

TECHNICAL SPEC FOR furnace

System Model:	Thermco Horizontal 1/4 THERMCO
Specific model:	Model 8200 Vintage 2011.04
Process:	Horizontal Hi-temp oxidation/diffusion
Substrate size: hardware change	8 inch (configuration), some tubes run 6 inch but without hardware change
MFC for each tube: (N2Carrier, 1 SLM)	1X N2 (30 SLM), 2X O2 (20 SLM, 2 SLM), 1X H2 (20 SLM), DCE
Process temperature:	1250°C
Voltage:	3X400VAC
Heating element:	DS Fibertech / Ellexar
P/N No for each tube:	8 inch SiC
Tube size:	8 inch
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:	D-loader (wormgear)
Hlf air supply:	From fab
Blower power:	Integrated
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 for hi-temp ox/diffusion
Gas manifolds:	See MFC
Exhaust position:	To top

External torch:	Water cooled steam generator
Source heater:	Resistor
Bubbler:	DCE – Schumacher - ATCS 15 TLC
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:	Heater tube 1 end of life
Operating system:	Brooks / AppliedMaterials SEMY
Serial plate	F1212R S/O TTJ-050

