



11 Apr 2019 / Bernard F

Pressure Vessel Inspection Checklist (Unfired) Conducted on 11th Apr, 2019 By SafetyCulture Staff

Complete

Inspection score	Failed items	Created actions
89.47%	4	0
Conducted on 📅 11th Apr, 2019 ⌚ 3:23 PM +08		
Prepared by Bernard F		
Location San Jose, CA 95135 United States (37.3084816473777, -121.6406824504114)		

Failed items

4 Failed

Inspection / External Inspection

External coverings such as insulation and corrosion resistant coatings are in good condition?

No

Notes

Need to re-apply coating

No erosion or dents found on surfaces of the vessel?

No

Notes

Visible dent observed. Urgent need of repair.

Free of cuts or gouges?

No

Notes

Found cut. Initial assessment is for repair only but will determine if need to be replaced after test.

Photos



Photo 1

Inspection / Piping Systems

No evidence of corrosion, erosion, or cracking or other detrimental conditions?

No

Photos




Photo 3

Inspection

4 Failed 89.47%

External Inspection

3 Failed


External coverings such as insulation and corrosion resistant coatings are in good condition?	No
Notes Need to re-apply coating	
No leakage of gas, vapor, or liquid?	Yes
Pressure vessel mountings have adequate allowance for expansion and contraction?	Yes
Free of cracks, deformations, or other defects on vessel connections (Manholes, reinforcing plates, nozzles, or other connections)?	Yes
Free of corrosion or defects on bolts and nuts?	Yes
No distortion found on accessible flange faces?	Yes
No erosion or dents found on surfaces of the vessel?	No
Notes Visible dent observed. Urgent need of repair.	
Free of distortion?	Yes
Free of cuts or gouges?	No
Notes Found cut. Initial assessment is for repair only but will determine if need to be replaced after test.	
Photos 	
Photo 1	
Determine if should be repaired or replaced	

Surfaces of shells and heads is free of cracks, blisters, bulges, and other evidence of deterioration? Same with skirt and the support attachment and knuckle regions of the heads?	Yes
No cracks or other defects on welded joints and the adjacent heat affected zones?	Yes

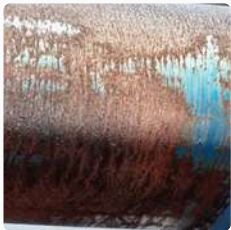
Internal Inspection

<p>Internal inspection may be required only if the ultrasonic wall thickness data indicate that there is some wall thinning or no stamp indicating original wall thickness of the shell and dished heads. All parts of the vessel should be inspected for corrosion, erosion, hydrogen blistering, deformation, cracking, and laminations.</p> <p>https://www.usbr.gov/power/data/fist/fist2_9/fist2-9.pdf</p>	
Adequate number of threads are engaged on threaded connections?	Yes
All openings leading to any external fittings or controls are free from obstructions?	Yes
Special closures are adequate?	Yes
No cracks at areas of high stress concentration?	Yes
Vessel internals have no deterioration that might constitute a hazard?	Yes
Free of corrosion?	Yes


Safety Devices

The following steps should be performed for each safety device:	
<p>IMPORTANT: The set pressure is not higher than the maximum allowable working pressure (MAWP) marked on the pressure retaining item?</p>	Yes
<p>Photos</p>  <p>Photo 2</p>	

If multiple devices are provided, the difference between set pressure does not exceed that permitted by the original code of construction?	Yes
Verify the nameplate capacity and, if possible, compare it to the system capacity requirements.	
Identification on seals match nameplates or other identification (repair or reset nameplate) on the valve or device?	Yes
The valve or device is sealing properly and not leaking?	Yes
Seals are intact and show no evidence of tampering?	Yes
Connecting bolting is tight and all bolts intact?	Yes
The valve has no deposits or mineral buildup?	Yes
No evidence of rust or corrosion?	Yes
Parts are not damaged or misapplied?	Yes
Visible drain holes are not clogged with debris or deposits?	Yes
Rupture Disks:	
Rupture disk nameplate information, including stamped burst pressure and coincident temperature, is compatible with the vessel and/or safety relief valve?	Yes
Markings indicating direction of flow are correct?	Yes
The space between a rupture disk and a safety relief valve is supplied with a pressure gage, try cock, or tell tale indicator to indicate signs of leakage through the rupture disk? (Leaking disks should be replaced.)	Yes
If a rupture disk is used on a valve outlet, is the valve design not influenced by back pressure from leakage through the valve?	Yes
For rupture disks installed on the valve inlet, is the combination rules of the code of construction have been applied?	Yes

Is there provision for expansion?	Yes
Is there provision for adequate support?	Yes
No evidence of leakage?	Yes
Is there proper alinement of connections?	Yes
Proper rating for the service conditions?	Yes
No evidence of corrosion, erosion, or cracking or other detrimental conditions?	No
Photos	
	
Photo 3	
Pressure Gages - pressure indicated by the required gage should be compared with other gages on the same system.	

Completion

Comments
Found a cut and a dent. Will conduct test to determine if can be salvaged by repair or needs replacement. If can still be repaired, will proceed with reapplication of corrosion resistant coating on vessel and piping.
Inspector Name and Signature

Bernard F 11th Apr, 2019 3:46 PM +08

Photos

3 Photos



Photo 1



Photo 2



Photo 3