

**American Society of Sanitary Engineering
Seal (Certification) Program**

**Factory Audit Inspection Test for:
Water Hammer Arresters**

Tested under ASSE Standard 1010 • Revised: 2004

Factory Audit Inspection Test

Manufacturer _____

Model No. _____

Address _____

Serial No. _____

Other Identification Markings _____

Size _____

Connections (screwed, flanged, etc.) _____

Size of Orifice in Arrester _____ inches (_____ mm)

Type and Size of Connector Attached to Arrester:

- Compression - Size of Orifice in connector** _____ inches (_____ mm)
- PEX- Size of Orifice in connector** _____ inches (_____ mm)
- CPVC - Size of Orifice in connector** _____ inches (_____ mm)
- Sweat - Size of Orifice in connector** _____ inches (_____ mm)
- Other - Size of Orifice in connector** _____ inches (_____ mm)

When testing a water hammer arrester with more than one type of connector, provided the orifice of each connector is of equal or larger size than the orifice of the water hammer arrester, only one connector need be tested. All connectors with an orifice size smaller than the orifice of the water hammer arrester must be tested for full compliance to the standard.

3.1 Shock Absorbing Capacity Test

Was the test rig so designed and arranged that the device under test was subjected to the full energy imposed by the abrupt stoppage of a 50 foot (15.2 m) column of water flowing at a prescribed pressure and velocity in a standard schedule 40 steel pipe as shown in Figure 1?

Yes No Questionable

If questionable, explain: _____

(a) What was the valve closure speed? _____ milliseconds

(b) What was the flowing pressure? _____ psi (_____ kPa.)

In compliance?

Yes No Questionable

If questionable, explain: _____

3.2 Endurance Test

(a) What was the water temperature during the first 5000 cycles of the test? _____ °F (_____ °C)

(b) What was the surge pressure (average of five (5) readings) at the beginning of the first 5000 cycles?
_____ psi (_____ kPa)

(c) What was the maximum total pressure recorded at the 5000th cycle? _____ psi (_____ kPa)

(d) What was the water temperature during the last 5000 cycles of the test? _____ °F (_____ °C)

(e) What was the surge pressure (average of five (5) readings) at the end of the first 5000 cycles?
_____ psi (_____ kPa)

(f) What was the maximum total pressure recorded at the 10,000th cycle _____ psi (_____ kPa)

(g) What was the average of the two maximum total pressure readings? _____ psi (_____ kPa)

In compliance?

Yes No Questionable

If questionable, explain: _____

TESTING AGENCY _____

ADDRESS _____

PHONE: _____ FAX: _____

TEST ENGINEER(S) _____

We certify that the evaluations are based on our best judgments and that the test data recorded is an accurate record of the performance of the device on test.

Signature of the official of the agency: _____

Title of the official: _____ Date: _____

Signature and seal of the Registered Professional Engineer
supervising the laboratory evaluation:



Signature

Seal