MICROTEST

2019

## PULL/PUSH RODS, ADAPTERS AND FURNACES

Pull/Push Rods, Adapters and Furnaces for high temperature





MICROTEST, S.A. Instruments and Equipments for Materials Testing (+34) 91 796 33 32 www.microtest-sa.com



## PULL/PUSH RODS AND ADAPTERS

A variety of pull/push rods and specimen holders (adapters) are available to accommodate various specimen geometries and dimensions for mechanical testing. They are made of high strength steels (room temperature), heat resistant steels (for temperatures up to 600 °C) and heat resistant nickel-based superalloys (for temperatures up to 1200 °C) for durability and high performance. High Temperature pull/push rods and adapter are usually made from HAYNES 230, INCONEL 713, INCONEL 718, MAR M-246/7 and other Ni based high temperature superalloys.

The pull/push rods are sufficiently long to accommodate the furnace and completely suitable to fix the specimen holders, clevis adaptors for compact tension (CT) test specimens of required dimensions, compression platens and other compatible testing accessories. One set is complete with upper and lower pull rods, couplings and fittings, nuts and specimen holders, fixtures and other compatible testing configurations. For some types of tests at room or high temperature, Self-aligning load line configuration is supplied. Specimen holders (adaptors) are easily removed from the pull/push rods to allow rapid interchange of compact-tension (CT), round, flat, threaded or button head specimens. For each specimen type, the suitable adaptor should be ordered.

- Dimensions: according to the proposed furnace, specimen geometries/dimensions, etc.
- Material: high strength steel, heat resistant steel, nickel-based superalloys
- Working temperature: ambient up to 1200 °C (depending on the construction material)
- Standard configuration: specimen holders for tensile testing of threaded end specimens (M6, M8, M10,...). This configuration makes use of interchangeable threaded adapters for every type of threaded specimen. For button head specimens, collars to hold the specimens can also be supplied.
- Other types of grips and fixtures can be supplied along with pull/push rods for room and high tests. Available grips/fixtures/adapters include compression platens, flexure fixture, pin and clevis grips for pin-loaded flat specimens, pin and clevis grips for CT specimens, custom grips and fixtures, etc.





## **FURNACES**

MICROTEST manufactures a complete line of different laboratory furnaces (resistant, induction, infrared, etc.) for different testing requirements and individual testing applications.

From medium temperatures furnaces (150 – 250 °C) to high temperature furnaces (1800 °C, with heating element of MoSi<sub>2</sub>), all MICROTEST furnaces are constructed using high-quality stainless steel exteriors and efficient ceramic thermal isolation. They are designed to work with material testing systems of all types, such as **Tensile Testing**, **Fatigue Testing**, **Compression Testing**, **Creep Testing** or **Tribological Testing**, and can be manufactured for new OEM systems or for retrofitting and integration into an existing system.

MICROTEST Laboratory furnaces can be designed for horizontal or vertical operation and optionally supplied with various types of mounting brackets or stands as well as ports for atmosphere introduction. **MICROTEST Furnaces can be customized to the end user individual specifications.** For more information on available furnaces and their specification, contact Microtest.





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