

Adixen Pod Analyser ver.2009



A SOLUTION TO MEASURE POD ENVIRONMENT QUALITY

Adixen Pod Analyser (APA)* measures POD environment quality inside the system and of surrounding also, in real time with ppbv sensitivity level. It is designed to provide Advanced Solutions from now onwards for clean room technology.

- Process control in real time
- Easier queue time management
- Yield improvement

**APA Stand alone version
Single POD interface
(FOUP / RSP)**



Wafer and Mask

"Fab AMC requirements have been defined, but AMC at the equipment and FOUP level needs to be understood and defined"

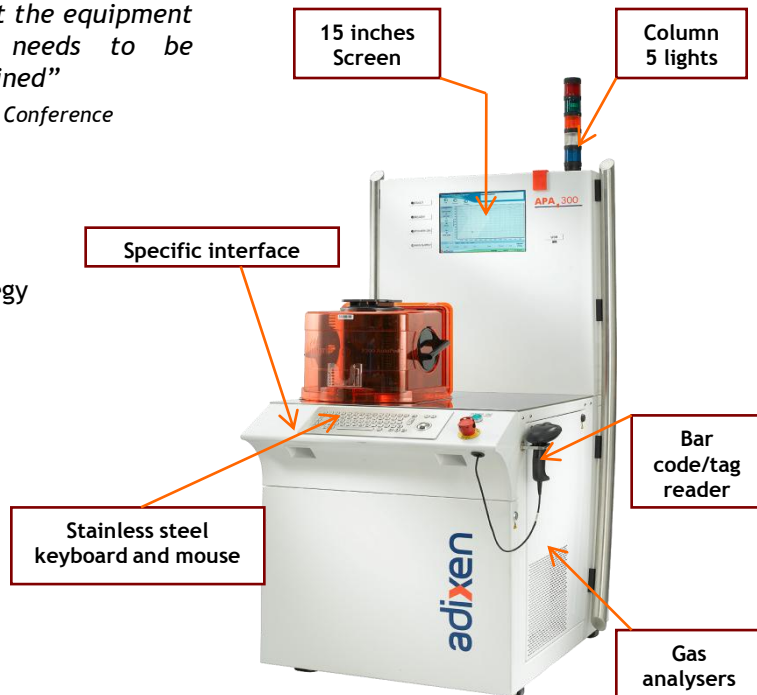
ITRS 2007 Public Conference

Actions

- Wafer and Mask environment → cleaning strategy
- Equipment & process → storage optimization
- Fab → cross contamination risk

The system

- ▼ Easy to use interface
- ▼ Automatic sampling
- ▼ Small foot print
- ▼ Without opening the Pod



****A full automatic version is coming soon**

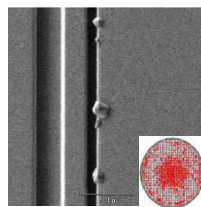
*Adixen patent pending

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Airborne Molecular Contamination (AMC) :

AMC is known to decrease the yield and quality in IC fabrication < 130 nm:

- ▼ **Acids:** Interconnect corrosion, haze effect, crystal growth
- ▼ **NH₃, amines:** Resin "T-topping", Critical Dimension modification (CD), haze effect,
- ▼ **Solvents:** Gate oxide issues, etch rate decrease, epitaxy issues



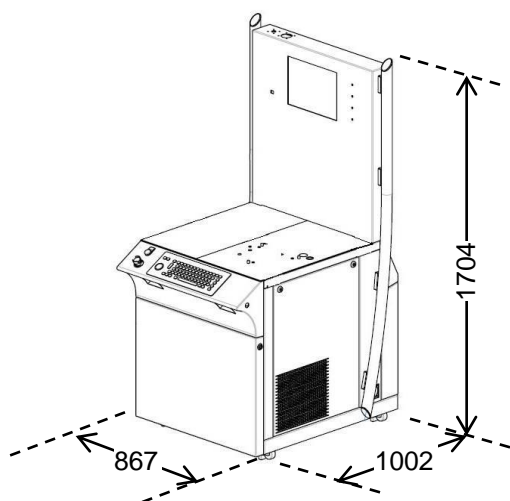
Example of Crystal growth induced by AMC

Measured gases

	Gas	Precision
Standard	NH ₃ or Total Amines	0.1 - 200 ppbv
	Total Acids (HCl, HBr, HF, F ₂ , Br ₂ , Cl ₂ , SO ₂)	0.1 - 200 ppbv
Option units*	H ₂ O	5 - 95 %
	SO ₂	0.5 - 500 ppbv

* Other option : please contact us

General specifications

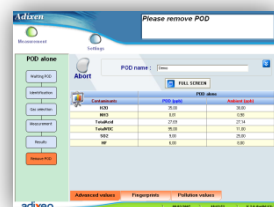


Stand Alone version, in [mm]

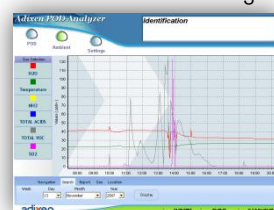
Control System

The simple interface is designed for the cleanroom operators. It features:

- Pod identification entry by bar code/tags.
- Recording of cycle monitoring
- Warning for high value
- Graphical interface
- Ethernet networking capability
- Data saving and on-line analysis.
- Ambient AMC monitoring



Real time monitoring



Ambient AMC history

Parameters	Specification
Type of pod**	FOUP 300 mm, SMIF Pod 200 mm, RSP 200, RSP 150, MRP 150 FOSB 300mm (manual measurement only)
Power supply	110 -240V and 50-60 Hz / 300 W max
Gas supply	CDA 6-10 Bar , 10 SLM max
Radioactive source	Nickel-63 370 MBq
Dimension WxDxH	867 x 1002 x 1704 [mm]
Handling space	1000 x 1750 [mm]
Weight	Approx. 235 kg depends on option
Noise	< 65 dbA
Measurement time	2 minutes
Data storage	Up to 1 year of measurement
Communication	User interface + Via Ethernet
Automation***	SECS/GEM, HSMS, E84

** Other interfaces : please contact us

*** Under development

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