



PTW ASIA PTE LTD

ASM International A412 Vertical Atmospheric Furnace	
Manufacturer	ASM
Model	A412
Product Description	Vertical Atmospheric Furnace
Serial Number	30418
Wafer size	300mm
Process	ATMOXANNL
System, General Specification	
Safety Specification	SEMI S2-0703/CE
Heater Model	Heating element ATM FR
Process Condition	AP
Process Temperature	(C)
ART Control	None
N2 Load Lock	Yes
Wafer Type	300mm-Si SEMI STD-Notch
Qty. of Production Wafers	150wfr
Side Maintenance	None
Software Version (WAVES)	Latest
Boat Operation	2 Boat Type
Temperature Controller	MTC
System, Unit Location	
Furnace	Main-Fab
Power Box	Sub-Fab
Pump	N/A
FTR	Sub-Fab
Step Up Transformer	N/A
Step Down Transformer	N/A
Ozone Delivery System	N/A
WVG Controller	N/A
Liquid Delivery System	N/A
UPS	None

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System, Factory Automation	
Host Communications	Comply with GJG
Equipment Host I/F Connection	Power Box Top HSMS (10Base-T)
Group Controller Connection	None
OHT Capability	Yes
AGV Capability	None
RGV Capability	None
PGV Capability	None
PIO I/F Location	FNC Top
PIO Provided by	Customer
PIO Maker/Model	N/A
Carrier ID Reader Writer Type	RF
CIDRW Load Port	Read
CIDRW FIMS	Write
CIDRW Maker/Model	Asyst/ATR9100
CIDRW Provided by	ASM
FDC FDC(Fault Detection and Classification)	N/A
System, User Interface	
Signal Tower Model	LOUGWB-24-4
Signal Tower Colors	Signal Tower Colors (from the Top), Red/Yellow/Green/Blue
Signal Tower Location	Front Operation Panel
Front Operation Panel	Yes
MMI and Gas FlowChart	Gas Box & Front Operation Panel Installed
Indicator Type	Superset
Operator SW	Standard
Pressure Display Unit	MPa / Pa
Cabinet Exh Pressure Display	Cabinet Exhaust Pressure Display Unit=Pa
Warning Label	English
System, Furnace	
Dewpoint Meter for N2 LL Dewpoint Meter for N2 Load Lock	Yes
RCU Duct Length FNC - RCU	NA
Ionizer (maker/model)	None
Chemical PreFilter-Acid Chemical Pre-filter (for Acid)	None
Chemical PreFilter-Alkali Chemical Pre-filter (for Alkali)	None
Chemical PreFilter-Hydrocarb Chemical Pre-filter (for Hydrocarbon)	None

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Chemical PreFilter-Location	Chemical Pre-filter Location	N/A
Side FFU Chemical Filter	Side FFU Chemical Filter	None
O2 Control for N2 LL	O2 Density control for N2 Load Lock	Yes
System, Wafer/Carrier Handling		
Carrier Type		FOUP/25slots, SEMI STD
FOUP Maker/Model		FOUP Maker/Model= Entegris/F300-2005-17UT1502
Carrier Stage Capacity		32 FOUP
Info Pad A,B		None
Fork Material		END EFFECTOR242*2 CERAMIC
W/T Type		Gemark WHR
W/T Type A/T		Standard
System, Power Distribution		
Voltage 3phase		480VAC
3phase connection type		Star Connection
Voltage Single-phase		120VAC
Single-phase connection type		N/A
Wattmeter		None
Control Power UPS provided by		Customer
Control Power UPS type		N/A
UPS Input/Output Voltage		N/A
System, Gas Distribution		
IGS Type		Integrated Gas System
IGS Maker		Fujikin
Tubing Bends		Bend Less than 90deg
IGS Final Filter		PALL
IGS Regulator		Tescom
IGS MFC		HORIBA STEC-Z500series/ Digital
IGS Press. Transducer		Celerity
Liquid Source Vapor System	Liquid Source Vapor System Maker/Type	None
Auto-Refill System		N/A
Auto-Refill System Provider		N/A
Refill System Tubing		N/A
Vacuum Gage - Press Ctrl		N/A
Vacuum Gage - Press Monitor		N/A
Vacuum Gage - Pump Monitor		N/A

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Main Valve	N/A
Pump Maker/Model	N/A
Pump Provided by	N/A
N2 Dilution Unit Provided by	N/A
Pump Power	N/A
Pump Control Unit Location	N/A
Vacuum Piping Provider	N/A
Gas Leak Detector	None
Gas Leak Detector Provided By	Customer
Gas Leak Detector Maker	Customer - House System
Gas Detector Power	Customers Facility Provided
Detected Gas 1 / Location	H2/Gas cabinet
Detected Gas 2 / Location	NH3/Gas cabinet
Detected Gas 3 / Location	H2/BUBBLER Cabinet
Detected Gas 4 / Location	HCL/BUBBLER Cabinet
Detected Gas 5 / Location	NH3/BUBBLER Cabinet
Detected Gas 6 / Location	HCL/Reactor Cabinet
Detected Gas 7 / Location	NH3/Fast ramp
External Torch Unit	Installed
Burn Out Unit	N/A
PAC	None
Exhaust Pressure Control	N/A
Exhaust Pressure Controller	N/A
Vacuum Exhaust System	N/A
Vacuum Pressure Controller	N/A
Heater Tape Interface	Heater Tape Interface
System, Reactor	
Quartz Provided by	ASM
Quartz Vendor Requirement	None
SiC Provided by	N/A
SiC Vendor Requirement	N/A
Liner Tube (AP)	N/A
Process Tube (AP, AP+Sub-AP)	Quartz Single
Outer/Inner Tube Material	N/A
Inner Tube Type (LP)	N/A
Inner T/C	Process Tube interior wall type (for AP Heater)
Tube Sealing	N2 purge+Lip seal
Manifold Heater	N/A
Valve,Manifold PCW	N/A
Soft Backfill Injector	N/A

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Boat Type	170 slots Ladder (5.3mm Pitch)
Boat Material	Quartz
Boat Rotation	Yes
Pedestal Type	Quartz
Cap Heater	None
Auto Shutter	No Storage Purge Type
Earthquake Countermeasure	None
Process Cap	Process Cap
System, Facilities	
Exhaust Connection Point	Top Connection
PCW Connection Point	Bottom Connection
Incoming Gas Connection Point	Bottom Connection
Gas VENT Connection Point	Bottom Connection
Exhaust VENT Connection Point	Bottom Connection
Gas Unit Exh Connection Point	Bottom Connection
Power Cable Input Location	Power Box Top
Gas Exhaust Connection Point	Top Connection
Damage/Missing parts list	
Please inspect tool to reconfirm	



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All Equipment is offered subject to prior sale. This item will be quoted based upon specific terms and configuration required. Interested parties may contact PTW Asia Pte Ltd at:

ask@ptwsingapore.com

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