

### Conical Mandrel

Conical Mandrel is a laboratory apparatus used to determine the flexibility, adhesion, elasticity and elongation by bending the fully cured coated M.S. Panel or specimen over a conical shape mandrel. The specimen can be bent on part or along the entire length of the mandrel and the resulting cracks corresponding to different test diameters can be observed in a single operation.

The frame has a bending lever with a roller that pivots on the conical mandrel with a diameter from 3 mm to 38 mm. A graduation indicates the mandrel diameter in mm. Mandrel is tapered from 1 ½" to 1/8" along its length and has markings from 37 mm to 6 mm in diameter on the flat scale of the mandrel. It consists of a bending lever, clamping lever, and roller frame with mild steel bending cone. Its base and flat scale is made up of a good quality mild steel body with powder coatings for durability. M.S. Panel or Specimen is clamped in front of dia which requires and bends the panel with the help of a bending lever by rotation of the roller frame and observes the panel for any defects on a coated film.

**Standard:** ASTM D 522, BS 3900 E 11, IS 101 (Part 5 / Sec. 2), ISO 6860

**Raj Make**

#### Technical Specifications:

Larger end	: 38 mm
Smaller end	: 3.0 mm
Cone length	: 203 mm

#### Accessories required for testing:

- M.S. Panel 150 x 75 x 1 mm.

#### Package Includes:

Conical mandrel, manual, spares and calibration certificate.

#### Ordering Informations:

Ref No.116/1 Conical Mandrel - Normal Quality

Ref No.116/2 Conical Mandrel - Superior Quality

**HSN Code:** 90248091



## Cylindrical Mandrel

Cylindrical Mandrel is a robust bend tester used to determine the flexibility, adhesion, elasticity and elongation by bending the fully cured coated M.S. Panel or Specimen over a cylindrical mandrel. It consists of a frame which has a bending lever with height adjustment sliding vise and panel fixing knob. Mandrels and knobs are made up of Stainless steel or hardren material and rest parts are made up of high quality mild steel with powder coated for durability.

M.S. Panel or Specimen is clamped after adjusting the height and fixed with panel fixing knob and it bent over a mandrel about 180° and observed for deterioration of film in terms of flexibility, adhesion, elasticity, elongation etc. The instrument can be adjusted to a different diameter of the mandrel by changing it. The mandrels are easily changeable.

Raj produces 12 mandrel sets with sliding vise and knobs for fixing the specimen or panels properly. Always conduct the test from high size mandrel to lower size mandrel for proper observation of the result.

**Standard:** ASTM D 522, DIN - 53152, IS 101 (Part 5 / Sec.2), ISO 1519

**Raj Make**

Ref No.	Mandrel dia (mm)
118	2, 3, 4, 5, 6, 8,10,12,16, 20, 25, 32

### Accessories required for testing:

- M.S. panels (150 x 50 x 1 mm), Tin panel ( 150 x 50 x 0.3 mm ).

### Package Includes:

Cylindrical mandrel, 12 set mandrel, manual, spares and calibration certificate.

### Ordering Informations:

Ref No.118/1 Cylindrical Mandrel - Normal Quality

Ref No.118/2 Cylindrical Mandrel - Superior Quality

**HSN Code:** 90318000

