

TECHNICAL SPEC FOR furnace

System Model:	Thermco Horizontal 1/4	THERMCO
Specific model:	Thermco 5000	
Process:	Horizontal Hi-temp oxidation/diffusion	
Substrate size:	6 inch	
MFC for each tube: (N2Carrier, 2 SLM)	1X N2 (30 SLM), 2X O2 (20 SLM, 2 SLM), 1X H2 (20 SLM), DCE	
Process temperature:	1250 °C	
Voltage:	3X400VAC	
Heating element:	MRL	
P/N No for each tube:	6 in SiC	
Tube size:	6 inch, SiC tube with profile TC	
Water cooled heat exchanger:	Yes	
Thermocouples:	B-type, 5-zone profile and 5-zone spike	
Temp controlled zones:	5-zone	
Over temp monitoring:	Separate overtemp controller	
Boat loader type:	BT-loader (belt)	
Hlf air supply:	From fab	
Blower power:	Separated	
Hepa filter type:	Fire limiting	
Hepa filter access:	Rear	
Scavenger boxes:	Standard – air cooled	
Head assembly:	SiC paddle	
Cantilever type:	Cryco for SiC paddle	
Source cabinet:	Standard	
Gas manifolds:	Standard	
Exhaust position:	Top	

External torch:	Water cooled steam generator
Source heater:	Resistor
Bubbler:	Schumacher
CDA:	Yes
Regulator:	Common for stack
Gauge:	Common for stack
Filter:	Yes
Gas inlet location:	Top
Valve:	Standard
Computer console:	Separate TMX cabinet
Controller:	TMX
Missing parts:	None
Defected parts:	Tube 3 heater defective
Operating system:	Brooks / AppliedMaterials SEMY
Serial plate	SC109L S/O 24-19008

