

RFQ#

## FURNACE SPECIFICATION FORM



CONTACT		FURNACE INFORMATION	
Date Rec'd:	_____	Equip:	Series: _____
Customer:	_____	Model:	_____
Add1:	_____	<b>RFQ DETAILS</b>	
Add2:	_____	Source of Bid:	_____
City, State, Zip	_____	Type of Bid:	Budget      Firm
Country	_____	RFQ Due:	<input type="text"/>
email:	_____	Competition:	_____
web:	_____		
Phone:	_____	Job Timing:	_____
Fax:	_____	Funding:	_____
Contact 1/Title:	_____	Desr'd Deliv Date:	_____
Contact 2/Title:	_____	\$Budget Avail:	_____
Direct      Rep	_____		
Rep Phone/Fax:	_____	<b>OPTIONS / CUST EQUIP Prefs / CUST NEEDS</b>	

**CUST NEEDS:**

APPLICATION	
Mat'l:	_____
Application:	_____
_____	_____
_____	_____
_____	_____
_____	_____
Reason for Furnace:	_____
_____	_____

**OPTIONS:**

Reference Quotes:		
RFQ/Job #	Cust	Descript.

Load Truck (elec/air)  
 O<sub>2</sub> Monitor (Model)  
 Dew Point Monitor

**EQUIP PREFERENCES:**

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CUSTOMER SPECIFICATION									
<b>Chamber</b>	Int/Ext/Flgs	/	/	(SS/MS)	<b>Process Gas</b>	Temp Range	Press/Vac	Flow Rate(slpm)	
Doors (swing/bolt)	Front:			Rear:	Process Gas(es):				
Pneumatic/Sbar	(externally switchable or concurrent)								
<b>Temperature</b>					G-10504A part press (1-1000μ)	Gas:			
Cont. Oper Temp:					G-10504A part press (1-760 torr)	Gas:			
Max Oper Temp:	Max. Design:				G-10503A H <sub>2</sub> pos.press(1-3 psig)	H <sub>2</sub> / Inert:			
Temp Uniformity:	+/-		@	(vac / atm)	G-10503B H <sub>2</sub> part pres(2-760torr)				
Cust. Witness	#5	9	type	t/c @	°C in	vac /atm	G-10503D H <sub>2</sub> pos. press(1-3psig)	HiVac	
Ramp Rate (°C/min)					@ linear / ave	G-10503E H <sub>2</sub> partial press	Siemens PLC		
<b>Load</b>					G-10503G H <sub>2</sub> part. press(0-15torr)				
Load Layout					G-10505A Pos Pres Flow(0-2psig)	Gas(es):			
Part Qty:					G-10503H Pos Press Formng Gas	(0-2 psig)			
Part Size:					G-10505J part press Flow	(0-15 torr)			
Furniture:					Backfill Gas	Gas(es):			
Max Load (Kg)					(incl furniture)	WC Sweepgas™ (10-100 torr)	Gas(es):		
<b>Binder / Lubes</b>					MimVac Sweepgas™(1-760 torr)	Gas(es):			
Type(s):					wt%:	InjectavacSweepgas™(1-760torr)	Gas(es):		
Other Contaminants:					Backfill Gas	Gas(es):			
Debind					Misc Gas Strategy:				
1st Stage: ( %)					MP:	Vapor:			
2nd Stage: ( %)					MP:	Vapor:			
<b>BRS:</b>	None	Vac Delub	WC Sweepgas™	OTO BRS	<b>Cooling</b>				
	MimVac	Incinerat	Trap/Cond	Peg Pot	Method:	None	Quench	Fan	
Strategy:						Heat Exch	Prog. Cooling		
					Cooling Gas:	Fan HP:			
					Cooling Rate (°C/hr):				
<b>Vacuum</b>	Evac	Debind	Sinter	<b>Water</b>					
Ultim. Vac Level:					Open	Closed			
Oper. Vac Level:					Water Quality:				
Vacuum Leak:					Unif: +/-				
<b>Misc</b>					Contin. Fce.				
Pressure (Bar)					(productuctivity)				
					(setter)				
Hot Press (ram 1-2 sided)									
(ram travel)									

# FURNACE SPECIFICATION FORM

FURNACE DESIGN			
<p><b>Hot Zone</b> (Resist Induction)</p> <p>Hand Load/Ld truck: _____</p> <p>Cust Des'd HZ Size: _____</p> <p>HZ Size: _____</p> <p>No. Sides: _____</p> <p>No. Zones: _____</p> <p>Mat'l/Type Alloy: Mo W Ta Graphite</p> <p style="margin-left: 20px;">- Elements: _____</p> <p style="margin-left: 20px;">- Shields/Insul: _____</p> <p style="margin-left: 40px;">- Hearth: _____ (Rails/Rollers)</p> <p style="margin-left: 40px;">- Jail: _____</p> <p style="margin-left: 40px;">- Retort: _____ Type: _____</p> <p><b>Power / Utilities</b></p> <p>Inc'g(V/Ph/Hz): _____ / _____ / _____</p> <p>Hot Zone (KVA): _____ Second V: _____</p> <p>Tot Con Ld (KVA): _____</p> <p>SCR/VRT/SaCR: _____</p> <p>Air: _____ H<sub>2</sub>O(psig): _____</p> <p>Gas(es) (slpm): _____</p>	<p><b>Temp Sensors</b></p> <p>T/C Type: _____ Temp: _____ # Ctrl: _____</p> <p>Sheath: _____ # OverT: _____</p> <p>Optic. Pyrom: _____ 1 2 color _____</p>		
<p><b>Vacuum</b></p> <p>Mech/Roughing: _____ CFM: _____</p> <p>Blower: _____ Oil Mist : _____</p> <p>Manifolding: Main Debind Bypass</p> <p>High-Vacuum: _____ CFM: _____</p> <p>Back'g/Hold'g: _____</p>	<p><b>Vac Sensors</b> # Type Display/PS</p> <p>Rough Vac # T/ CVac Gauge</p> <p># Capac. Mano</p> <p># Piranni</p> <p># Cold Cathode</p> <p># Hot Ion Filamt</p>		
<p><b>Instrument. &amp; Control</b></p> <p>System Prog/Ctroller _____</p> <p>PC-Based Ctrl Software: _____</p> <p>Sys/Prog: _____</p> <p>PLC: _____</p> <p>Overtemp Ctrl: _____</p> <p>Chart Record: _____</p> <p>Gas Ctrl: _____</p> <p>Misc. Ctrl Info: _____</p>	<p><b>Misc Control Strategy</b> _____</p>		

# FURNACE SPECIFICATION FORM

## MISC. CUSTOMER PROFILE QUESTIONS

1. What are the main products mfg'd at your facility?
2. What are the current forming techniques (press & sinter; extrusion; MIM) ?
3. What are the end-use applications for your products?
4. What other type of furnaces are used at your facility?
5. Familiarity level with CVI furnace offerings?

## FURNACE PROCESSING PROFILE

Step:	Temp (°C)		Time	Ramp (°C/min)	Press / Vac	Gas	Toler (+/-°C)
	from	to					

TOTAL CYCLE TIME: \_\_\_\_\_

## FURNACE SCHEMATIC / GENERAL ARRANGEMENT

# FURNACE SPECIFICATION FORM

CUSTOMER QUESTIONS

BOOKING MEETING QUESTIONS

FURNACE QUOTE STRATEGY / CHANGES