

ASTM B406 Transverse Rupture Fixture



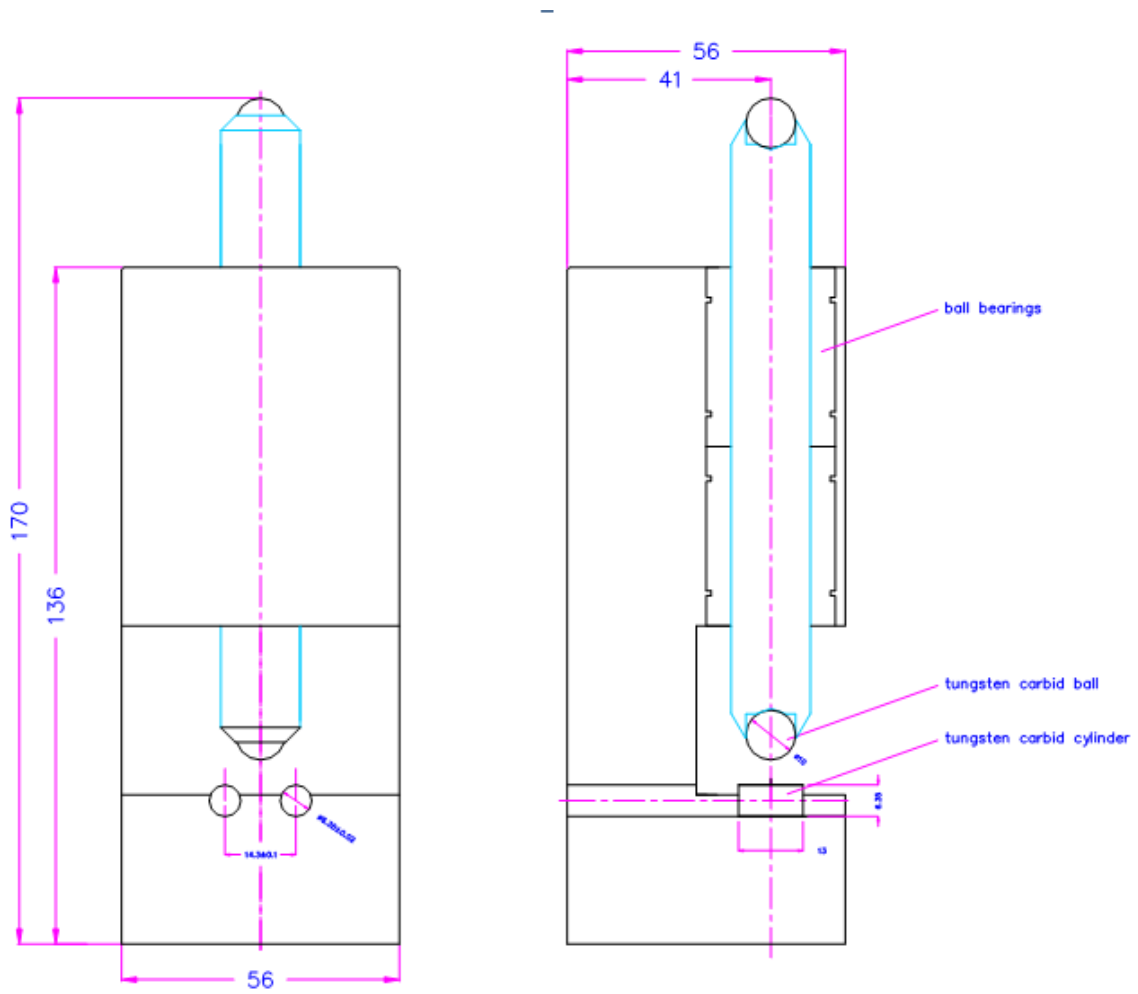
Compression Rating: 50kN (11,250 lbs.)

Construction: Steel

Scope of Delivery: Both pieces of the fixture including compression plunger and tungsten cylinders.

Adapter/Coupling: Recommended to be compressed between two fixed steel compression platens, quoted and sold separately.

Schematic (mm)





4. Apparatus

4.1 Either a specially adapted machine for applying the load or a special fixture suitable for use with a conventional load-applying machine may be used. In either case, the apparatus shall have the following parts:

4.1.1 Two ground-cemented-carbide cylinders 0.250 ± 0.001 in. (6.35 ± 0.02 mm) in diameter, at least 0.500 in. (13 mm) in length with the long axes parallel, and center to center spacing of 0.563 ± 0.005 in. (14.3 ± 0.1 mm).

4.1.2 A movable member (free to move substantially only in a line perpendicular to the plane established by the axes of the two cylinders) containing a 0.4 ± 0.05 -in. (10 ± 1.3 -mm) cemented-tungsten-carbide ball or a ground-cemented-carbide cylinder of the same dimensions as, and with axis parallel to, those of the two previously mentioned cylinders (see 4.1.1). This ball or cylinder shall be so positioned that movements of the member will cause the ball or cylinder to contact a specimen placed on the two lower cylinders at the midpoint of the span between them.

4.1.3 The apparatus shall be so constructed that the application of a sufficient load to the movable member to effect breaking of a specimen will not cause appreciable deflection of the line of movement of the movable member and the plane established by the two fixed cylinders. The apparatus shall be capable of applying sufficient load to break the specimen. The apparatus shall be capable of registering the load required (within $\pm 1\%$ of the load) to break the specimen. The cemented-tungsten-carbide ball and cylinders shall not show permanent deformation after use.