

TECHNICAL SPEC FOR furnace

System Model:	Thermco Horizontal 1/4	THERMCO
Specific model:	Thermco 5000	
Process:	2/4 are thermal diffusion, 2/4 are H2_anneal	
Substrate size:	6 inch	
MFC for each tube:	2/4 thermal : 1X N2 (30 SLM), 2X O2 (20 SLM, 2 SLM), 1X H2 (20 SLM), DCE (N2Carr, 2 SLM)	
	2/4 H2_anneal : 2X N2 (40 SLM, 30 SLM), 1X H2 (4 SLM), 1X H2/N2 (4 SLM).	
Process temperature:	2/4 hi-temp diffusion on 1250°C	
	2/4 on 500°C (H2Anneal)	
Voltage:	3X400VAC	
Heating element:	MRL	
P/N No for each tube:	2/4 6 inch SiC, 2/4 6 inch quartz	
Tube size:	2X 6 inch SiC, 2X 6 inch Quartz	
Water cooled heat exchanger:	Yes	
Thermocouples:	2/4 B-type, 5-zone profile and 5-zone spike	
	2/4 R-type, 5 zone profile and 5-zone spike	
Temp controlled zones:	5-zones	
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:	2/4 : Standard for hi-temp ox/diffusion 2/4 : for H2 anneal
Gas manifolds:	Standard
Exhaust position:	Top
External torch:	Water cooled steam generator
Source heater:	Resistor
Bubbler:	DCE – Schumacher – STC 115 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:	None
Operating system:	Brooks / AppliedMaterials SEMY
Serial plate	

G1



THERMCO SYSTEMS

A Division of Silicon Valley Group, Inc.

SER. NO.	SG 074R	VOLTS	380 / 220 / 120		
TYPE	5 000	FREQ.	50	HZ	AMPS 32.9/55.8/10.1
S.O. NO.	24-18922	PHASE	1Ø	POWER	12.5 KW
L1	_____	AMPS	L2	_____	AMPS
			L3	_____	AMPS