
International Standard



8749

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Pins and grooved pins — Shear test

Goupilles et goupilles cannelées — Essai de cisaillement

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Foreword

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International Standard ISO 8749 was prepared by Technical Committee ISO/TC 2, *Fasteners*.

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Pins and grooved pins – Shear test

1 Scope and field of application

This International Standard specifies the test method for shear testing of metallic pins with nominal diameters from 0,8 to 25 mm inclusive.

2 Principle

The test consists of subjecting a pin to a double shear load using a suitable test fixture in a testing machine and recording the maximum load to fracture.

3 Test equipment and method

The shear test is performed in a fixture (a typical fixture is shown in the figure) in which the pin support members and the member for applying the load have holes with diameters con-

forming to the nominal pin size (tolerance H6) and a hardness of not less than 700 HV.

The clearance between the supporting member and the load member shall not exceed 0,15 mm. The shear planes shall be at least one pin diameter away from each end and at least two diameters apart. Pins too short to be tested by double shear shall be tested by shearing two pins simultaneously in a single shear.

Spring pins shall be mounted in the test fixture with the slot upwards.

Pins shall be tested to fracture. The maximum load applied to the pin coincident with or prior to pin fracture shall be regarded as the double shear strength of the pin.

Pins tested for shear strength shall show a ductile shear without longitudinal cracks.

The speed of testing shall not exceed 13 mm/min.

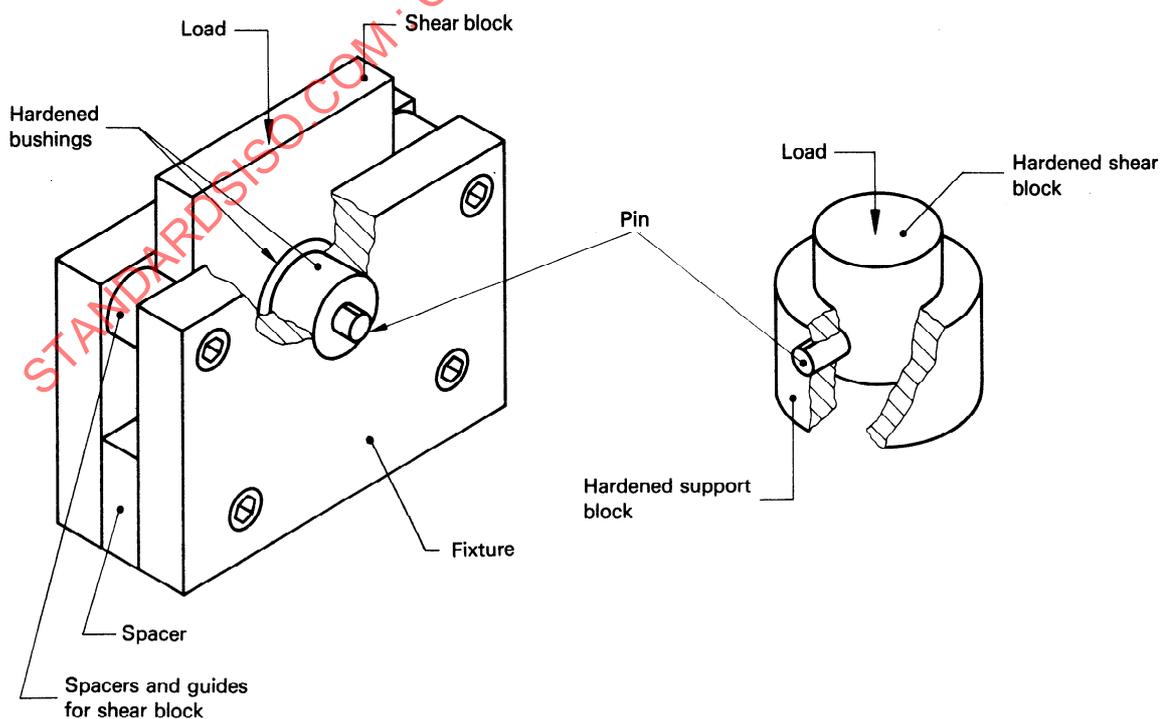


Figure – Typical pin shear test fixture