

ASTM D1414 TESTING FIXTURE

RUBBER O-RING

These test methods provide acceptable procedures for quality control purposes and for the determination of engineering characteristics.

The equipment consists of two pulleys which stretch the O-ring to failure. To minimize the local stresses induced in the sample due to frictional forces, the standard provides that a spool must rotate one complete revolution for each 6 “stroke of the knobs. The large pulley on the right side is a constant force spring. The free end attaches to the base of the test machine. Placed on the same shaft of the upper sprocket, it turns one revolution for every 6 “of the test machine gear, rotating the upper spool as required.

Source of Additional Information:

ASTM Standard D 1414-94 (1994; reapproved 2003), “Standard Test Methods for Rubber O-Rings,” American Society for Testing and Materials, West Conshohocken, Pennsylvania (originally published in 1956).