UDC 621.886.1 : 620.176 October 1992

Determination of shear strength of pins

(ISO 8749 : 1986)
English version of DIN EN 28 749

DIN
EN 28 749

This standard incorporates the English version of ISO 8749.

Stifte und Kerbstifte; Scherversuch
(ISO 8749 : 1986)

Supersedes DIN ISO 8749,
April 1991 edition.

European Standard EN 28 749 : 1992 has the status of a DIN Standard.

A comma is used as the decimal marker.

National foreword

The publication of this standard is in keeping with a decision made by CEN/TC 185 to adopt, without alteration, a series of ISO Standards covering pins as European Standards. The responsible German body involved in their publication is the *Normenausschuß Mechanische Verbindungselemente* (Fasteners Standards Committee).

As a consequence, the DIN Standard covering determination of the shear strength of such pins, DIN ISO 8749, has been superseded by this DIN EN Standard.

Previous edition

DIN ISO 8749 : 04.91.

International Patent Classification

F 16 B 19/02
G 01 N 3/00

EN comprises 3 pages.

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 conforming 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.

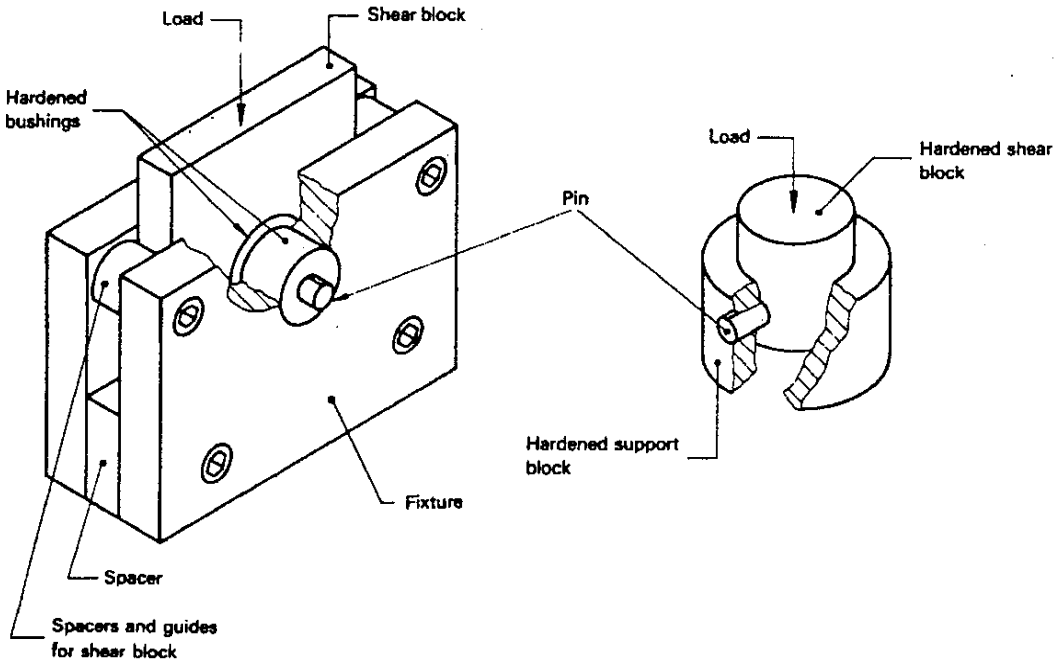

Figure — Typical pin shear test fixture