

High-Temperature Split Tube Furnaces

ADMET Precision Heating Solutions





CUSTOMIZABLE, RELIABLE, AND PRECISE HEATING FOR MATERIALS TESTING UP TO 1700°C

**Broad
Temperature
Range: up to
1700°C**

**Customizable
Dimensions
to Fit Your
Testing
Needs**

**Advanced
Heating
Elements for
Accurate
Heat
Distribution**

**Cost-
Effective
Precision
Furnaces**

ADMET's High-Temperature Split Tube Furnaces are engineered for the rigorous demands of advanced materials testing.

Whether you are performing tension, compression, fatigue, or bending tests, these furnaces provide precise temperature control and reliable performance across a wide range of materials, including metals, composites, and ceramics.

Our furnaces conform to industry standards such as ASTM E21 and ISO 6892-2, ensuring that your high-temperature testing meets the strictest requirements for accuracy and safety.

Designed to operate up to 1700°C, these furnaces offer customizable interior diameters and heated specimen lengths, making them suitable for various testing scenarios.

High-Temperature Split Tube Furnaces For Materials Testing

Efficiency, Flexibility and Performance

Universal Testing Systems

Our furnaces cover a wide temperature range, from 300°C to 1700°C, and offer various customization options to meet your specific testing needs. The flexibility extends to configurations for interior diameters and heated specimen lengths:



Standard Configurations:

- 2" DIA X 3" Long
- 2" DIA X 4" Long
- 5" DIA X 8" Long
- 9" X 9" X 10" Long

Heated Lengths: From 2" to 10"
(additional options available upon request).

Robust, User-Friendly Design

The exterior of our furnaces is crafted from high-quality, rigid stainless steel, providing structural integrity and preventing insulation cracking. The clamshell-style design allows for easy sample installation and removal, while user-friendly temperature controllers simplify the programming process. Optional stands and frames provide additional customization to fit your laboratory's specific needs.



Temperature Range



**Up to
1700°C**

Heated Specimen Length



2-10"

Interior Diameter Configurations



**2-9" DIA
3-10" Long**

Heating Elements

**Iron-Chrome-Aluminum
Alloy Wire, Silicon
Carbide, Molybdenum
Disilicide**



Power Supply

**240 Volts, 1
Phase, 60 Cycle
typical**



APPLICATIONS AND COMPLIANCE

VERSATILE HIGH-TEMPERATURE TESTING FOR ADVANCED MATERIALS

ADMET's High-Temperature Split Tube Furnaces are designed for a broad range of material testing applications, including metals, ceramics, and composites. Whether conducting **tension, compression, bend, or fatigue tests**, our furnaces provide precise and consistent heating **up to 1700°C**. These features make them ideal for industries such as **aerospace, automotive, and materials research**. With customizable configurations to fit various specimen sizes and testing needs, ADMET furnaces deliver accurate results, even in the most **demanding environments**.

KEY APPLICATIONS

Our furnaces excel in several critical testing areas. For **tension testing**, they help determine the tensile strength and ductility of metals and composites under heat. In **compression testing**, ceramics and alloys can be tested for compressive strength in high-temperature conditions. For **bend testing**, materials such as glass and metals are evaluated for their flexural strength under thermal stress. **Fatigue testing** allows you to assess the durability of materials under cyclic loading at elevated temperatures, ensuring reliability over time. These versatile testing capabilities make ADMET furnaces a valuable asset in any testing laboratory.

COMPLIANCE WITH INDUSTRY STANDARDS

ADMET's furnaces are built to conform to stringent global standards, ensuring precision and reliability in every test. They meet the requirements of **ASTM E21** for tension testing at elevated temperatures, **ISO 6892-2** for metallic tensile testing, and **EN 10002-5** and **EN 2002-2**. By adhering to these **internationally recognized standards**, ADMET furnaces provide confidence that your test results will be **accurate, repeatable, and globally accepted**.

WHY CHOOSE ADMET FURNACES?

ADMET furnaces are equipped with advanced safety systems to ensure both operator safety and test accuracy. These features include **independent thermocouples, PID control systems, and optional door switches**, all of which contribute to safe and consistent heating. This level of safety and precision is crucial for industries where **reliable high-temperature testing** is essential. Additionally, ADMET furnaces combine superior performance with affordability, making them the optimal choice for **high-performance testing at a competitive price**.



ADVANCED HEATING AND CONTROL SYSTEMS

PID CONTROL SYSTEM

Our PID system offers easy-to-use temperature programming, ensuring accurate and consistent heat application across the specimen.

MULTIPLE TEMPERATURE SENSORS

These sensors monitor each heating zone, ensuring safety and maintaining thermal consistency.

INCLUDED SAFETY FEATURES

The furnaces come equipped with independent safety thermocouples, optional door switches, and automatic shutdown features to ensure operational safety.

ACCESSORIES AND ADD-ONS



ADMET provides a wide range of **custom accessories** to optimize the performance and precision of your testing systems. Inside the chamber, choose from **threaded and shouldered fixtures** or custom grips, while outside the chamber, **standard grips with cooled faces** offer excellent heat management. For heat-sensitive specimens, **water-cooling adapters** are available to maintain specimen integrity. Additionally, **high-temperature hot mountable extensometers** enable strain measurement with automatic gauge length setup, ensuring accuracy during high-temperature tests. These accessories are designed to increase the versatility of your furnace and enhance testing performance.



SERVICE AND SUPPORT

To ensure your furnace operates at peak performance, ADMET offers comprehensive **service and support** throughout its lifetime. We provide both **on-site and remote training** to help integrate the furnace into your workflow smoothly. Our **calibration services** ensure long-term accuracy and compliance with ISO 17025 standards, with available contracts for ongoing maintenance. ADMET also offers **free phone and email support** for the life of the system, so you can trust that expert help is always available when needed.



High-Temperature Split Tube Furnaces For Materials Testing

Efficiency, Flexibility and Performance

Universal Testing Systems

SYSTEM SPECIFICATIONS

Specifications	F-1700HT Series
Heated Length	3" (76.2mm) and up
Heating Elements	Iron-Chrome-Aluminum Alloy Wire Silicon Carbide Molybdenum Disilicide
TemperatureControl	PID Control
TemperatureSensors	1 per zone, plus 1 extra for safety
Safety Switch	Independent Safety Thermocouple Optional Door Switches
Power Supply	240 Volts, 1 Phase, 60 Cycle
Mounting Options	Frame or Floor Standing Inside Chamber: Threaded, Shouldered Fixtures, Custom Grips Outside Chamber: Standard Grips with Cooled Faces
Accessories	Extensometers, Water-Cooling Adapters, High-Temperature Grips

Specifications	F-1700HT Series
Model Number	Furnace F-1700HT
TemperatureRange	300°C – 1700°C (verify high range, typical max is ~1200°C)
Overall Heated Specimen Length	2" to 10" (50.8mm to 254mm) Other options also available
Interior Diameter Options	2" DIA x 3" Long 2" DIA x 4" Long 5" DIA x 8" Long 9" x 9" x 10" Long
External Dimensions	Starting at 6" larger than internal space (increases with temperature requirements)
Furnace Type	SplitTube
Furnace Bore	2" (50.8mm) and up

Test with 