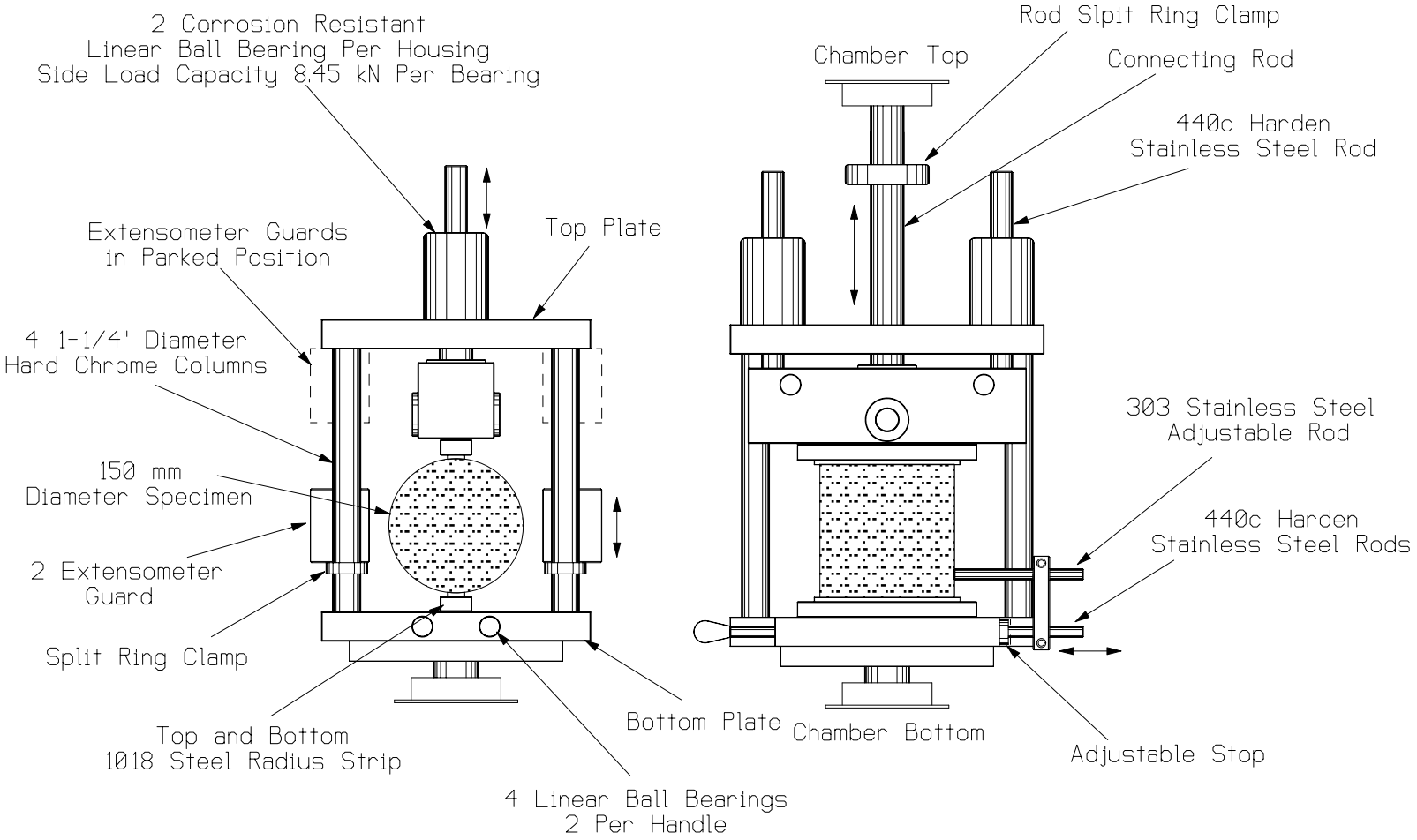
IDT Fixture
Model CS7511

IDT Testing Fixture
with Extensiometer Guards in test position

Extensiometer Guards Retracted

MODEL CS7511
Indirect Tensile Fixture



James Cox & Sons Inc.

CS7511 INDIRECT TENSILE TESTING FIXTURE

Specifications

The indirect tensile testing fixture conforms to all the specifications required by SHRP M007/AASHTO TP9 test procedures for testing asphalt concrete specimens with diameters of 150 mm.

General Information

The CS7511 Indirect Tensile Fixture was designed to attach directly to a rigid universal base plate located in the environmental chamber. This plate is supported by a 2.75 in. (69.85 mm) diameter column attached to a 25K (100kN) load cell (for high capacity force requirements). The load cell is secured to the lower 4 in. (102 mm) thick steel cross head. This solid assembly increases the accuracy of specimen deformation measurements during dynamic cyclic testing. This increase in fixture mounting rigidity, provides a significant reduction in fixture compliance and vibration during high cyclic testing

Features

- The lower fixture base plate is machined from a solid aluminum billet and is supported by four (4) 1.250 in. (31.75 mm) hard-chrome plated steel columns for alignment accuracy and rigidity..
- The loading plunger is supported by four (4) 1 in. (25.4 mm) diameter linear ball bushing to prevent side deflection at the rocker arm assembly.
- The specimen loading strips are fabricated form 8620 steel case-hardened to 58 RC and plated with electroless nickel for corrosion resistance.
- The upper and lower hardened loading strip is secured by two (2) socket cap screws.
- The anti-rotation rods are fabricated from 1050 steel heat-treated to 60 RC, precision ground to a 10 micro-inch finish and hard chrome-plated to prevent rotation of the rocker arm assembly. The anti-rotation arm is attached to the rocker arm assembly and supported by four (4) linear ball bushings, rated at 1900 lb. each, located on each side of the rocker assembly.
- The lower loading strips for 6 in. (150 mm) diameter specimens are attached to a riser block.

CS620 Gauge Head Holders

- The LVDT holders conform exactly to the SHRP M007/AASHTO TP9 test requirements for gauge length, center line distance from specimen face and mounting pad size.

Features

- The LVDT holder encapsulates the plunger end of the LVDT for protection from over-travel, allowing only the measuring tip to protrude out of the end of the LVDT holder for full travel distance of .040 in. (± .020 in or 0.5 mm).
- The fine thread, adjustable target is provided to aid in rapid setup and mechanical centering of the LVDT gauge heads.
- The gluing fixture precisely locates four LVDT holders and four LVDT target pads per SHRP/AASHTO TP9 test requirements.

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