



SCENTROID SM100

IDES CANADA INC.

FUTURE OF SENSORY TECHNOLOGY



SCENTROID

Scentroid SM100 is an in-field odour measuring device that allows users to accurately quantify ambient odour strength. This revolutionary device (Patent Pending) offers an easy-to-use and cost effective alternative to guessing at odour strength or using expensive odour measuring laboratories.

 **HIGHER STANDARDS**

ACHIEVEMENTS

5
Years

IDES CANADA has the largest growth of sales
in the industry ... in the world!

32 Countries



Every situation is unique and every client's requirement is different.

At IDES we strive to build a lasting association through close communication, and personal relationships.

- . Canada
- . USA
- . Brazil
- . Peru
- . Mexico
- . Chile
- . Colombia
- . UK

- . France
- . Ireland
- . Italy
- . Norway
- . Spain
- . Finland
- . Germany
- . Austria

- . Sweden
- . Ukraine
- . Denmark
- . Russia
- . Latvia
- . Turkey
- . Belgium
- . Netherlands

- . Kenya
- . South Africa
- . China
- . South Korea
- . Malaysia
- . Hong Kong
- . Slovakia
- . Australia

SM100

FEATURES

IDES CANADA has the largest growth of sales in the industry ... in the world!

The SM100 draws a sample of ambient air via venture pump and dilutes it using fresh odourless air from a compressed air tank. Operator uses an adjustable sliding valve to control the ratio of fresh to ambient air.

Unparalleled Reliability

SM100 uses no electronic components and incorporates the highest grade of industrial components for the highest level of reliability. SM100 is built to last!

Cost Effective

SM100 is the most cost effective method of obtaining accurate and reliable odour intensity measurement.

Accurate- Comparable results to full scale odour laboratories

Unlike other infield odour-measuring devices, SM100 does not rely on filters to clean ambient air for dilution. Rather fresh odourless air is supplied by a portable light weight high-pressure air tank. This leads to the highest level of accuracy in the industry.

Wide Detection Threshold

Measure odours from as low as 2 OU all the way to 30,000 OU with 60 steps in between.

Zero Maintenance

- ➔ Requires no other accessories such as sample bags
- ➔ No contamination: Teflon nose masks and stainless steel wetted surfaces
- ➔ No filters to change
- ➔ No pumps or other moving parts to maintain
- ➔ Does not require frequent re-calibration



TECHNICAL SPECS

Main technical points of the olfactometer SM100 customized to your needs

Manufacture	IDES CANADA INC.	
Model	SCENTROID - SM100	<input checked="" type="checkbox"/>
Air Supply Capacity	15min	<input checked="" type="checkbox"/>
# of samples per tank	10-15	<input checked="" type="checkbox"/>
Dilution range	2 – 30,000 (2 ¹⁵)	<input checked="" type="checkbox"/>
Dilution Principle	Stainless Steel Eductor	<input checked="" type="checkbox"/>
# of Dilution Steps:	15 (adjustable range)	<input checked="" type="checkbox"/>
Dilution Steps:	Variable	<input checked="" type="checkbox"/>
Selectable Ranges	2-101; 4-678; 44-656; 2-3600; 2000-30,000	<input checked="" type="checkbox"/>
Pres. Flow Rate:(l/min)	20	<input checked="" type="checkbox"/>
Presentation Face	0.3 Velocity (m/s)	<input checked="" type="checkbox"/>
Face Mask	Half-face Teflon	<input checked="" type="checkbox"/>
Wetted Material	Stainless Steel and PTFE	<input checked="" type="checkbox"/>
Tank material	Carbon Fibre	<input checked="" type="checkbox"/>
Dimensions (in)	16x6x6	<input checked="" type="checkbox"/>
Weight Kg/(lb)	3.5 (8)	<input checked="" type="checkbox"/>



ACCESSORIES

SM100 Accessories and Systems



In-Lab Sniffing Port

Mask



Tank



Case



ODMAP



SM100



Diluting Sampler



N-BKIT



CAPABILITIES

The SM110 can be used to analyze samples from:
a Tedlar or Nalophan bag directly from a flux chamber or a stack
directly from ambient air.

In-Field Odour Measurement

Use of a field Olfactometer – Scentroid SM100.
Ultra-portable, weighing only 4 lbs.

Measure odors as low as 2 OUs.

and as high as 30,000 OUs

Comparable results to lab based olfactometer.

Simple and cost effective .

Very easy to use and maintain.

Capable of conducting panel screening using n-butanol.



IN-LAB ANALYSIS



IN-FIELD ANALYSIS

How it works

1. Clean air from a carbon fiber air tank is used as diluting agent.
2. Pressure regulator keeps 20 LPM flow through the device to ensure accurate dilution.
3. Activated carbon filter ensures zero-odors from compressed air tank.
4. Stainless steel venturi pump creates the vacuum to draw in the sample air.
5. Dilution (flow of sample air) is controlled manually via flow control valve .
6. Mask always has positive pressure to ensure zero leaks of ambient air.



CASE STUDY 1

FISHMEAL FACTORY

Following study was conducted by Dr. Knut Wiik from Purenviro in Stavern, Norway.
4 case studies were conducted to measure accuracy, repeatability, and ease of use of the SM110C in-field olfactometer.

Test 1 : Ease of use

3 local candidates were chosen with no previous olfactometer experience.
Brief training was provided to each candidate (10 min).
Candidates were asked to measure the same sample bags consecutively

Result:

All panelist were able to operate the machine properly.
Total variation in measured odour strength was less than 30%.
Minimal training and capacity to conduct n-butanol screening allows local population to act as panellist.

Test 2: Repeatability

A sample was taken from the ducts of the HVAC system using the lung principle.
Sample was analyzed once undiluted and again with dilution of 1:20 (sample to fresh air).
Same panelist was used in both tests.

Result:

Undiluted: 1553 OU
Diluted: 1554 OU
Unit is repeatable over its full measurement range

Test 3: Compatibility

Odour measurements were made by the SM100C and compared to results of tests made in 2002-2007 using Purenviro's accredited EN13725 laboratory.

Result:

SM100C: 3806 OU
Laboratory Results: 3300-7200 OU



CASE STUDY 2

LAND FILL

Test 1: Compatibility

Sample collected using a dynamic flux chamber from surface of a landfill site and measured using both EN13725 laboratory and SM100C.

Result:

SM100C: 10000 OU

Laboratory Results: 13000 OU

Recycling Facility

Test 2: Compatibility

Sample collected using a dynamic flux chamber from shredded recycling waste and measured using both EN13725 laboratory and SM100C.

Result:

SM100C: 30 OU

Laboratory Results: 45 OU



CASE STUDY 3

BIO FILTER CANADA

Test 1: Compatibility

Following studies was conducted by Anna Bokowa Engineering Consulting in Canada and presented in WEF odour conference 2012.

Samples received from clients were tested using an 8 panel olfactometer and the SM100C. All samples were compared in the same day.

Conclusion

The SM100C provides a simple yet accurate solution to in-field odour measurement.

The SM100 is light (4lbs) and portable

Can measure ambient odours as low as 2 OU

Can analyse stack odours as high as 30,000 without pre-dilution

Small dilution steps to achieve higher accuracy (e.g. 2,3,4,5,6)

Self-contained and does not require any additional sampling equipment

Capable of screening panellists using n-butanol

Benefits of In-field olfactometry are:

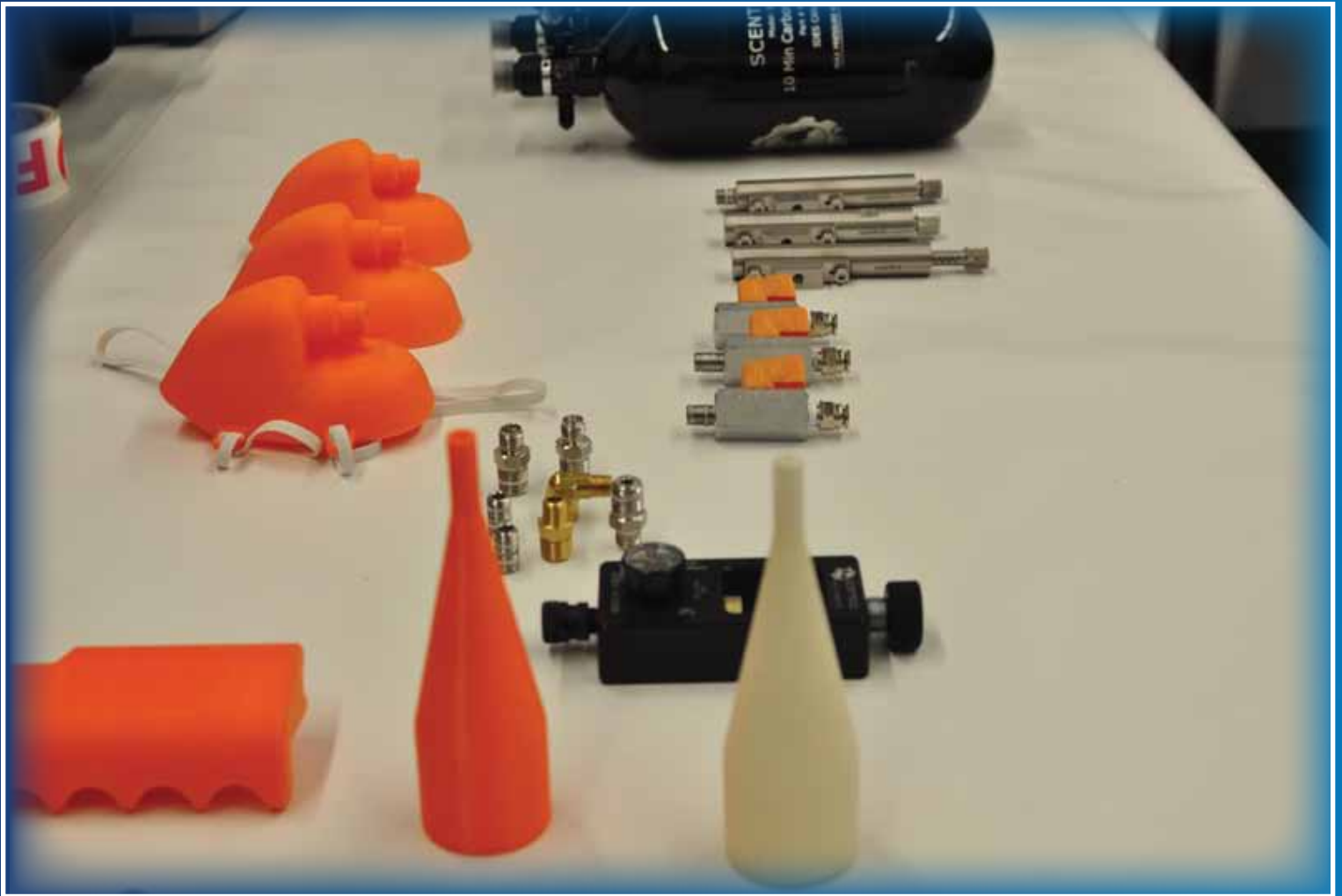
Lower capital and operational costs

Elimination of sample degradation caused by sample shipment (time, temperature and pressure imposed during shipping).

Use of local population as panellist

Sample	Lab Results (OU)	SM100C Results (OU)
1	116	94
2	108	164
3	139	131
4	201	219
5	1846	1441

PRODUCTION LINE





SM100 FOR STACK TESTING



SCENTROID

Professional Odour Measurement Equipment

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