

SCOPE OF WORK

This scope of work is for the testing of Multiple Round Containers (MRC), which are 5 inches round by 25 inches high and 30 inches round by 40 inches high. The government will provide to the contractor sufficient test samples (containers) to complete all required tests. The testing to be completed includes:

- 1) Hot and Cold High Frequency Vibration Tests for the 5 x 25 and 30 x 40 MRC's– To include test set-up of the required instrumentation to control, monitor and record the test spectrums. Set-up the environmental chamber and required equipment to introduce the hot and cold test temperatures. Fixture – Modify test fixturing for the 5 x 25 and 30 x 40 container units. Mount the test sample to the fixturing and install in the test chamber. This includes but is not limited to the installation of test port(s), inert loading of fill, providing helium to conduct leak testing and test fixtures.

Vertical Axis Vibration test at 165 degrees Fahrenheit, One (1) hour, Category 8 testing at 2000 HZ bandwidth and four (4) hours at Category 9 testing at 500 Hz bandwidth

Vertical Axis Vibration test at minus 35 degrees Fahrenheit, One (2) hour, Category 8 testing at 2000 Hz bandwidth, four (4) hours at Category 9 testing at 500 Hz bandwidth

Horizontal Axis Vibration test at 165 degrees Fahrenheit, One (1) hour Category 8 testing at 2000 Hz bandwidth and four (4) hours at Category 9 testing at 500 Hz bandwidth

Horizontal Axis Vibration test at minus 35 degrees Fahrenheit, One (1) hour Category 8 testing at 2000 Hz bandwidth and four (4) hours at Category 9 testing at 500 Hz bandwidth
- 2) United Nations Performance Oriented Packaging Tests (POP) for the 5 x 25 MRC

Drop testing per Section 178.603 – six (6) at ambient temperature, one (1) at 165 degrees Fahrenheit and one (1) at minus 35 degrees Fahrenheit.

Stack Testing per Section 178.606

Vibration Testing per Section 178.608
- 3) MIL-STD-1660 for the 30 x 40 MRC

Stack Testing paragraph 5.4.1

Repetitive Shock paragraph 5.4.2

Drop Test paragraph 5.4.3

Impact Test paragraph 5.4.4
- 4) Forty Foot Drop Test for the 5 x 25 and 30 x 40 MRC's – Drop height 40 feet onto a non-yielding surface.
- 5) Rough Terrain Handling for the 5 x 25 and 30 x 40 MRC's – The container will be subjected to a total of 30 miles of exposure divided between paved road, gravel road and off road/field exposure per attached drawing and description. (Attachment 002)
- 6) Cylinder Pressure Test for the 5 x 25 and 30 x 40 MRC's – Test at 200 psi for 15 minutes at ambient temperature.

Following completion of each test the U. S. Army representative utilizing government furnished test equipment will test each container to determine if it passed the test.

- (7) A report of all test data shall be provided to the government at the conclusion of all testing.