



AEROSPACE STANDARD

AS4265™**REV. A**

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Superseding AS4265

Impulse Testing of Hydraulic Tubing and Fittings, S-N Curve

RATIONALE

This technical report is being stabilized because it covers technology, products, or processes which are mature and not likely to change in the foreseeable future.

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**Documents**

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1. SCOPE:

This aerospace test standard establishes the requirements and procedures for evaluating and comparing the impulse fatigue performance of high pressure hydraulic fittings and tubing. This test method may be used to test similar fluid system components, if desired.

2. REFERENCES:

2.1 Applicable Documents:

2.1.1 SAE Publications: Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

AIR4298 Impulse Test Machine, Sine Wave, Equipment and Operation of

2.1.2 U.S. Government Publications: Available from Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

MIL-H-83282 Hydraulic Fluid, Synthetic Hydrocarbon Base

MIL-H-5606 Hydraulic Fluid, Petroleum Base

3. REQUIREMENTS:

3.1 Shape of the Pressure Surge Trace:

The impulse pressure trace shall be sinusoidal in shape and in accordance with the parameters shown in Figure 1.

3.2 Equipment:

3.2.1 The equipment shall have the capability of testing to peak pressures of 30 000 psi at a speed of 6 Hz $\pm$ 4. Equipment is described in AIR4298.

3.2.2 A simple test setup is shown in Figure 2.

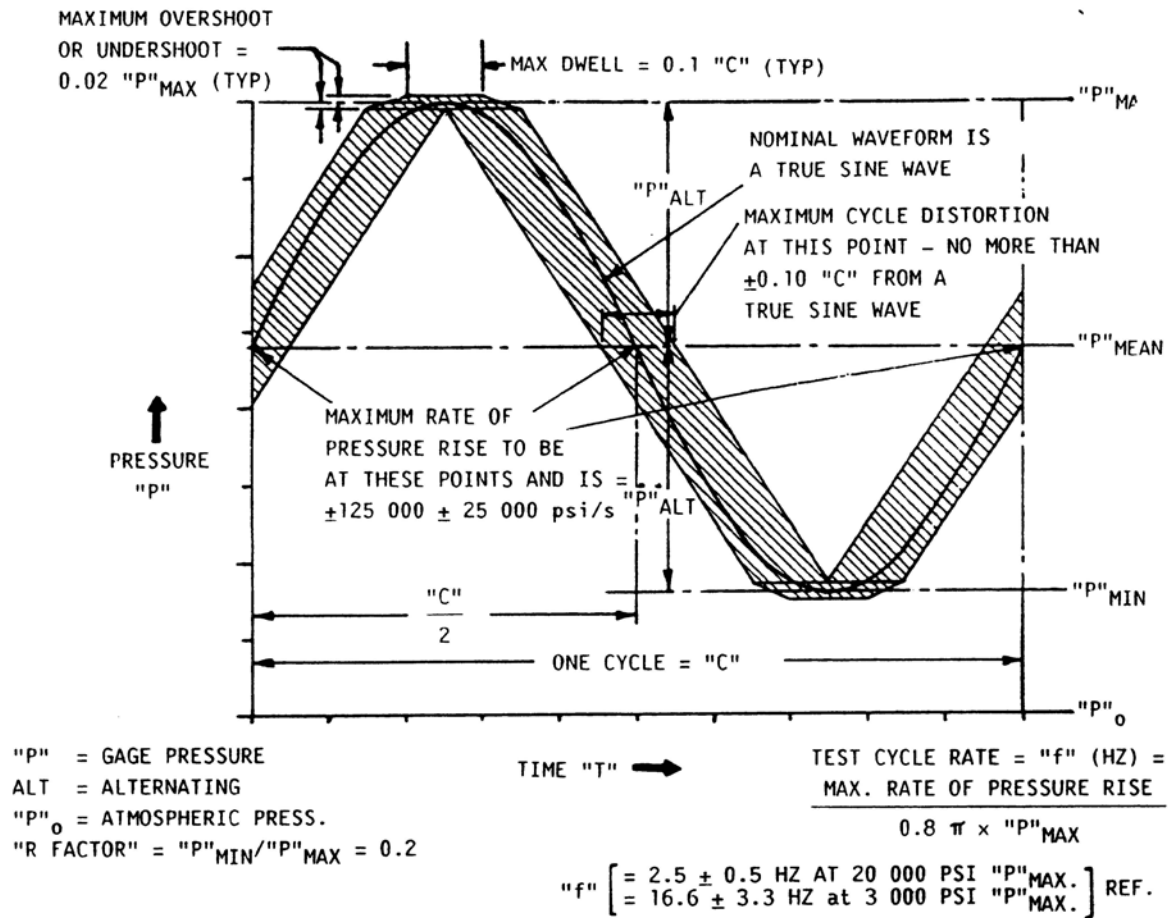


FIGURE 1 - Sine Wave Impulse Wave Form