

## ASTM D412 TESTING FIXTURE

## TENSION TESTING OF VULCANIZED RUBBER



### ASTM D412 Testing Fixture

This method covers the effect of the application of a tension load to vulcanized rubber and similar rubber-like material at room temperature and elevated temperature. Covered are tests for tensile stress, tensile strength, ultimate elongation and set. The method is not applicable to the testing of material ordinarily classified as ebonite or hard rubber.



### ASTM D 412 Testing Fixture - Drawing

|                    |                                |
|--------------------|--------------------------------|
| Test Standard      | ASTM D 418 / no ISO equivalent |
| Maximum Load       | 90 kN                          |
| Temperature Range  | da -80 °C a 149 °C             |
| Specimen Thickness | 1.5 - 3 mm                     |
| Specimen Width     | 40 mm                          |
| Specimen Length    | 210 mm                         |
| Mass               | 0.3 Kg                         |



### ASTM D 412 Testing Fixture - Assembly



### ASTM D 412 Testing Fixture - Application

#### Referenced Documents

##### ASTM Standards

D1349 Practice for Rubber-Standard Temperatures for Testing

D1566 Terminology Relating to Rubber

D3182 Practice for Rubber-Materials, Equipment, and Procedures for Mixing Standard Compounds and Preparing Standard Vulcanized Sheets

D3183 Practice for Rubber-Preparation of Pieces for Test Purposes from Products

D3767 Practice for Rubber-Measurement of Dimensions

D4483 Practice for Evaluating Precision for Test Method Standards in the Rubber and Carbon Black Manufacturing Industries



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E4 Practices for Force Verification of Testing Machines

### ISO Standards

ISO 37 Rubber, Vulcanized and Thermoplastic Determination of Tensile Stress-Strain Properties Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036.