



**CLEMEX**  
Defining Intelligent Microscopy

HIGH SPEED  
**CLEANLINESS**  
**ANALYSIS**



**Integrated solutions**  
with Contaminants software



## **RAPID SCANNING**

Full analysis of 47mm filter in under 2 minutes at 50X

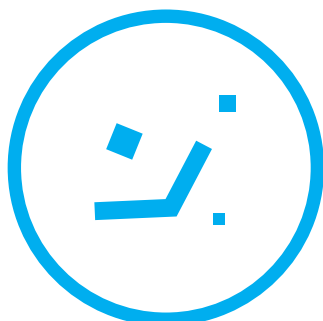


## **CONTAMINANT STANDARDS**

ISO 16232

ISO 4406-4407

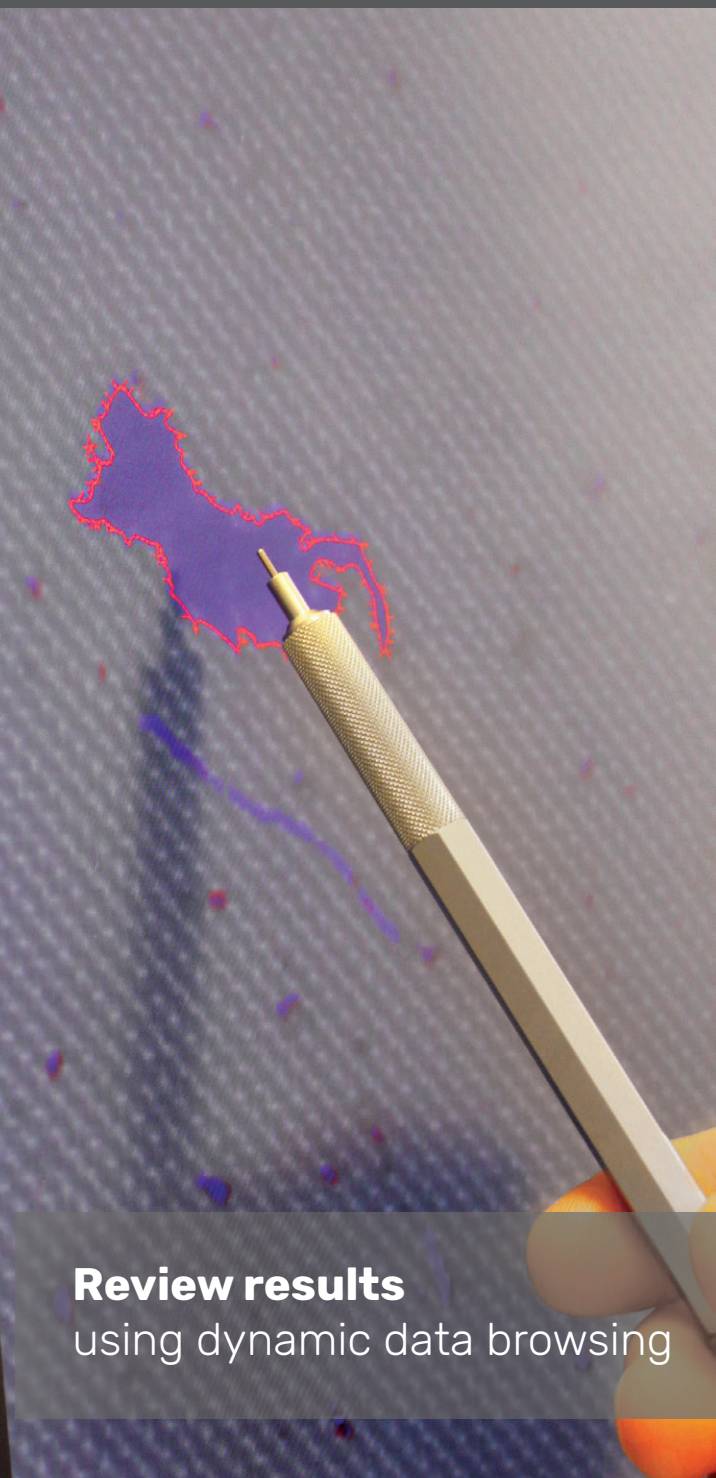
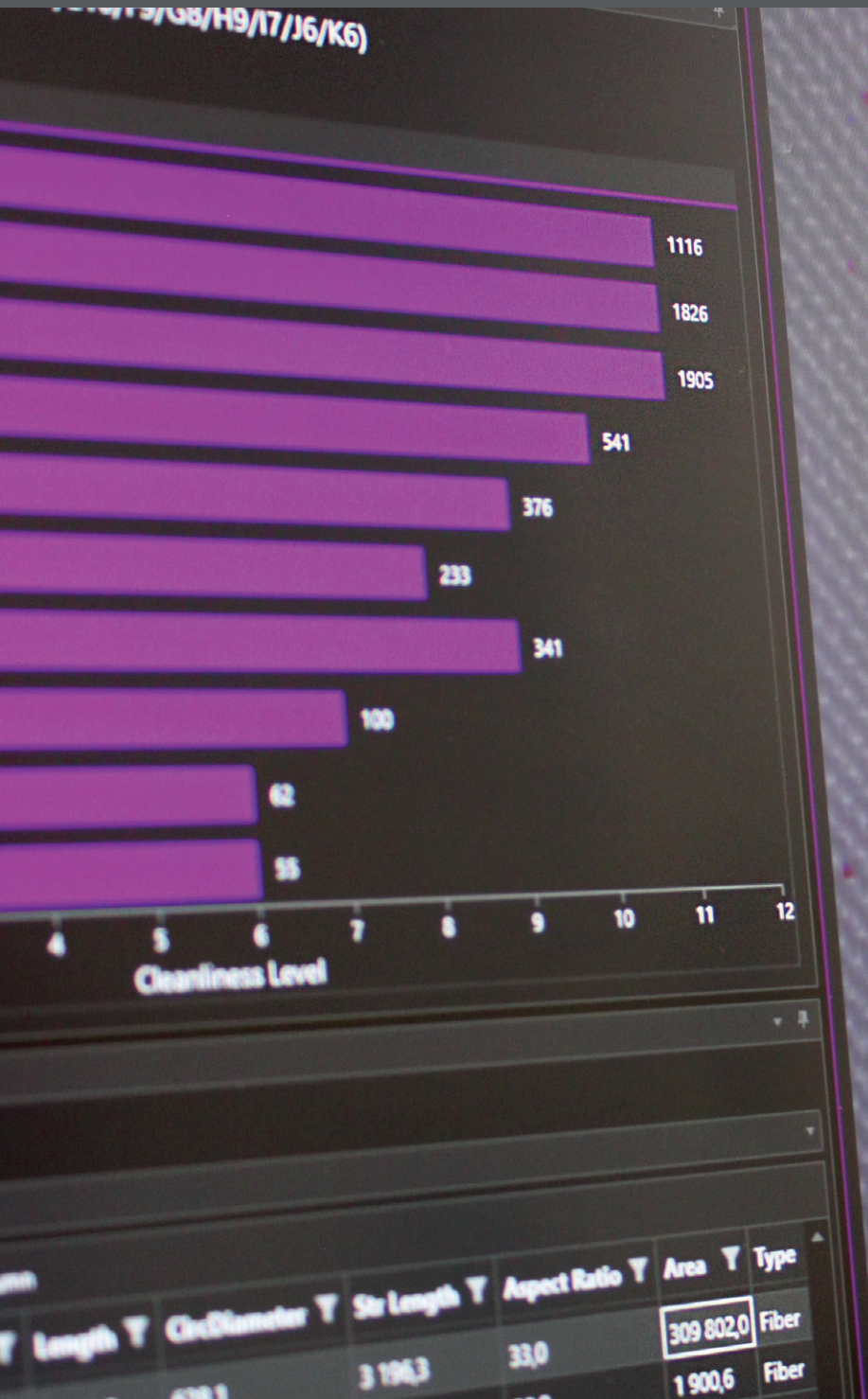
IEST-STD-CC1246E



## **EASY PARTICLE SORTING**

Automatic classification of fibers, non-metallic and metallic particles





**Review results**  
using dynamic data browsing

**EVERY FILTER SAMPLE**  
DESERVES THE SAME ATTENTION

# SAMPLE REPORT

## Cleanliness Evaluation Report

### ISO 16232

**SAMPLE IDENTIFICATION**

Sample name: Sample 01  
 Batch number: batch 9A4  
 Production line: Line B

**TEST PARAMETERS**

Analyst:	matthieug	Date:	5/2
Magnification:	50x	Filter area:	96
Calibration:	1.1640 µm/pixel	Covered area:	96

**RESULTS & STATISTICS**

CCC:	C(B12/C11/D12/E11/F9/G8/H8/I6/J5/K5)	Particle area coverage:	0.9
Global:	14	Total particle area:	8.7
Normalization method:	By Components (1 cm <sup>2</sup> )	Normalized count:	92

**NORMALIZED COUNT CHART**

Size Class	Count
B	3609
C	1344
D	2182
E	1312
F	334
G	149
H	212
I	49
J	31
K	28

**NORMALIZED COUNT GRID**

Size class	CL Level	Particle Count	Metallics	Non-Metallics
B	12	3609	0	3609
C	11	1344	0	1344
D	12	2182	3	2179
E	11	1312	22	1290
F	9	334	14	182
G	8	149	5	42
H	8	212	3	14
I	6	49	2	0
J	5	31	0	0
K	5	28	0	0

## Cleanliness Evaluation Report

Page 2 of 2

### ISO 16232

**SAMPLE OVERVIEW**

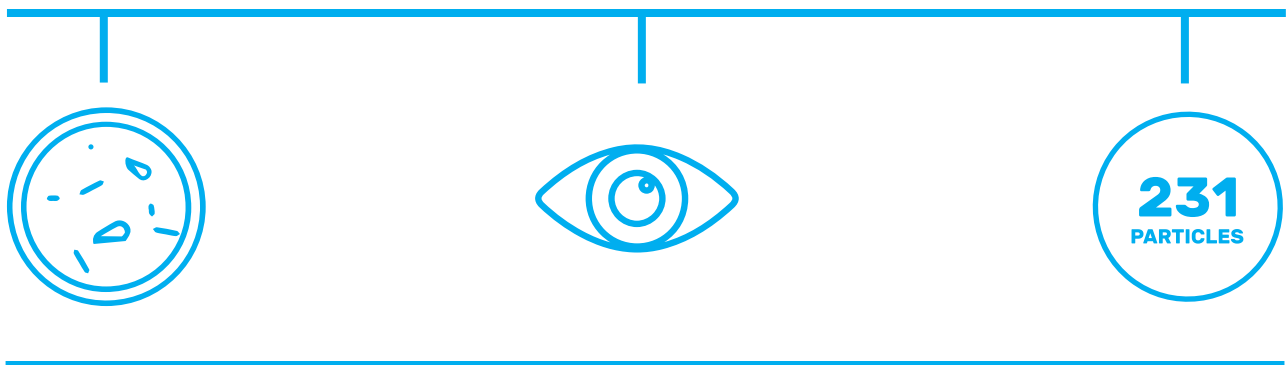
Mosaic of filter at 50x

**LARGEST PARTICLES**

538.84µm Metallic	277.78µm Non-Metallic	5218.91µm Fiber
428.02µm Metallic	256.39µm Non-Metallic	5017.94µm Fiber

Reports include a user selectable number of largest particle images for each class of particle

# AUTOMATED ANALYSIS FROM SCANNING TO REPORTING



## ACQUISITION & ANALYSIS

**Increase the number of samples analyzed per hour**

Thanks to our continuous stage motion technology, images are acquired and analyzed at high speed without any loss of precision. Metallic and non-metallic particles, as well as fibers, are all identified in real-time. A standard 47 millimeter membrane filter can be analyzed in under two minutes at 50x.

## REVIEWING DATA

**Flexible tools allow users to easily verify particulate data**

Full resolution deep-zoom viewing of particles, dynamic particle data browsing and advanced data sorting and filtering options all contribute to a better user experience. We understand how important it is to get answers fast and make sure the results are what you expect.

## INTEGRATED REPORTING

**Template-based reporting consistent with industry standards**

A user-friendly, integrated PDF generator allows you to create reports in a single step from within the software. Templates for all listed standards are included.



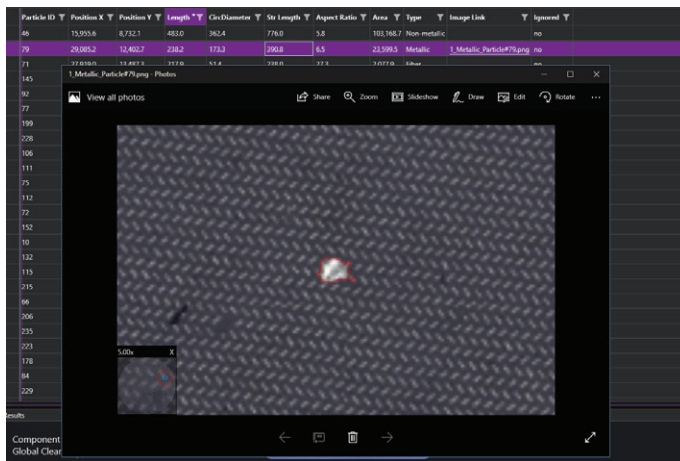


**CLEMEX  
SERVICE  
&  
SUPPORT**

## **TRANSFER OF EXPERTISE**

Passion for new technology is our motivation to offer the best customer care service possible to our clients. Clemex software is designed by our experienced engineers. It is perfectly adapted to an end-user's workflow and has a short learning curve.

# USER ORIENTED FEATURES FOR SMART REVIEWING AND REPORTING

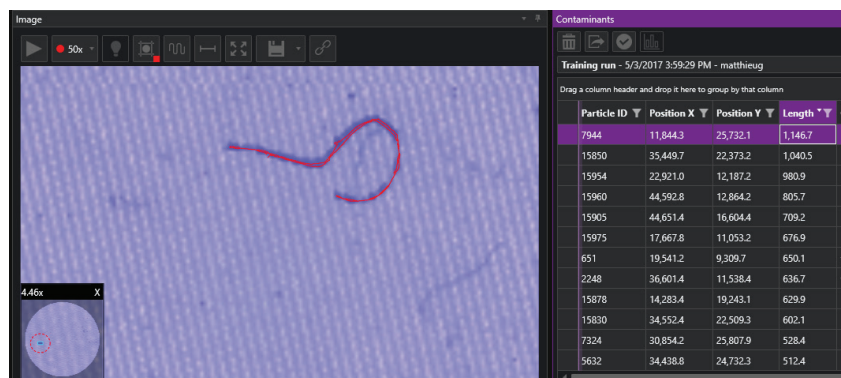


## REVIEWING SAVED RESULTS

Historical data can be saved and retrieved for comparison purposes. Saved images are linked to particle results and can be viewed in a single click. PDF reports can be generated from saved historical data.

## VIEWING AN INDIVIDUAL CONTAMINANT

Clicking on the data of an individual contaminant will immediately bring up the contaminant in the Image Panel. Reversely, clicking on a contaminant in the image will highlight the corresponding data.



Contaminants

Training run - 1/10/2017 10:07:24 AM - catherine

Grouped by: Type

	Particle ID	Position X	Position Y	Length	CircDiameter	Str Length	Aspect Ratio
Fiber							
Metallic							
Non-metallic							
	13	6,404.2	4,864.0	13.2	9.1	15.9	3.9
	18	3,985.1	3,986.5	31.7	23.6	41.3	3.9
	19	4,473.1	4,150.1	16.3	12.3	21.2	3.8
	22	1,961.9	6,873.7	67.4	54.3	99.2	4.2
	26	3,169.1	6,197.6	25.9	26.1	42.5	3.4

## FILTERING AND GROUPING DATA

Besides standard sorting options, each data column also has complete filtering functionalities. Users can exclude contaminants that fall above or below a certain range. Grouping data can be done on any category, for example Fiber, Metallic or Non-metallic.

© 2017 Clemex Technologies Inc.



**Clemex Technologies Inc.**  
800 Guimond Street  
Longueuil QC J4G 1T5  
CANADA

+1.450.651.6573  
+1.888.651.6573  
info@clemex.com

[www.clemex.com](http://www.clemex.com)