

KSC SIMPLE CERTIFICATION REPORT (SCR) for Pressure Vessels and Pressurized Systems

This Simple Certification Report meets the requirements of NASA-STD-8719.17 REV. A, NASA Requirements for Ground-Based Pressure Vessels and Pressurized Systems (PVS).

Certification Report # _____ Certification Expiration Date _____
System Identification _____
Date Performed _____ Location (Bldg, Room #) _____
PMN & B/L _____ User Organization _____
Work Order Number _____ O&M Organization _____

**WE, THE UNDERSIGNED, CERTIFY THAT THIS PRESSURE SYSTEM HAS BEEN ANALYZED,
REVIEWED, AND INSPECTED.**

Preparer: _____ Date: _____
Preparer's Supervisor Approval: _____ Date: _____
NASA PSM Approval: _____ Date: _____

GROUND RULES FOR USE OF THE KSC SCR

NASA KSC Pressure Systems Manager (PSM) concurrence is required prior to conducting PVS certification / recertification using the KSC SCR.

The KSC SCR may be used for the following PVS with a Risk Assessment Code of 3 or greater:

1. PVS operating at 150 psig or less which meet the following criteria:
 - Non-critical PVS, and
 - Not a constraint to other critical operations, and
 - Contain only non-hazardous commodities.
2. Air compressor(s) with vessel(s) and associated components which meet the following criteria:
 - Operating pressure of 150 psig or less, and
 - Pressure vessels up to 30 ft³(224 gallons), and
 - ASME Code Stamped pressure vessel(s) only, and
 - Line sizes not to exceed nominal pipe size (NPS) 2"

Note: Certification / recertification of air compressors in accordance with the KSC SCR require:

- Annual inspections for external corrosion or damage, and
- Ultrasonic Testing - Thickness (UTT) shall be performed on the vessel(s) no later than 10 years from date of manufacture, or prior to certification for systems older than 10 years.

3. Pressurized panels (inert gas and CAir systems) which meet the following criteria:

- Operating pressure of 250 psig or less, and
- Designed per ASME B31.3 or KSC-DE-512-SM, and
- Line sizes not to exceed NPS 2"

Note: Certification / recertification of pressurized panels in accordance with the KSC SCR require annual inspections for external corrosion and damage.

SIMPLE CERTIFICATION REPORT

DOCUMENTATION REVIEW continued

	Piping	Tubing	Components
Material(s)			
Code(s)			
Pressure Rating (MAWP)			

	# Pressure Vessel(s)	Year Built	National Board No.	Material	Code	MAWP (PSIG)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

SIMPLE CERTIFICATION REPORT

IN-SERVICE INSPECTION (ISI) CERTIFICATION MATRIX

Category	yr	yr	yr	yr	yr	NOTES
Pressure Vessels						
Support Structure						
Flexible Hoses						
Rupture Disks						
Pressure Gauges						
Relief Valves						
Regulator						
System Piping						
Other Components						

NOTE 1: _____

NOTE 2: _____

NOTE 3: _____

NOTE 4: _____

NOTE 5: _____

- VE - External Visual Inspection
- UTT - Ultrasonic Testing - Thickness
- OC - Operational Check
- R - Recertification
- VI - Internal Visual Inspection
- RS - As a Recall System

INSTRUCTIONS TO FILL OUT THE KSC SCR

DOCUMENTATION REVIEW

- **System description:** Describe the system(s), system boundary, and its purpose
- **Commodity(ies):** List all the commodities used in the system
- **MAWP:** Maximum Allowable Working Pressure
- **MOP:** Maximum Operating Pressure
- **Operating Temperature:** Measure the temperature of system fluid during the operation
- **Piping/Tubing/Component Material(s):** use acronym if available (example: Copper is Cu, Carbon Steel is CS, Stainless Steel is SS, etc.)
- **Piping/Tubing/Component Code(s):** Design/Construction code (example: ASME B31.3, KSC-SPEC-Z-0008, etc.)
- **# Pressure Vessel(s):** List how many vessel(s) are included in the system
- **Year Built:** Date of manufacture can be found on the vessel name plate
- **National Board No.:** If available, will be stamped on the vessel name plate as well as the vessel manufacturer's data report
- **Material:** Material of construction can be found on the name plate
- **MAWP:** Design pressure of vessel can be found on the name plate

INSPECTION REPORT

- **# Pressure Relief Device(s):** List the individual relief device in the system
- **Set Pressure:** List the set pressure for each relief device
- **Flow Rate Setting:** Record actual and required capacity
- **Functional Test:** List the date that the relief device was tested
- **Grounding and Bonding:** Is the system grounded/bonded?
- **Corrosion:** Report if there are signs of corrosion
- **Crack:** Report if there are signs of crack(s)
- **Physical Damage:** Report if there are other signs of damage to the system
- **ATTACH PHOTOS:** Submit photos/documentation/data package/problem reports/etc. to this report by using this button
- **Describe above Conditions:** Reference the above conditions, explain why the PVS is acceptable for certification/recertification.
- **Attachments:** All the ATTACH PHOTOS/ATTACH DOCUMENTS stored in here
- **Visual Examination and Ultrasonic Testing-Thickness Examination:** explain the results

IN-SERVICE INSPECTION (ISI) CERTIFICATION MATRIX

- Refer to NASA-STD-8719.17A, Section 4.8.3
- **Year columns:** Insert the year appropriate to capture Non-Destructive Evaluation (NDE) frequency, Internal Visual Inspection, Recertification, etc.
- **NOTES column:** Insert note(s) to each category, if applicable
- **NOTE 1/2/3/4/5:** Comment or explanation for each note (include last NDE performed if applicable)
- **VE/UTT/etc.:** Insert these acronyms in the year columns for each category where applicable

INTEGRITY ASSESSMENT

- Refer to NASA-STD-8719.17A, Section 4.8.1
- Describe how integrity assessment requirement has been met

REMAINING LIFE ASSESSMENT

- Refer to NASA-STD-8719.17A, Section 4.8.2
- Describe how remaining life assessment requirement has been met

RISK ASSESSMENT

- Refer to NASA-STD-8719.17A, Section 4.9
- **Risk Summary:** Briefly explain how Severity Class and Probability Level were determined
- **RAC Determination** (Refer to NASA-STD-8719.17A, Section 4.9, Tables 1 through 4): Select appropriate RAC number based on Severity Class and Probability Level

RECOMMENDATION FOR USE

- Provide a summary of this certification and recommendation

OTHER additional information

- List and attach support documents by using the ATTACH DOCUMENTS button