

## START-UP SHEET Vacuum Pump

Job Name				Job Number			
Job Ad	idress						
Section	n 5: Equipment Des	scripti	ion				
Spec.	#:		Submittal #:	P	&ID /	'Dwg#	<sup>‡</sup> :
Area	Served:						
	Data		Design			Actual	On Site
Unit T			Design		Actual On Site		
	facturer						
	del #						
Seri						<b></b>	
	Data		Design			Actual	On Site
Motor	Manufacturer						
Mod	del #						
Seri	al#						
RPN	A						
	sepower (HP)						
Serv	vice Factor						
Section	n 6: Equipment Pre	-Inst	allation Inspection				
Step	Ins	pectio	on Description	Yes	No	N/A	Performed By (Initials & Date)
6.2	Nameplate data ma	atches	s vendor specifications.				
6.3	All parts are receiv	ed.					
Commer Observa		Print	Name Signatur	re			Date
Perform (Therm			MANUTO A PORTO DE LA CONTRACTOR DE LA CO				
Review	ved By r/Representatives)						



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Step	Inspection Description		No	N/A	Performed By (Initials & Date)		
6.4	No visible signs of damage, leak, or defective parts.						
6.5	Verify electrical service for correct voltage, current and thermal overload protection.						
6.6	Operational and Maintenance (O&M) manual is available in field.						
6.7	Start-up technicians have reviewed factory start-up procedures in O&M manual.						
Section	7: Installation Inspection						
Step	Inspection Description	Yes	No	N/A	Performed By (Initials & Date)		
7.2	Unit is installed level.						
7.3	Tag # is attached to the unit.						
7.4	Unit base filled with concrete.						
7.5	Service clearance is adequate for maintenance.						
7.6	Spring isolators are installed and adjusted.						
7.7	Pressure gauge is installed per design.						
7.8	Inlet and outlet valves are installed properly.						
7.9	Exhaust devices are connected per design.						
7.10	Water piping is installed per manufacturer's specification. (for wet sealed pumps)						
7.11	Pump is lubricated.						
7.12	Pump oil level is at manufacturer's specification.						
7.13	Back pressure gauge is installed.						
7.14	Gas ballast valve is installed.						
Commer Observa		ire			Date		
Perform (Therm	ned By						
	Reviewed By						
(Owner	r/Renresentatives)						



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Step	Inspection Description		Yes	No	N/A	Performed By (Initials & Date)
7.15	Oil control is properly inst	alled.				
7.16	Oil filter is installed.	Oil filter is installed.				
7.17	Oil drains are installed.					
7.18	Piping connections are tigh	nt.				
7.19	Clamps, bolts, and setscrev	vs are tight.				
7.20	Electrical connections are	secure.				
7.21	Connection between the ur per good piping practices.	nit and piping are installed				
Section	n 8: Operational Inspection	1				
Step	Inspection	Description	Yes	No	N/A	Performed By (Initials & Date)
8.2	Unit vibration is acceptable	e.				
8.3	Pump rotation is correct.					
8.4	Coupling assemblies need alignment (If yes, proceed to step 5, otherwise go to step 6.).					
8.5	Record final data:					
	Position	Readings				
	Up/Down					
	Side/Side					
	Angular					
8.6	Oil or water level is within manufacturer's specifications.					
8.7	Oil or water temperature is within manufacturer's specification.					
Commer Observa						
Perform (Therm Review	(a)	ame Signatu	ire		I	Date
	c/Danrasantativas)					



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Step	Inspection Description	Yes	No	N/A	Performed By (Initials & Date)
8.8	Record the operating parameters below:				

### **Record Start Up Operating Parameters**

Data	Design	Actual On Site		
Unit Voltage				
Current				
Phase				
Vacuum Pressure				
Impeller diameter				

Data	Design	Actual On Site	
Unit Voltage			
Current			
Phase			
Vacuum Pressure			
Impeller diameter			

#### **END OF SECTION**

Comments/ Observations	
	Print Name Signature Date

Performed By (Therma) Reviewed By

(Owner/Representatives)

Print	Name	Signature	Date