

CYLINDRICAL / CONICAL MANDREL



conical mandrel



cylindrical mandrel

Device developed for bending tests, where flexibility and adherence of the coatings are determined by measuring them on a substrate.

Standards

- The cylindrical mandrel, ISO 1519 / 2003
- The conical mandrel, EN ISO 6860 and ASTM D 522-93A

Features

This test examines the properties of the coating and its adherence when it is flexed or bent over its substrate. The process is the following one: The test specimen is placed and it is flexed progressively. During the test the formation of cracks can be observed. The measurements, depending on the selected model are compared with:

- Cylindrical Mandrel: The test plates are bent progressively over mandrels of decreasing diameter until cracks appear. It incorporates mandrels of the following diameters: 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 25 and 32 mm.
- Conical Mandrel: The bending of the plate is executed over a cone of 200 mm in length and decreasing diameter from 37 mm to 3 mm. The maximum lecture is used on the diameter on which cracks begin to appear.