VRC-2 Compressor Start Up Check List PRE-START UP

COMPRESSOR GENERAL INFORMATION

Compressor Model	Serial No
Cylinder Serial No	
Driver	Rated Speed
Packager	Packager Unit No
Date Packager Shipped	Start Up Date
Serviceman	Customer
Location	Field Contact
Field Telephone No.	Unit Location
Frame Oil - Make	Grade
Cylinder Oil - Make	Grade

NOTES / COMMENTS:

PRE-START UP

		YES	NO
1.	Are the correct Arrow parts book, technical manual, special tools, and spares available?		
2.	Have the design limitations for the compressor model such as rod load, maximum and minimum speed, discharge temperature been checked?		
3.	Have the design operating conditions been determined?		
	Pressure, PSIG (kPa): Suction Discharge	_	
	Temperature, °F (°C): Suction Discharge	_	
	Maximum RPM Minimum RPM	_	
		YES	NO
4.	Soft Foot Check: Have the compressor feet and crosshead guide supports been shimmed so that the machine is not twisted or bent?		
5.	Have bottom crosshead clearances on all corners been checked? Max. 0.0015" (0.0381 mm) feeler inserted to 1/2" (12.7 mm) Max. depth.		
6.	Record top crosshead minimum feeler clearance below		
	THROW No. 1 2		
		YES	NO
7.	Have the piping and supports been checked to be sure they do not bend or stress compressor?		
8.	Have the coupling bolt torque values been rechecked?		
9.	Has the compressor to driver alignment been checked?		
	Maximum allowable 0.005" (0.127mm) TIR		
10	. Record coupling dial indicator readings in inches at the 3, 6, 9, 12 o'clock position provided.	ons on the li	nes
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Compressor Model Serial No		
11. Has the crankshaft end-play clearance been checked?	YES	NO
Record frame end-play clearance here: inches (mm)		
12. Have piston end clearances been checked with feeler gauges?	YES	ΝΟ
THROW No. 1 2	L	
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13. Has the frame been filled with oil to the proper level?

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- 14. Has proper oil been added if extreme ambient conditions exist or special gases are compressed?
- 15. Is the compressor frame oil level control working and set at the proper level?
- 16. Is the frame oil supply isolation valve open?
- 17. Does the frame low level shutdown work?
- 18. Has the recommended oil filter element been installed?
- 19. Is the oil filter element and all lube oil piping primed with oil?
- 20. Is the low oil pressure shutdown installed and tubed correctly to the downstream side of the oil filter?
- 21. Does the low oil pressure shutdown work?
- 22. Does unit have an oil cooler? Maximum compressor inlet oil temperature is not to exceed 250°F (121°C).
- 23. Is the frame oil temperature shutdown installed, set and working?
- 24. If oil is cooled, is there a temperature control valve?
- 25. Is the frame breather element clean?
- 26. Is the cylinder lubricator box filled with oil?

YES	NO

Compressor Model _____

Serial No. _____

		YES	NO
27.	Is the cylinder lubricator system primed?		
28.	Is the cylinder lubrication system no flow shutdown installed and working?		
29.	Is the cylinder lubrication overpressure indicator installed? Check rupture disc for color. Aluminum is standard @ 2350 psi.		
30.	Has the lubricator instruction plate or Divider Block Selection and Cycle Time (Table 6.2) been checked for proper lube feed rate?		
31.	Is there a working vibration shutdown mounted on the compressor?		
32.	Are the primary and secondary packing vents and the distance piece vents open, and when necessary, tubed off of the skid or out of the building?		
33.	Is there some method of suction pressure control?		
34.	Are the suction pressure, inter stage pressure and discharge pressure shutdowns set and working?		
35.	Are the safety relief valves installed and set to protect cylinders and piping for each stage of compression?		
36.	Are the gas discharge temperature shutdowns installed, set and working?		
37.	Have the gas suction lines been blown out to remove water, slag, dirt, etc?		
38.	Have temporary screens been installed at cylinder suction?		
39.	Has the machine been rolled with the starter to make sure it is free? The oil pressure should come up noticeably while rolling on the starter.		
40.	For engine driven units, has the machine been rolled with the starter to make sure it is free? The oil pressure should come up noticeably while rolling on the starter		
41.	Does the driver rotation match the compressor rotation?		
42.	For machines compressing a combustible gas, have the piping and compressor been purged to remove all air?		
43.	Have the start-up instructions for other equipment on the package been followed?		
44.	Has the Packager's representative done the required review of the Packager's Start Up and Operating Instructions for the unit with the unit operator?		

AFTER START UP

Compressor	Model
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Serial No.

- 1. Did the oil pressure come up immediately?
- 2. Any strange noises or shaking in the compressor or piping?
- 3. Is low oil pressure shutdown set at 25 PSIG
- Are the high discharge gas temperature shutdowns set at approximately 10% above normal discharge temperature? 325°F (163°C) to a maximum of 350°F (177°C).
- 5. Is the divider block cycle indicator pin moving, and have you set lubricator for proper break-in flow rate?
- 6. Are there any oil leaks? If so, where?
- 7. Are the scrubber dumps and high level shutdowns working?
- 8. Are the scrubbers removing all liquids from the gas? How often do the scrubbers dump? (_____ min.)
- 9. Are there sands or oxides in the gas?
- 10. Is the overspeed shutdown set?
- 11. Are rod packing sealing properly?
- 12. Have all safety functions been tested to ensure shutdown of unit upon malfunction?

YES	NO