Scanning Acoustic Microscope SPICA



AcouLab

New Generation Acoustic Solution

SAM-SPICA

Ultrasonic Pulser/Receiver

- Frequency Range 1 - 500MHz
- PRF(Pulse Repetition Frequency): Upto 50KHz

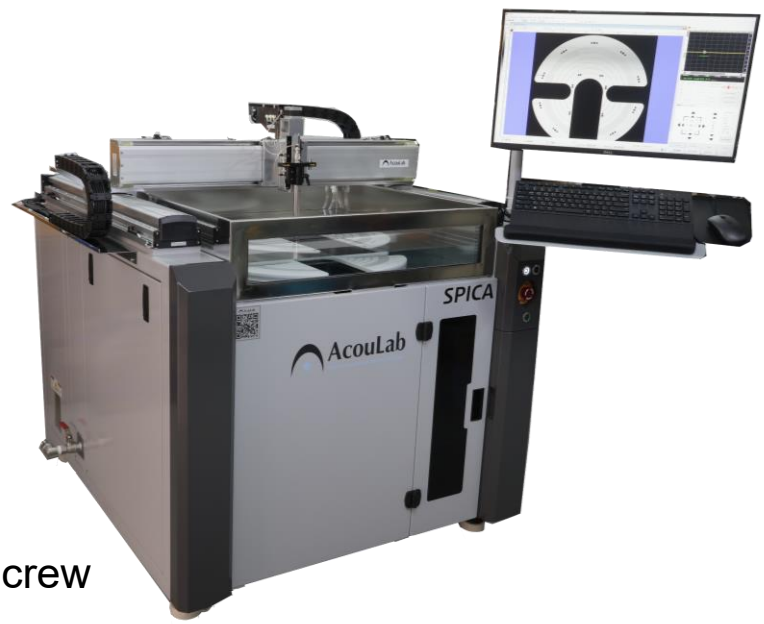
A/D Converter

- Real time 1GHz Sampling Rate

Industrial Computer for Ultrasonic System

- OS : Windows 11
- Monitor : 27" (4K)

Mechanical Scanner



- Scan Axis (Linear servo motor)
  Max. Speed 1,000mm/s
  Repeatability +/-2 micron
  Encoder Resolution 0.5micron

- Index Axis
  Servo motor with lead screw
  Step Resolution 5micron

- Vertical Axis
  Micro-stepping motor with lead screw
  Max. Stroke 80mm
  Vertical Resolution 2.5micron

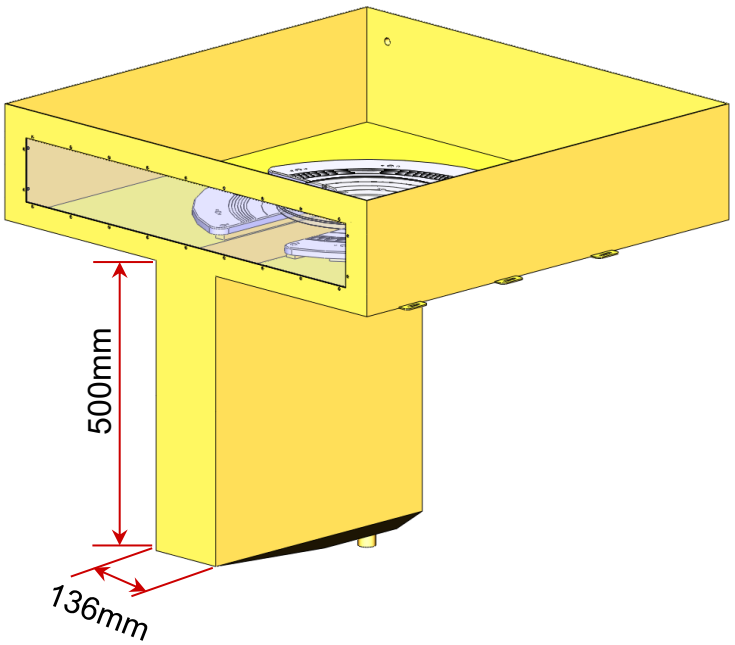
- C- Scanning Area : 750mm x 750mm

- Main Unit SIZE : 1,210mm X 1,320mm X 1,430mm

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Configuration

Bath & JIG (Standard type)

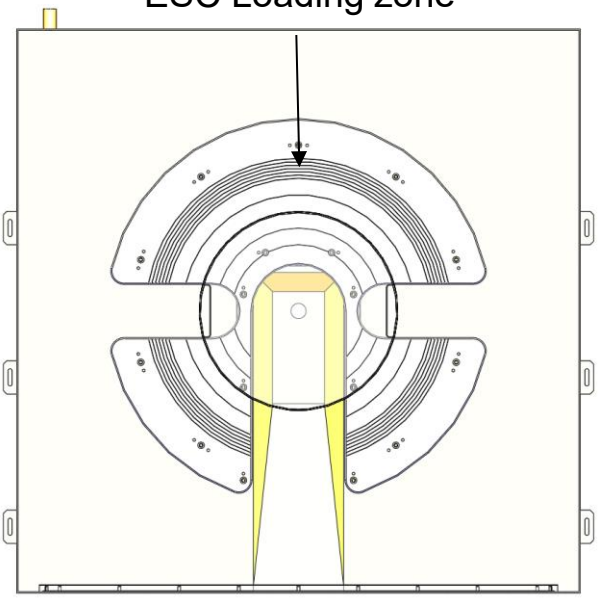


Inner Maximum size

(Heater pole length & diameter)

Inspection align

ESC Loading zone

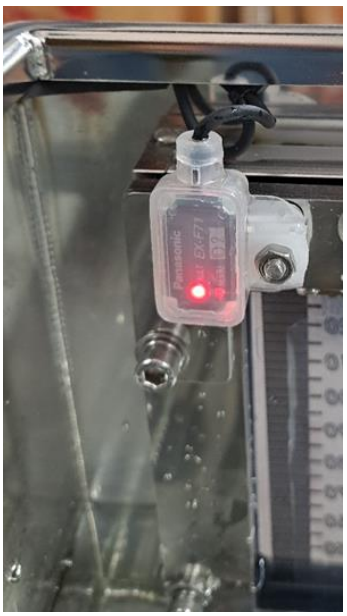


Bath Overflow Sensor & Valve

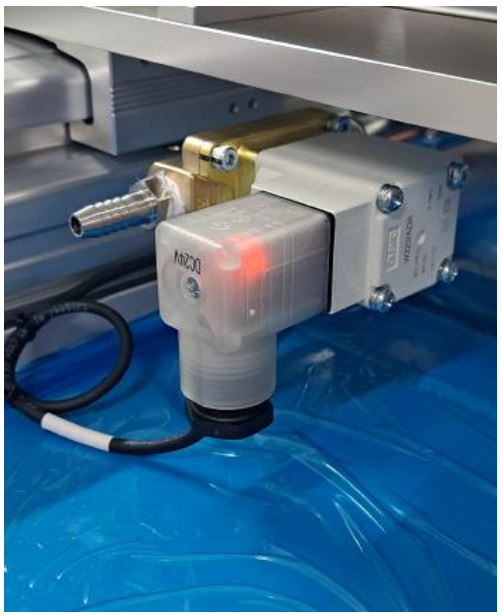
Overflow (Normal)



Overflow (Abnormal)



Water Supply Solenoid Valve



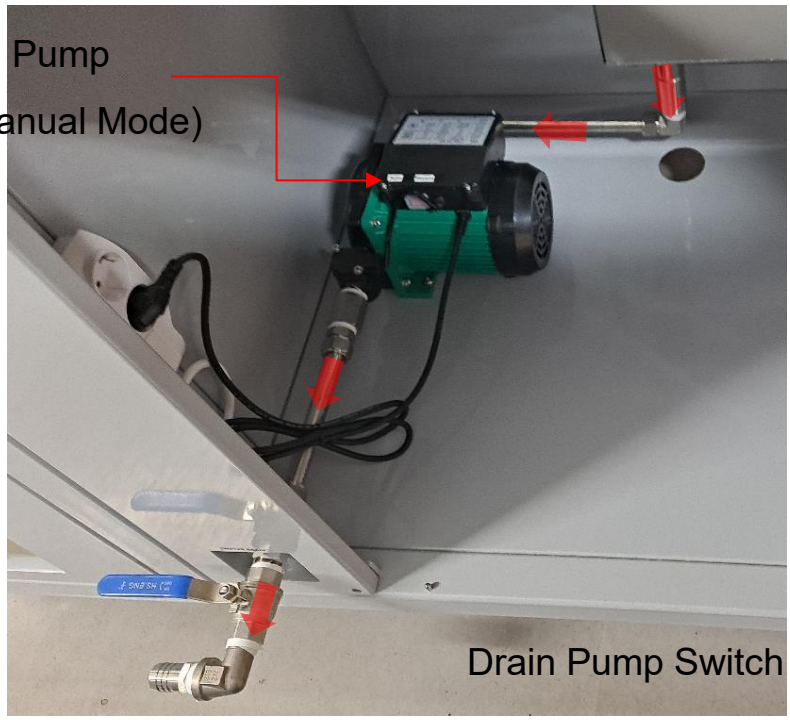
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Configuration

Drain

Drain Pump

(Auto or Manual Mode)



Drain Pump Switch



Computer & Pulser Receiver



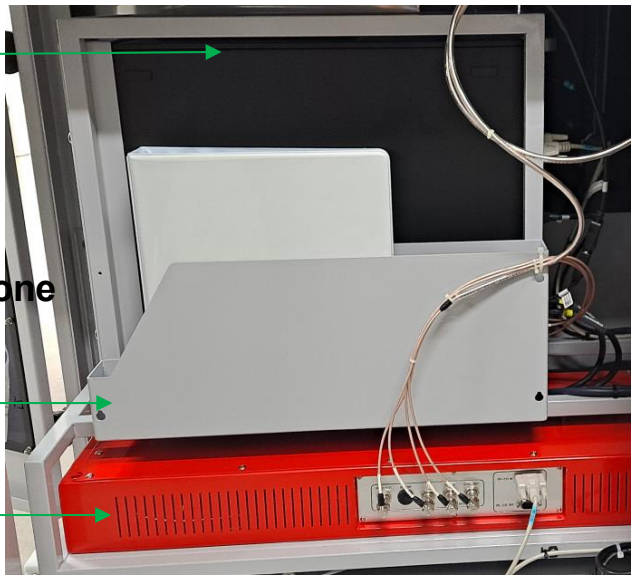
Computer



Transducer storage zone

Manual storage zone

Pulser Receiver



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SAM-SPICA

Immersion Tank

- Dimension : 850mm x 850mm x 200mm
- Material : STS304

General

- Weight : Approx. 500kg
- Electric Power : AC220V / 1Kw(5A) / 1Phase

Safety

Certification of KCS



KCs

자율안전확인 신고증명서

신청인	사업장명	(주)어코랩	사업장관리번호	119-81-340260
	사업자등록번호	119-81-34026	대표자 성명	이원흠
	소재지	(14516) 경기 부천시 수도로55번길 8,2층 (삼정동)		
자율안전인증대상 기계 · 기구명		산업용로봇		
형식(규격)		SAM-SPICA	용량(등급)	3 axis
자율안전확인번호		24-AE1EQ-01563		
제조자		(주)어코랩		
소재지		(14516) 경기 부천시 수도로55번길 8,2층 (삼정동)		

「산업안전보건법」 제89조제1항 및 같은 법 시행규칙 제120조제3항에 따라 자율안전확인 신고증명서를 발급합니다.

2024년 11월 15일

한국산업안전보건공단 이사장

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SAM-SPICA

ScanUp Software

- Windows 11 base software for system control and image analysis Automatic and manual setup.

- Automatic focusing, Auto-sizing & Auto-gate.

- Pulse echo and thru transmission modes of operations.

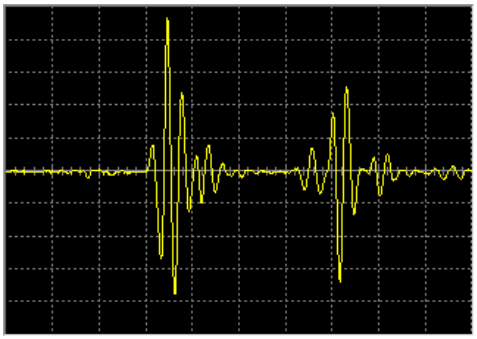
- A, B, C-Scan, FFT-Scan TOF-3D and Virtual 3D display.

- C-Scan image for amplitude, time of flight and phase inversion FFT for transducer evaluation.

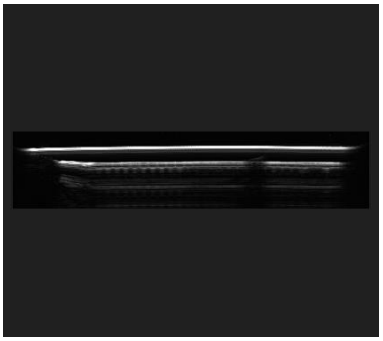
- Size measurement of defects and delamination.

- Automatic report generation.

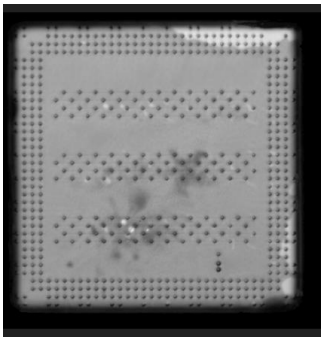
- Simultaneous Pulse Echo and Thru Scan inspection. (Optional)



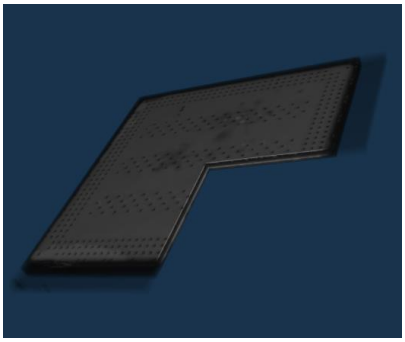
A-Scan



B-Scan



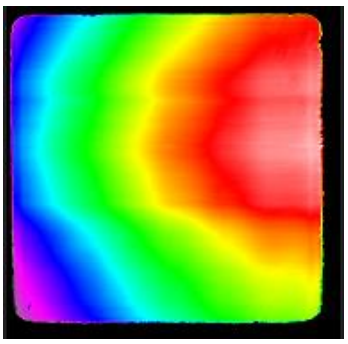
C-Scan



Virtual 3D



TOF 3D

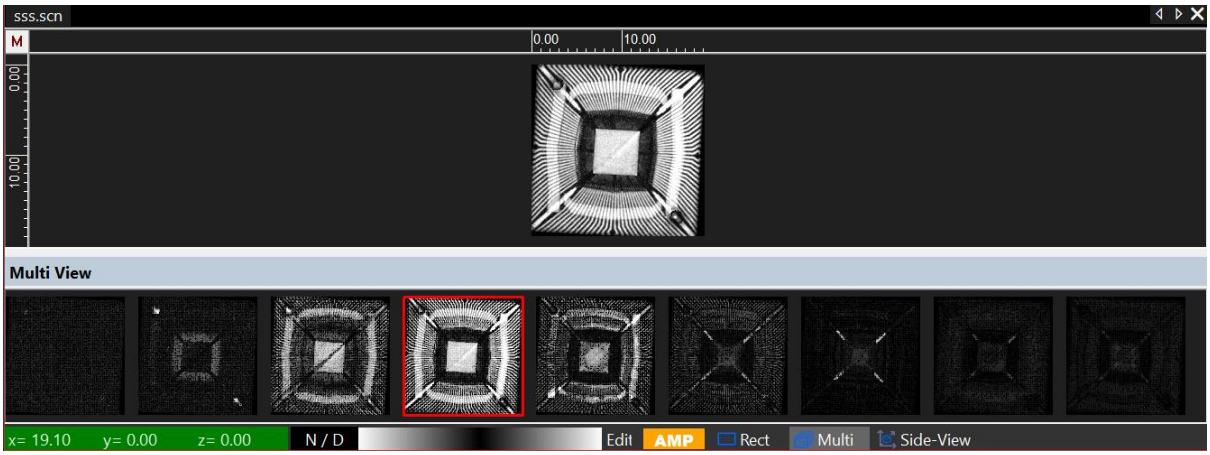


Surface

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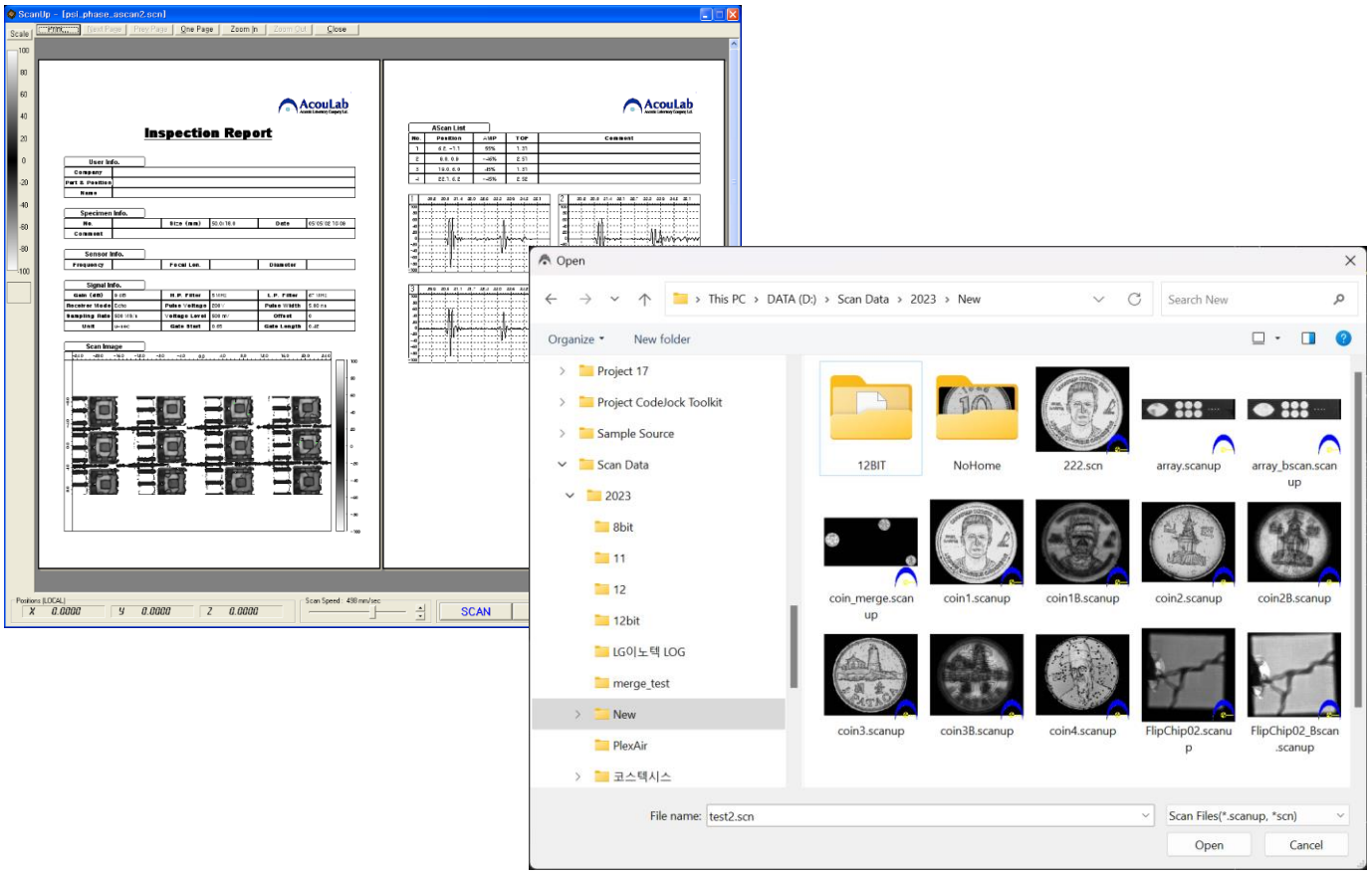
ScanUp Software

- Multi-Layer Scan (Upto 99 layers), Tray Scan and Specific Area Scan.



- Inspection Report.
  A function for pre-entering information required when creating an inspection report, for preview and printer output.

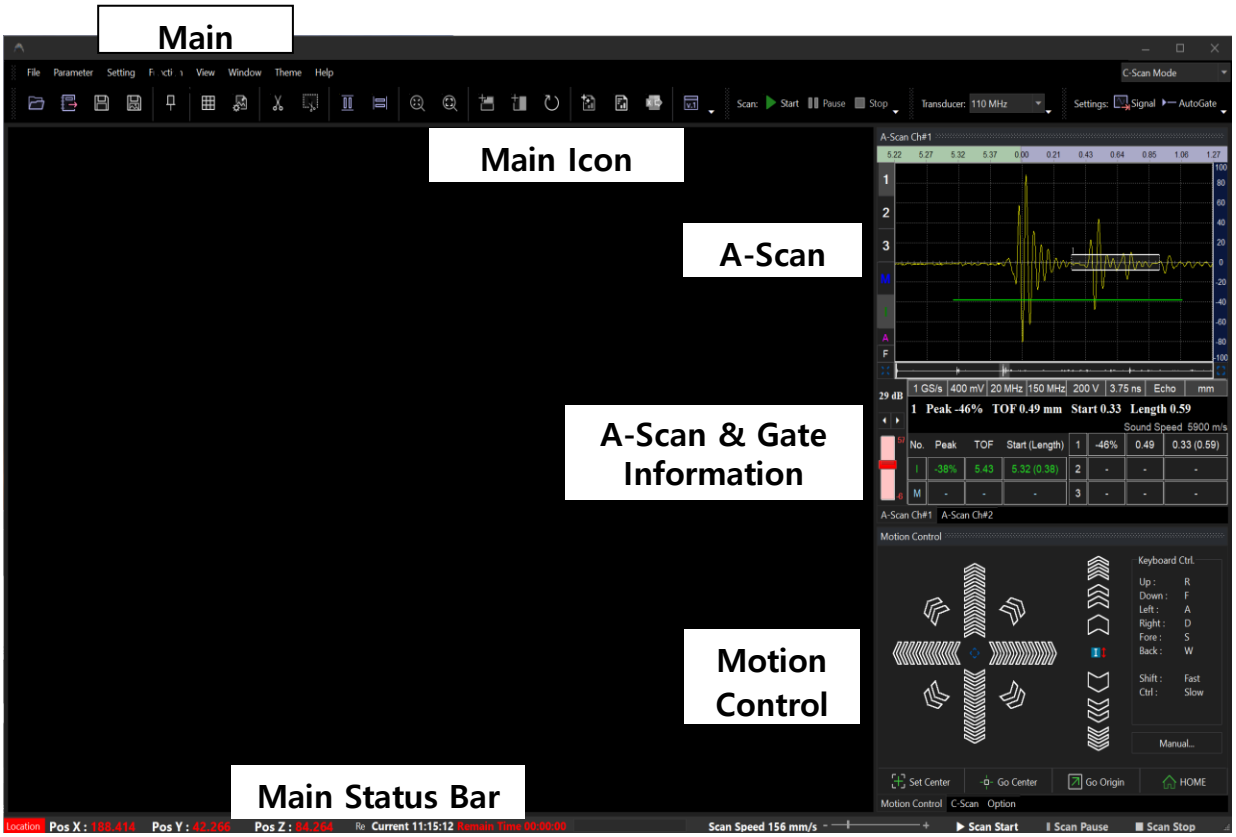
- Preview
  Can preview the inspected image through Windows Explorer.



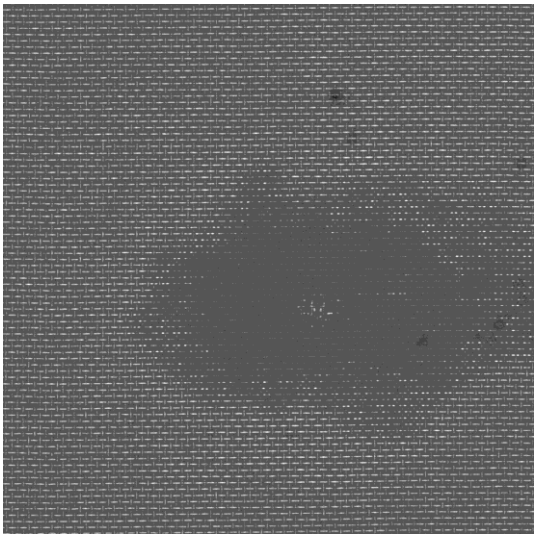
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ScanUp Software

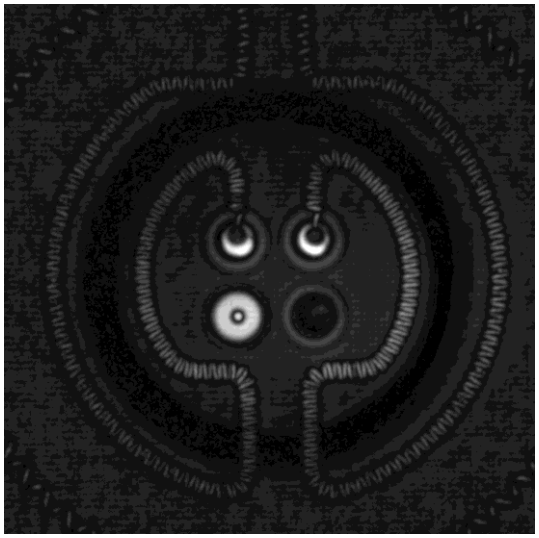
- ScanUp Program User Interface.



Application



Mesh

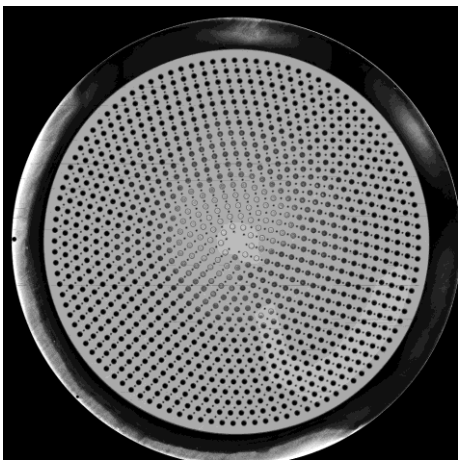


Heater

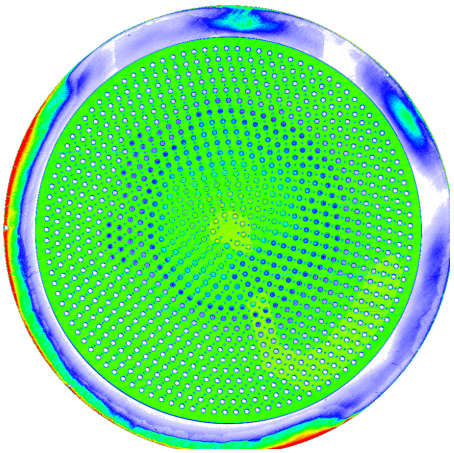
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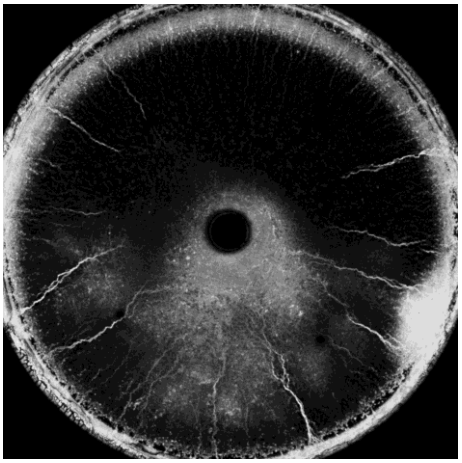
Application

C-Scan

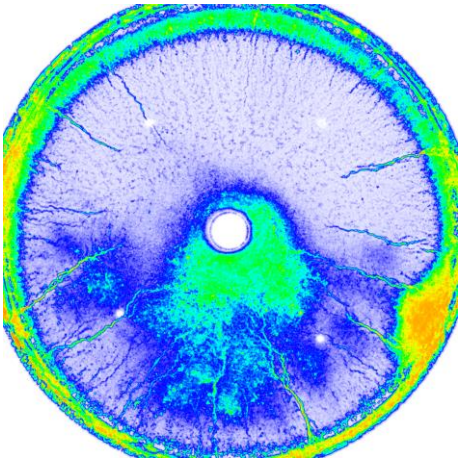


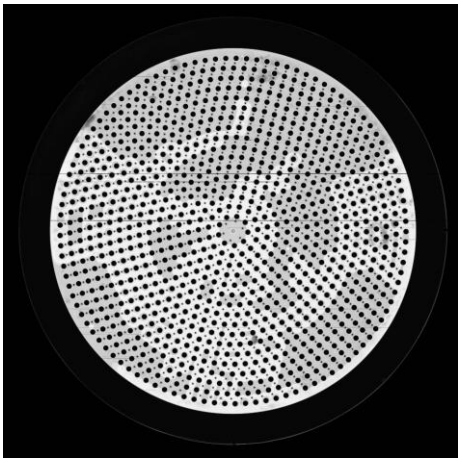
Leak



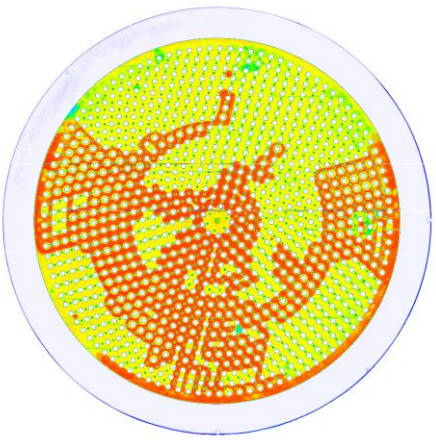


Crack





Void

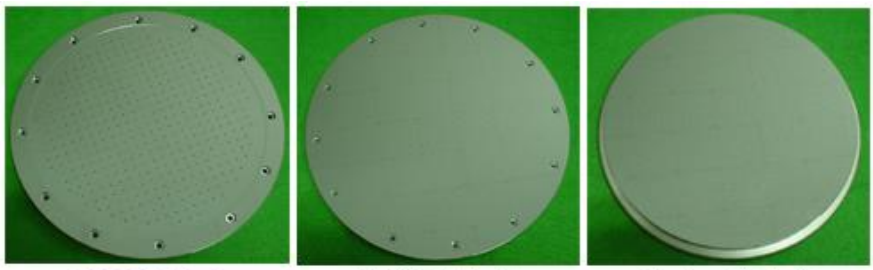


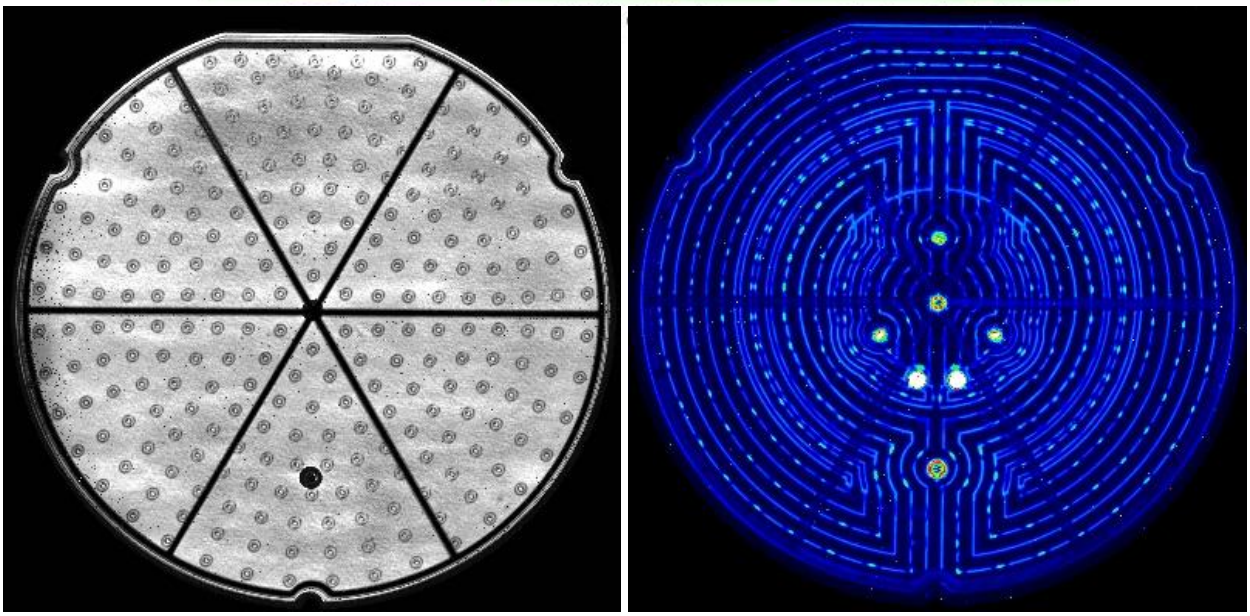
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SAM-SPICA

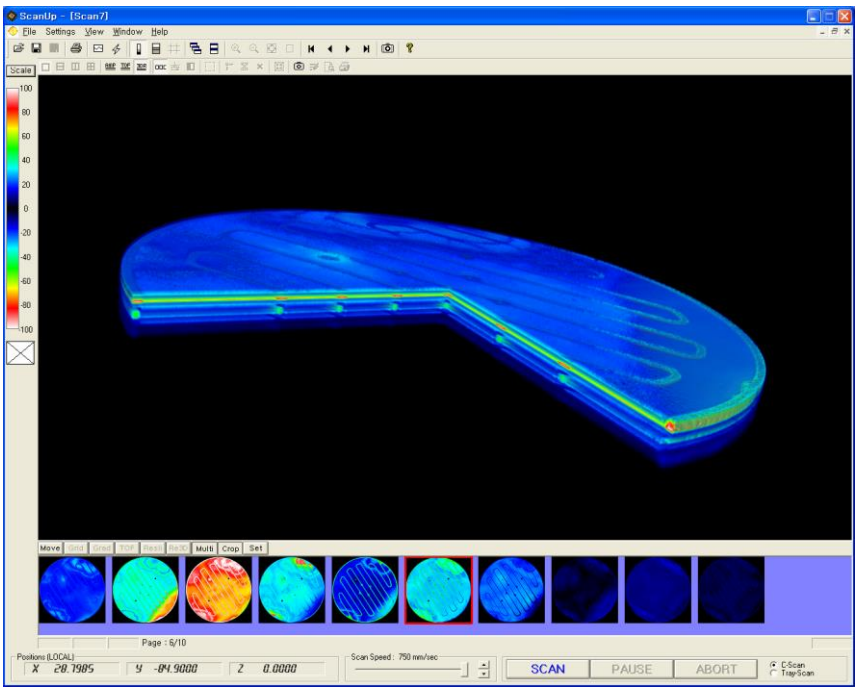
Application

Electro Static Chuck









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