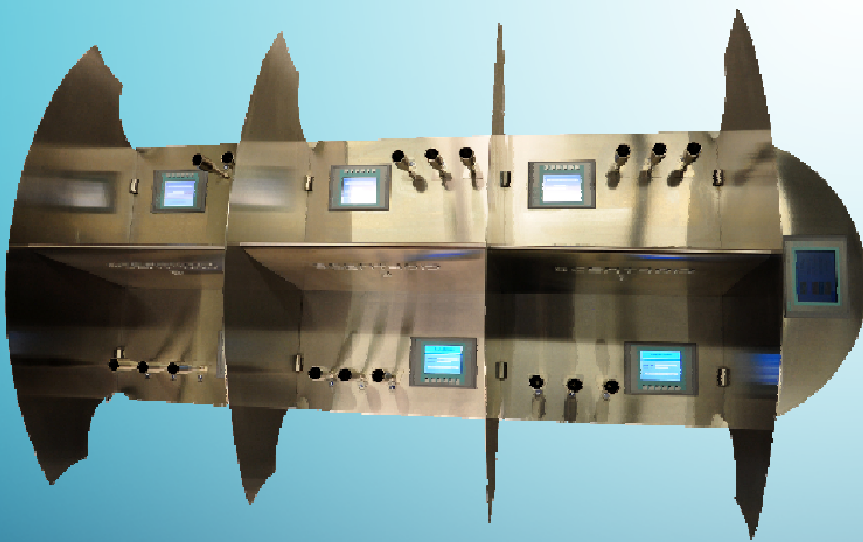




# ACCURACY

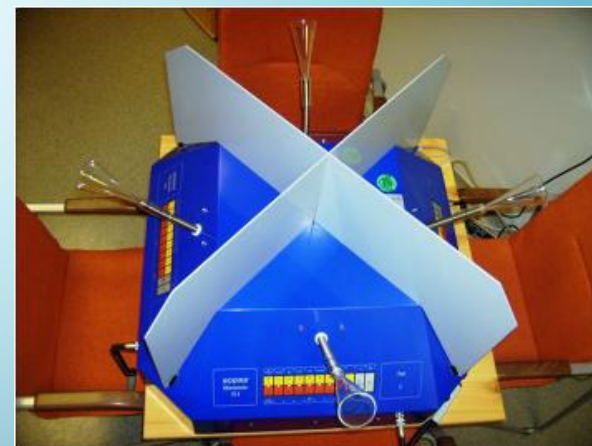
Find the TRUE Odour Concentration!

## Accuracy in Odour Analysis



**Scentroid SS600**

Adjustable Dilution Step



**Competitor**

Fixed dilution steps:  
multiples of 2



## How does this affect Accuracy?

### Competitor

Fixed dilution means that the machine can only achieve the following steps:  
16384, 8192, 4096, 2048, ...

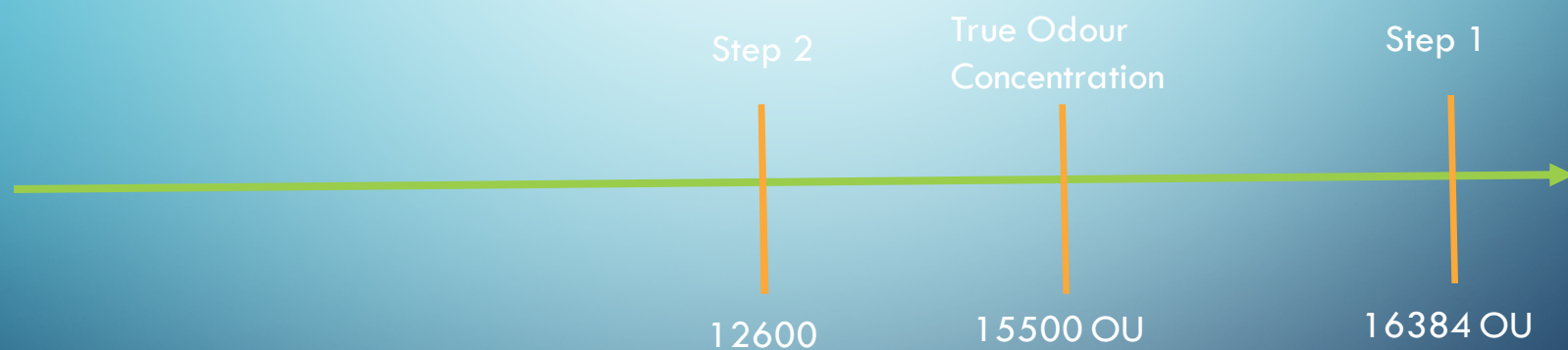


The competing olfactometer can't distinguish between any odour from 16000 OU to 8200 OU. Its all the same?? That's 50% error from the start!

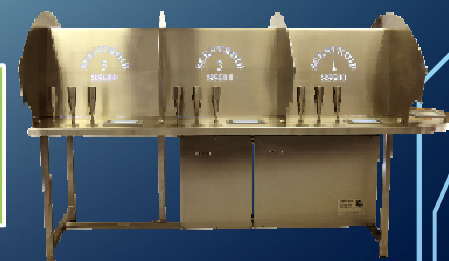
How does this affect Accuracy?

## Scentroid SS600

Variable dilution means that the machine can be setup with any dilution step. A good lab would run a step of 1.3 to 1.5.



The SS600 can home-in on the True Odour Concentration, providing accurate and reliable data.



## Case Study #2 - Accuracy

- A bio-filter manufacturer had used a job running a competitors olfactometer for its bio-filter efficiency testing. The tested efficiency was given as 70%. The Plant Manager refused to sign off on the installation as 80% was promised.
- When the same samples were given to a Scentroid equipped laboratory they determined that the efficiency of the bio-filter was actually 82%.



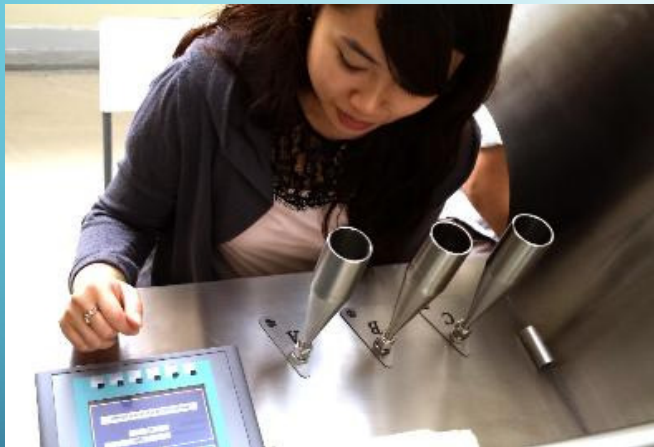


# FLEXIBILITY

Run any type of analysis you want!

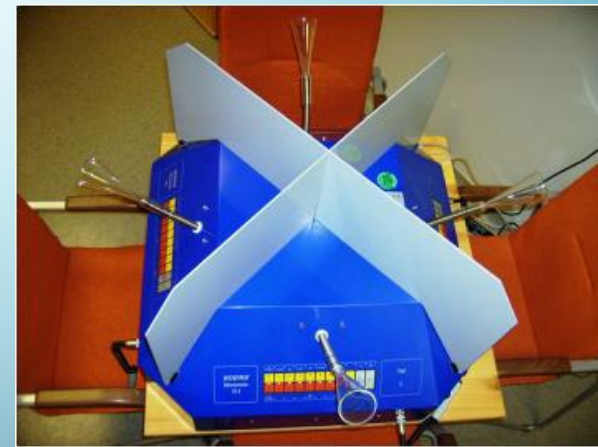
## Test Modes

Scentroid SS600 Can run any test mode in the world, to any standard in the world. The competitor: only one !



### Scentroid SS600

1. Yes/No
2. Binary Forced Choice
3. Triangular Forced Choice
4. VDI Hedonic Tone
5. GB Boundary (Japanese/Chinese Standard)
6. GB Source (Japanese/Chinese Standard)



### Competitor

1. Yes/No

## Case Study #3 - Flexibility

- ✓ ALS laboratory in Hong Kong processes samples both from mainland China and from Hong Kong, even though Chinese GB Boundary and GB Source odour standards are completely different from the EN13725 used in Hong Kong.
- ✓ In parts of the world (e.g. Netherlands), Yes/No method is not accepted and only Binary or Triangular Forced choice can be used.



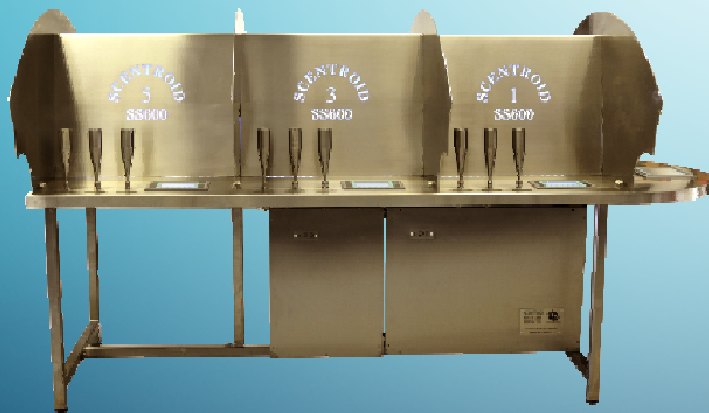


# REPEATABILITY

Have confidence in your data!

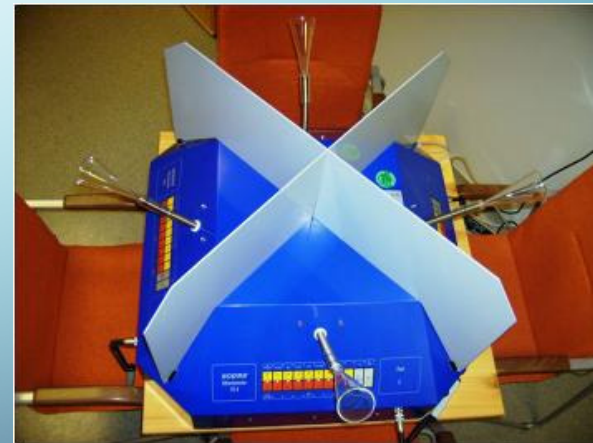
## Repeatability

Scentroid SS600 monitors both sample and diluting air flow, adjusts to overcome variations, and alerts the operator of any issues in the analysis. This ensures the highest level of repeatability and data quality.



Scentroid SS600

✓ Smart System with feedback on all air flows and system parameters!



Competitor

✗ Blind System with no feedback!

## Case Study #4 - Repeatability

- ✗ A laboratory running a competitor's olfactometer made new sample bags with smaller than 1/4" tubing. When they conducted panelists screening they noticed everyone is not answering correctly. After days of investigation they determined that the sample was not being pulled enough by the olfactometer. They were told that the olfactometer only works with one type of sample bags.
- ✓ The Scentroid SS600 would automatically adjust for the variation. It will even warn you when the sample bag is empty.





# RELIABILITY

ZERO days down in over 9000 samples and still going.

## Reliability

The Scentroid SS600 is built for continuous service, day after day, with zero days down.

Why? If the olfactometer is down, the laboratory loses money and clients.



## Reliability

The Scentroid SS600 only uses industrial components such as Siemens Controllers, Siemens Touch screens, and valves rated for more than 1,000,000 cycles. All parts are guaranteed by their manufacturer to be available for at least the next 30 years!



### Scentroid SS600

- ✓ Only Industrial certified components.
- ✓ All parts tested by 3<sup>rd</sup> party manufacturers to meet the highest level of reliability and quality.
- ✓ Spare parts available through Siemens large network of distributors and service centers



### Competitors

- ✗ Custom made components with no certification.
- ✗ No long term reliability testing.
- ✗ Spare parts only available through olfactometer manufacturer.
- ✗ Spare parts not available past product life cycle (typically 6-8 years).



## Case Study #5 - Reliability

**X** If you own a previous model of the competitors olfactometer, you are forced to buy a new olfactometer if any component fails ...previous models are not supported. There is no sourcing of components from anyone else! While this tactic is good for selling new olfactometers, it is very unfair to the end-user.



# CONTAMINATION CONTROL

Technologies from the nuclear industry

## Contamination Control

Contamination control is one of the most important aspects of an olfactometer.

Without it, the operator must spend hours or days cleaning the olfactometer, purging it and hoping the odour will go away.

An olfactometer not able to properly control the contamination from each sample can easily get 50 OU even on blank samples. This will not only affect accuracy of the lab but also its credibility.





## Contamination Control

The Scentroid SS600 uses the most advanced contamination control in the industry based on technologies IDES Canada developed for nuclear reactor refurbishment.

The contamination control technology is so effective that laboratories in Europe, South America and Asia have completed more than 100,000 samples without having to purge more than 30 seconds. This purge is automatically run before each analysis by the SS600.



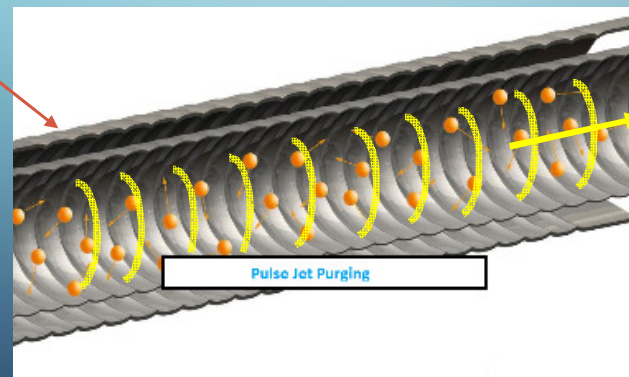
## Contamination Control Technologies

### Pulse Jet Purging

An innovative technique of pushing air through the system at extremely **high velocity while pulsing at 100 Hz**. The pulsing action shakes the stainless steel tubes at a resonant frequency dislodging any contamination stuck to the surface, similar to an ultrasonic cleaner.

Pulse purging is done with air in a reverse direction and with air directed to a special holding filter to ensure the contamination does not enter the laboratory.

Heater



## Contamination Control Technologies

### All Stainless Steel Surfaces

Scentroid SS600 uses only polished stainless steel for all wetted surfaces. The 400 series stainless provides the highest degree of contamination resistance.





## Contamination Control Technologies

### Heated Air Lines

All stainless steel lines are equipped with high capacity heaters that are activated by the SS600 during purging for fast decontamination.

Rapid heating is achieved thanks to the high thermal conductivity of the stainless steel tubes.

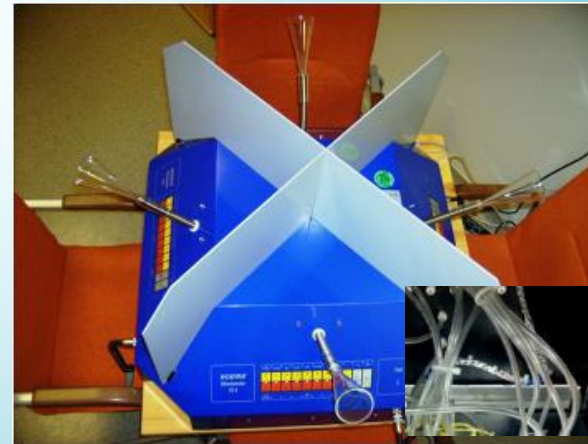


## Contamination Control



### Scentroid SS600

- ✓ Never need more than 30 second of purging
- ✓ Pulse Jet Purging Technology
- ✓ All stainless steel wetted surfaces
- ✓ Heated stainless steel air lines



### Competitors

- ✗ May be contaminated for hours or even days
- ✗ PTFE tubing for wetted surfaces which absorbs odors over time
- ✗ Ineffective heaters due to low heat conductivity of PTFE tubes (rapid heating only works on stainless steel)

## Case Study #6 – Contamination Control

- ✓ An Italian Laboratory has completed more than 9000 samples with purge time of less than 30 seconds.
- ✓ Blank samples in PTFE bag consistently provide zero background odour.
- ✗ Most of the competing olfactometer report hours of purging for strong and sticky odors especially from petrochemical and swine operations. With certain projects the equipment never fully recovered to zero background odour.
- ✗ Purging time is costing the laboratory lost analysis time cutting into profits and affecting client relations due to delays in providing testing results.





# EASY TO USE

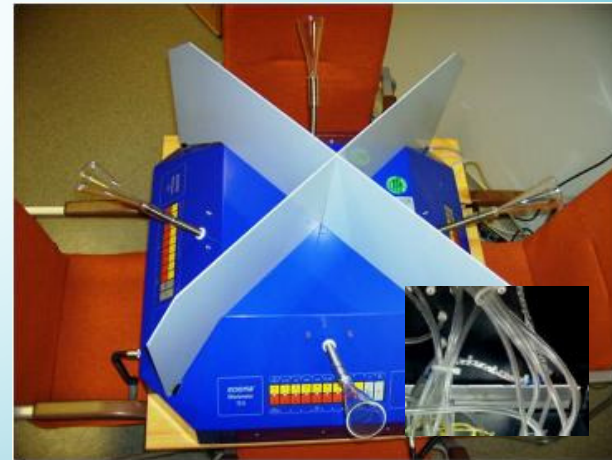
Welcome to the age of touch screens

## User Interface



### Scentroid SS600

- ✓ Siemens Touch screen on all 6 stations giving panelist instructions and collecting their responses.
- ✓ Large Siemens touch screen at the administrator station providing immediate and live test results, machine conditions, and test parameters.
- ✓ Multi-Language support including: English, French, Spanish, Italian, Mandarin and Cantonese.
- ✓ No PC required to operate the instrument



### Competitors

- ✗ No panelist screens.
- ✗ Use of windows based PC to control the olfactometer. Can easily crash, be corrupted or infected.
- ✗ No feedback to panelist.

## Panelist Comfort



### Scentroid SS600

Panelist using the SS600 sniff the ports for the duration of the presentation (usually 10 seconds) and then enter their choice and wait for the next round. They are not rushed and are free to move their head and breath lab air in between the trials.

- ✓ Relaxed non-time based approach with breaks between presentations
- ✓ Breath laboratory air and therefore do not have dry olfactory receptors
- ✓ Participants stay sensitive much longer



### Competitors

The Competitor requires the panelists to continuously breath the olfactometer air with their nose in the sniffing port for the duration of the analysis (15 minutes). For this duration they must concentrate and act in a time sensitive manner.

- ✗ This continuous concentration makes the panelists very tired and results in reduced sensitivity
- ✗ Breathing continuous dry air (0% humidity) results in dry olfactory receptor and therefore reduced sensitivity





# BUILT-IN QUALITY

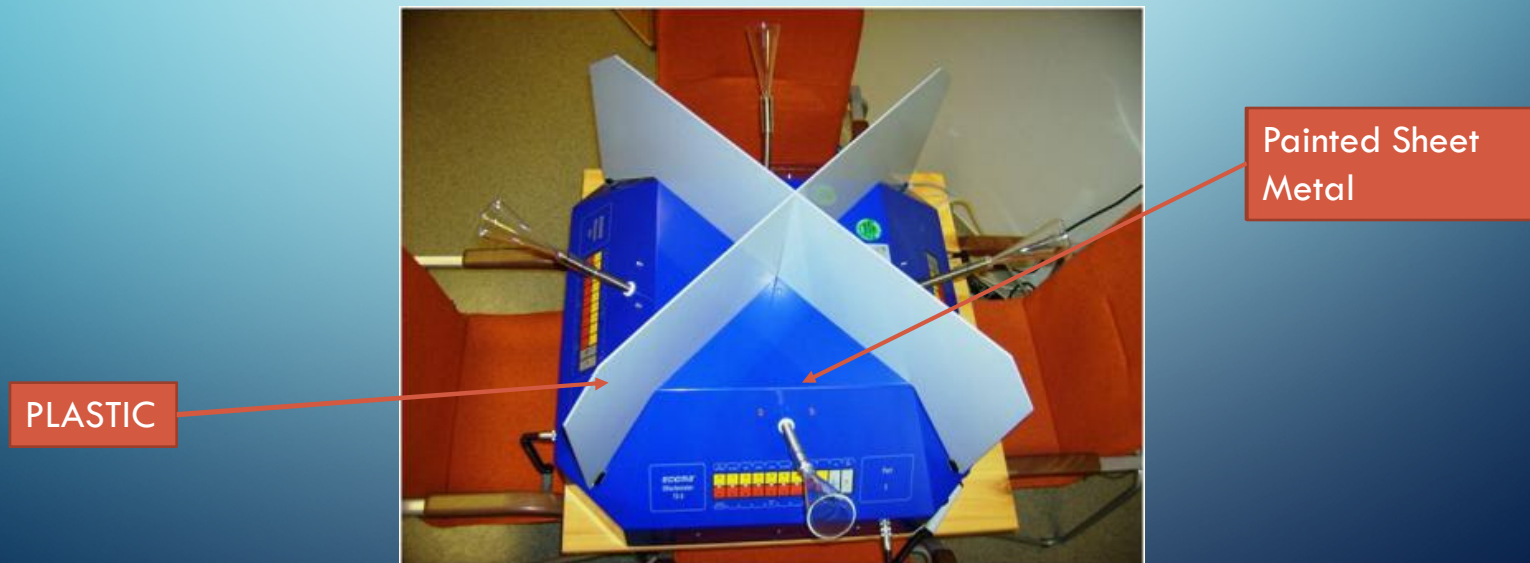
One look is all it takes

## Built-In Quality

### Plastic surfaces and painted sheet metal in an olfactometer?

Surprisingly, the competitor's olfactometer uses plastic dividers and painted sheet metal for the housing of the olfactometer. These materials absorb odour and are very hard to clean.

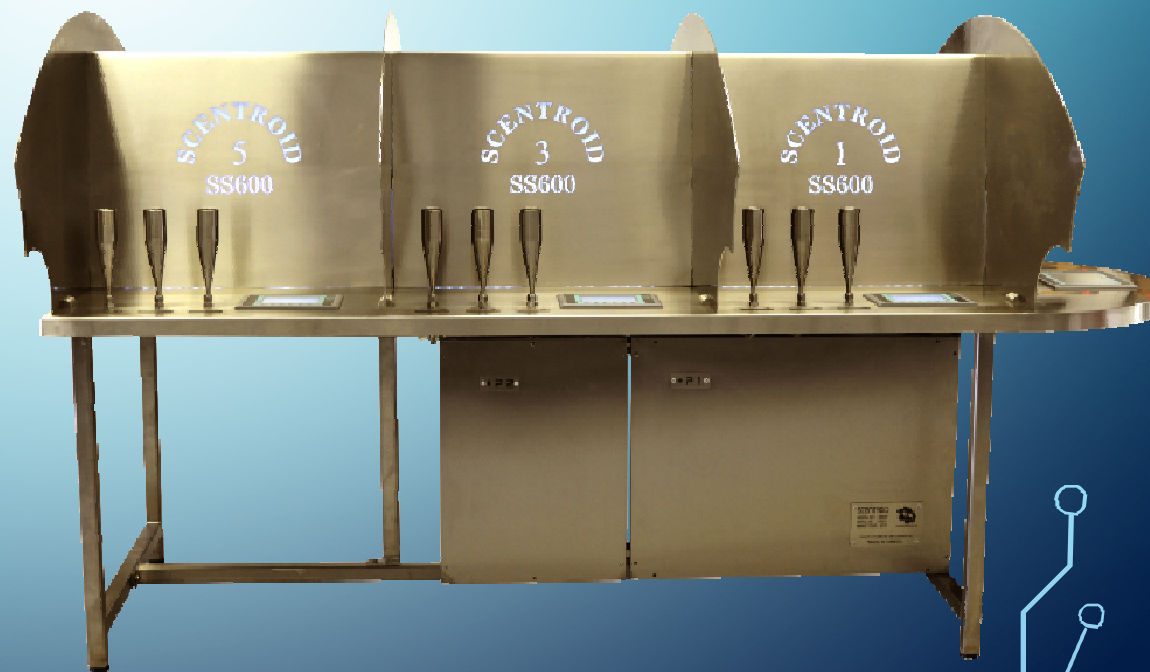
Competitors design is not considered to be Esthetically pleasing.



## Built-In Quality

**Built-In Quality is always apparent from one look**

- ✓ The Scentroid SS600 is designed to be durable, easy to clean, and has a high technology look, equivalent to the built-in technology
- ✓ All dividers, table, and cabinets are made of polished, easy to maintain stainless steel.
- ✓ The Panel numbers are equipped with back lit LED lighting for a clean esthetic look
- ✓ The natural curves and pleasing lines of the SS600 will make sure every client visiting your laboratory takes notice.



**Make it the Jewel of your laboratory**



The background of the slide is a blue gradient. In the four corners, there are white line-art illustrations of electronic circuit boards, featuring various lines, nodes, and circular components.

# TRAINING AND SUPPORT

Complete sharing of knowledge

## Training

We go beyond simply teaching you how to operate the instrument. We help you become a **World Class Air Quality Laboratory**.

We specialize in instrument manufacturing and we have been involved in setting up dozens of laboratories around the world.

### What does that mean?

We have taken all the best practices in operating an odour laboratory and we share it all with you openly. We do not hold information back to gain competitive advantage over your laboratory because we don't own any laboratories.

**Your success becomes our success.**

## Support

Get fast and reliable support locally thanks to our vast network of distributors.

Scentroid is supported by our every growing vast network of distributors. That means that you get immediate local support to ensure your lab runs smoothly and continuously. Our distributors have extensive training in maintenance, calibration, and training to support your SS600.

The competitors refuse to provide local support through distributors and require the olfactometer to be sent to Germany for all repairs or recalibration taking months.



# SCENTROID SS600

YOUR COMPETITIVE ADVANTAGE

## In Summary. . . Why Choose the SS600?

1. Increase your capacity by 300% and reduce your analysis cost by 70% thanks to the speed of SS600.
2. Increase your Accuracy by up to 50% by utilizing the SS600's variable dilution step.
3. Provide up to 6 different odour tests and expand your market.
4. Have 100% confidence in your results by allowing the SS600 to monitor, modify and notify you of any issues during testing.



## In Summary. . . Why Choose the SS600?

5. Complete more than 10,000 samples with no down-time thanks to the SS600s 100% industrial certified components for ultimate reliability.
6. Utilize the latest contamination control technology to ensure zero background odour with only 30 second purge time.
7. Receive complete training on all aspects of running a successful commercial olfactometry laboratory through Scentroid Odour Academy.
8. Get immediate local support through Scentroid's ever expanding network of global distributors.







# SCENTROID

Future of Sensory Technology