

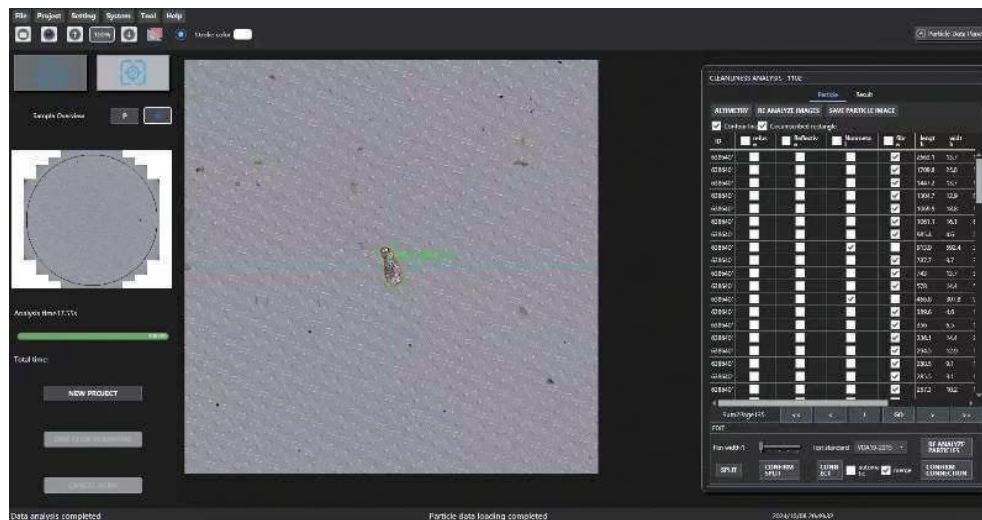
AUTOMATIC CLEANLINESS ANALYSIS SYSTEM (STANDARD TYPE) CODE OPP-OS18



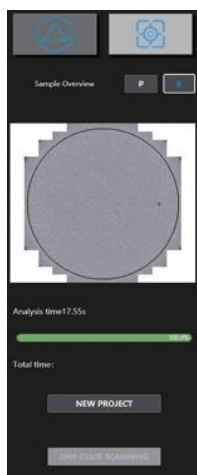
- According to VDA19.1, ISO16232, ISO4406, NAS1638
- Parallel optical system
- Automatically detects and distinguishes particle types
- One scan, one click report
- High reliability, high accuracy
- Parameters such as length, width, area, maximum fiber length, total length, etc. can be evaluated

SPECIFICATION

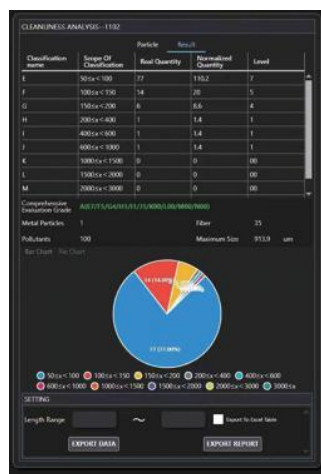
Microscopy	objective	0.8X~5.6X
	zoom ratio	1:7
	polarized light	anti reflective coating polarizer, automatic polarized light
	light source control	LED cold light source, gray value automatically adjusted in the range of 0~255
	focus display	manual focus
Motorized scanning table	control mode	X-Y axis high-precision control
	travel	80×60mm
	motion accuracy	1μm
	repeatability	≤2μm
Camera	sensor	1/1.2"CMOS
	single pixel size	5.86×5.86μm
	pixel	2.3M
Software	distinguish between particle types	metals, non-metals, fibers
	testing items	particle type, size, quantity, etc.
	detecting particle size	≥15μm
	testing method	automatic scanning, automatic detection
	testing accuracy	repeatedly scan the filter membrane 10 times, with the deviation of the total number of particles less than 2%
	testing result	scan the calibration film, with the deviation less than 2 pixels
	scanning time	automatically rate, WORD/EXCEL reports can be exported
Power supply		<3min
Dimensions(L×W×H)		AC 220V, 50Hz
Weight		800×600×650mm
		15kg



cleanliness analysis software
(included)



scanning image stitching



test result statistics

Cleanliness Particle Analysis Report

Technical Cleanliness according to VDA 19.1

Classification of Results		Sample No.		Date of Extraction	
Component	Amount = Spots + Ultrasonic	Amount = Spots + Ultrasonic	Sample No.	Date of Extraction	Examiner
Amount = Spots + Ultrasonic	Amount = Spots + Ultrasonic	Amount = Spots + Ultrasonic	Amount = Spots + Ultrasonic	Amount = Spots + Ultrasonic	Amount = Spots + Ultrasonic

Extraction & Granularity		Filter on Filter	
Extraction Method	Filter Type	Filter Type	Filter Type
Extraction Method	Filter Type	Filter Type	Filter Type

Microscopic Analysis		Estimated 0 (mm)	
Scale	Estimated 0 (mm)	Estimated 0 (mm)	Estimated 0 (mm)
Scale	Estimated 0 (mm)	Estimated 0 (mm)	Estimated 0 (mm)

Largest metallic particle		Largest nonmetallic particle	
Length (µm)	Width (µm)	Length (µm)	Width (µm)
Length (µm)	Width (µm)	Length (µm)	Width (µm)

Largest metallic particle		Largest nonmetallic particle	
Length (µm)	Width (µm)	Length (µm)	Width (µm)
Length (µm)	Width (µm)	Length (µm)	Width (µm)

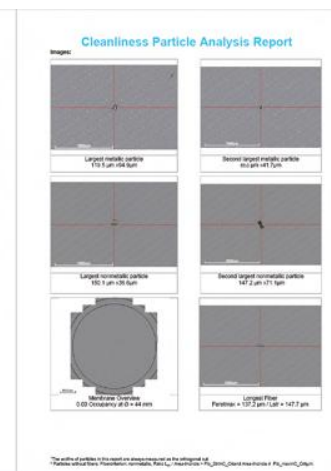
ISO 15000 Cleanliness (mm)

Total metallic particles (ISO 15000) (mm)

Total nonmetallic particles (ISO 15000) (mm)

Total particles (ISO 15000) (mm)

Remarks:



example of cleanliness report analysis

STANDARD DELIVERY

Microscopy	1 pc
Analysis software	1 pc
Camera	1 pc
Computer	1 pc
Filter membrane fixture	1 pc
Motorized scanning station	1 pc
Calibration film	1 pc

OPTIONAL DELIVERY

Filter membrane	OPP-FP47
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