+800 °C Reverse Stress Pullrods

Catalog Number 3117-050

Features

- Suitable for both fatigue and monotonic tensile testing at elevated temperatures
- Backlash free specimen clamping, essential for testing though zero load
- Mechanical operation means no need for separate hydraulic supply or hand pump
- Interchange adapters allows various specimen sizes to be accommodated (threaded ends only)
- Integrated thermal break and heat shield minimises heat transfer to actuator and loadcell, no cooling water supply required
- Design optimises lateral stiffness by keeping overall length to a minimum
- Compatible with Instron® high temperature split furnaces
- Compatible with Instron AlignPRO™ fixture to ensure optimum co-axial relationship between upper and lower pullrod

▲ **+800 °C pullrods with furnace**

Description

Instron reverse stress pullrods are designed to meet the specific requirements of reverse stress low cycle fatigue and tensile tests at elevated temperatures.

The pullrods are manufactured from a nickel based superalloy, selected for its excellent fatigue and creep resistance characteristics.

Principle of Operation

Backlash free specimen clamping is achieved using an outer pull rod nut and a smaller specimen nut (mounted onto either end of the specimen).

The larger pullrod nut when fitted over the specimen nut and tightened clamps the specimen securely against the end of the pull rod. Thus ensuring a smooth loading path for the specimen with no 'glitches' when cycling through zero load.

Application Range

- Full reverse stress high temperature testing
- High temperature fatigue testing
- High temperature tensile testing

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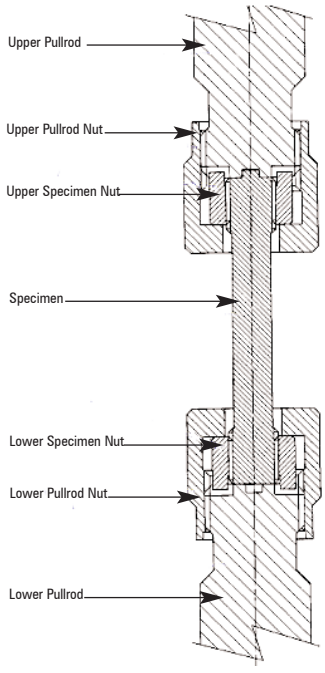
Specifications

Catalog Number	3117-050
Max Operating Temperature	+800 °C (+1472 °F)
Min Operating Temperature	Ambient
Weight (Each)	15 kg
Standard Specimen Nut Size	M18 (others available on request)
Pullrods Diameter	40 mm (1.57 in)
Daylight Required [1]	570 mm (22.44 in) (approximately)
Machine Compatibility	8516, 8502, 8513, 8562, 8801, 8802, 8861, 8862

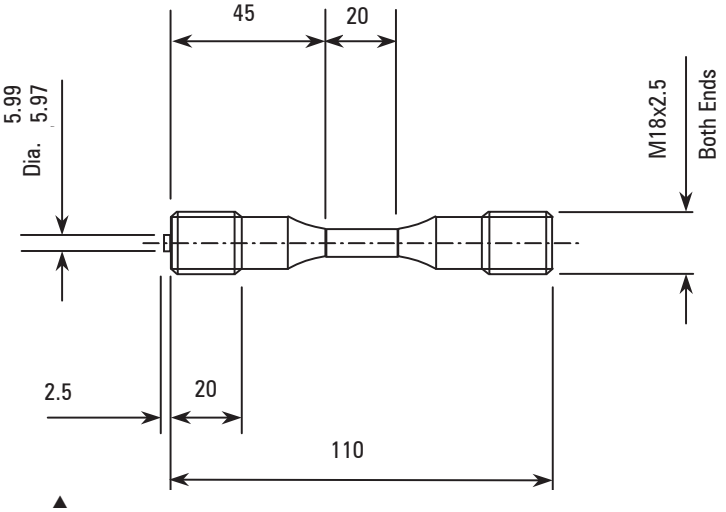
Note 1:
Not including loadcell or actuator



▲ Specimen installation

Accessories

Catalog Number	Description
2632-054, 2632-055, 2632-056, 2632-057	High temperature axial strain gauged extensometers
8000-072. 8000-073	AlignPRO™ alignment fixture
4040C	AlignPRO software and electronics
3117-152	High temperature three zone split furnace suitable for testing up to +800 °C
3117-051	Angularity alignment rings



▲ Specimen

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