



## Side Impact Test

### 1 Introduction

**Note:** Nothing in this standard supercedes applicable laws and regulations.

**Note:** In the event of conflict between the English and domestic language, the English language shall take precedence.

**1.1 Purpose.** This standard describes a test procedure that utilizes a standard lap shear sample to determine the comparative impact strength of adhesive bonds in torsional impact.

**1.2 Applicability.** This standard can be used in laboratory testing of structural adhesive used for the bonding of metal and/or composite.

### 2 References

**Note:** Only the latest approved standards are applicable unless otherwise specified.

#### 2.1 External Standards/Specifications.

ASTM D5868

#### 2.2 GM Standards/Specifications.

None

### 3 Resources

**3.1 Facilities.** Facilities used in conjunction with this test procedure shall not impact the results of the testing.

**3.1.1 Calibration.** The test facilities and equipment shall be in good working order and shall have a valid calibration label.

**3.1.2 Alternatives.** Alternative test facilities and equipment may also be used. However, all measuring variables as specified in this standard shall be determined correctly with respect to their physical definition.

#### 3.2 Equipment.

**3.2.1 Impact Test Fixture, Pendulum Type (Figure 1).** The testing apparatus may be any suitable construction that will provide adequate support and minimum friction for the moving head. The base shall provide a means for securing samples being tested in a position which will cause the impact head to strike at right angles to the bond. It shall be equipped with a joule indicator. (Figure 2).

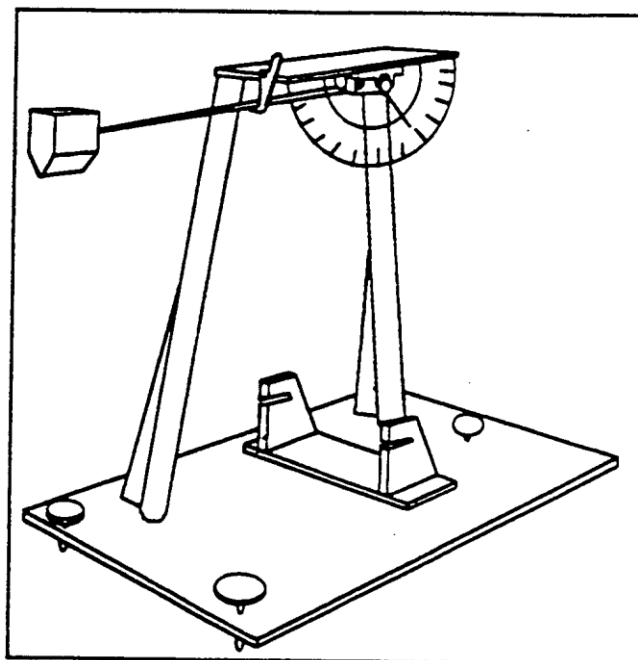


Figure 1: Impact Tester

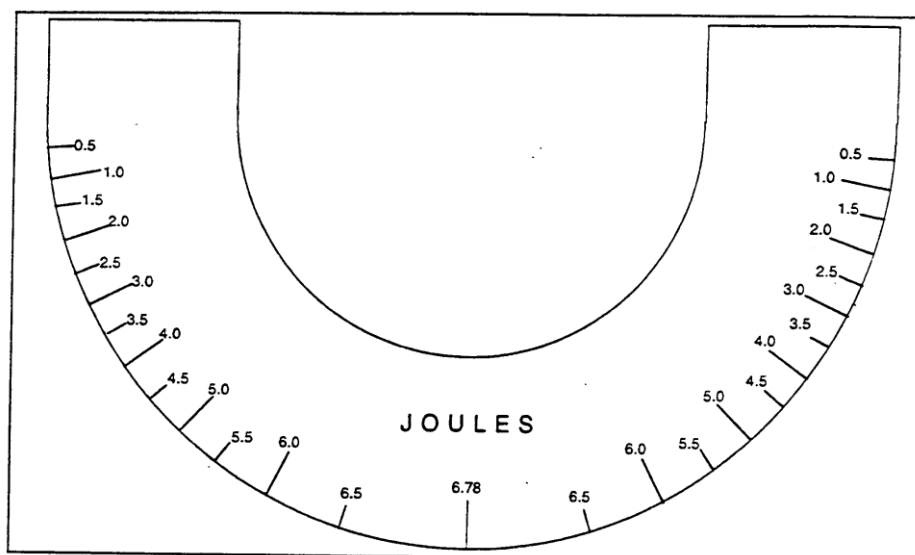


Figure 2: Joules Indicator

**3.3 Test Vehicle/Test Piece.** Test samples used in this standard are constructed according to ASTM D5868.

**3.4 Test Time.** Not applicable.

**3.5 Test Required Information.** All required dimensions necessary for the construction of an impact test fixture as shown in Figure 3.