



# antsProsys

The **Power** of Imagination

**Heating & Process Systems**



[www.antsprosys.com](http://www.antsprosys.com) / [www.antsfurnace.com](http://www.antsfurnace.com)

# About Us

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Founded in 2016, Ants Innovations (An **ANTS** Group Company) is a knowledge driven company and is India's leading manufacturer of **Import Substitute High Temperature Laboratory & Pilot Scale Furnaces & Ovens**, under the brand name of **antsProsys**.

We offer one of the widest range of standard and custom designed Muffle, Retort, Tube, Split Tube, Hydrogen, Inert, Vacuum, Induction Furnaces, Chemical Reactors and Process Systems.

With more than 17 years of experience of its founders, **antsProsys** Furnaces and Ovens stands for High Efficiency, Quality, Innovative Designs & Best in Industry Service. More than 1,000 satisfied customers all across India use **antsProsys** system for their Cutting-Edge research and Production Requirements.

'ANTS' stands for team work; our motto is continuous improvement through product driven R&D, enhancing product experience through assimilation of diverse designs and ideas and a pursuit of excellence. We want to set the bar high with each of our creations.

**Ants Innovations is the only company in India** which makes its own Smart Temperature Controllers, Data-Logging Systems and Integrated Control System for CVD, Induction and Vacuum Furnaces. We have been associated with many a firsts in India like Scientific Black Line for Carbon Fiber, Gas Mixing Furnaces, TGA System, Deep Freezer with High Temperature Ovens, Coking Ovens, Fully Automated Drop Quenching Systems, High Temperature Rotary Tube Furnaces, Bridgeman Furnaces for Silicon Crystal, Diamond Tools Vacuum Brazing Lab Furnaces.

Ants Innovations has technological collaboration with BARC, VSSC, CMET, IIT Powai, IIT BHU and IIT Madras. These collaborations leverage years of scientific experience into creating knowledge driven products. So the next time you have any requirement of heating solutions, think of Ants Innovations as a knowledge partner who can provide solutions for your requirement and where you can see your imaginations come true, because at Ants, we credit our existence to "The Power of Imagination".

At Ants innovations, our strength is our people and innovation driven culture. Driven by an ideology to create import substitute systems, we are a company which treats challenges as opportunities. With our desire to learn and grow, with every challenge, we have been able to introduce newer technologies and cost effective solutions for Indian users. Given the number and size of challenges to be surmounted, we believe this is just the beginning of a remarkable journey.

Contact us directly or our network of long-term channel partners for any discussion about your process system requirements and we would be delighted to partner with you in making things happen.

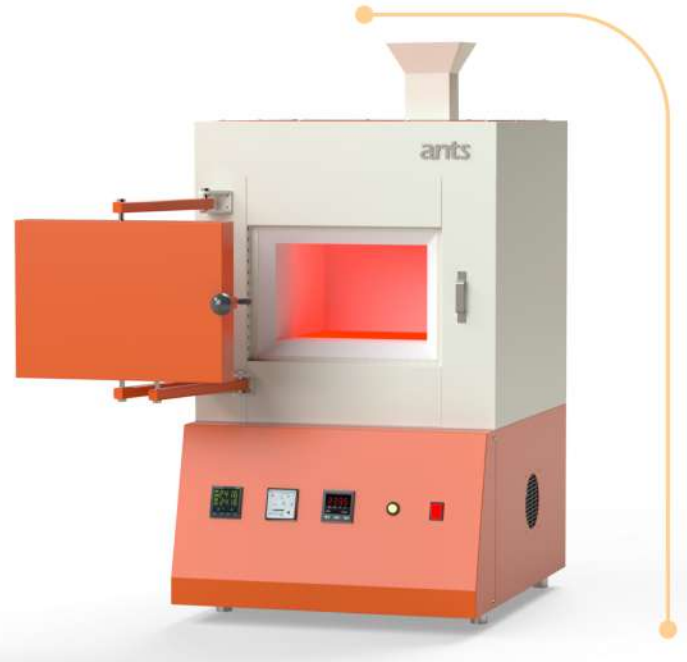
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## Standard Products



**Muffle Furnace**  
(600 °C - 1800 °C)



**Ashing/VM Furnace**  
(600 °C - 1000 °C)

**Horizontal Tube Furnace**  
(600 °C - 1800 °C)



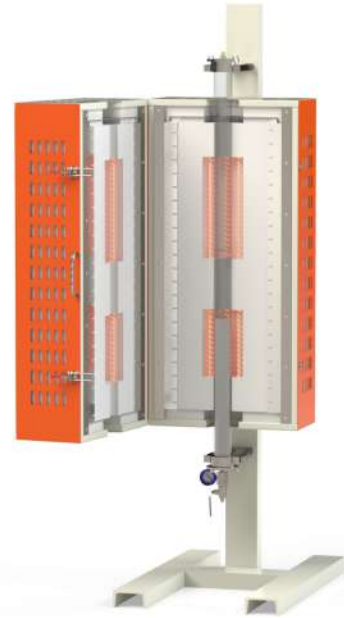
**Horizontal Split Tube Furnace**  
(600 °C - 1400 °C)



## Standard Products



**Vertical Tube Furnace**  
(Up to 1700 °C)



**Vertical Split Tube Furnace**  
(Up to 1600 °C)

**Rotary Tube Furnace**  
(Up to 1350 °C)



**RTA Furnace**  
(Up to 1000 °C)



# Application Specific Products



**Vacuum Heat Treatment  
Furnace (Annealing,  
Sintering, Brazing. etc.)**  
(600 °C - 1600 °C)



**CPT Furnace**  
(Up to 350 °C)

**2-Zone Split Tube  
Furnace**  
(600 °C - 1400 °C)



**UTM Furnace**  
(600 °C - 1600 °C)



# Application Specific Products



**CVD Furnace (Chemical Vapor Deposition)**  
(600 °C - 1600 °C)



**Rocking Furnace**  
(600 °C - 1350 °C)

**TGA Furnace**  
(600 °C - 1600 °C)



**Bridgeman Furnace**  
(Up to 1400 °C)



# Application Specific Products



**Biomass & Plastic  
Pyrolysis Furnace**  
(600 °C - 1000 °C)



**Muffle cum Tube Furnace**  
(600 °C - 1600 °C)

**Gettering Furnace**  
(300 °C - 900 °C)



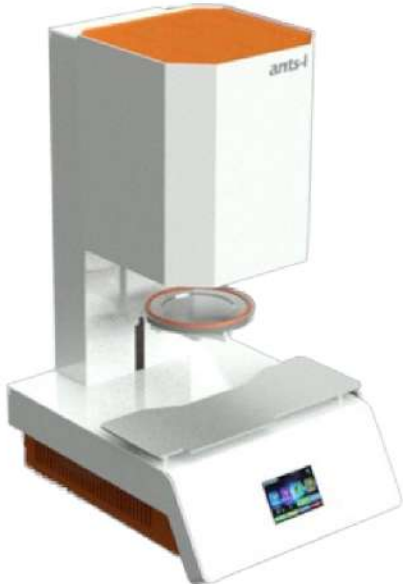
**Coke Oven**

(600 °C - 1100 °C)





# Application Specific Products



**Dental Furnace**  
**(Porcelain, Zirconia, Wax  
Removal)**  
(600 °C - 1600 °C)



**Raising Hearth/Bottom  
Loading Furnace**  
(600 °C - 1600 °C)

**Gas Sensing Unit**



**Gas Mixing Furnace**  
(600 °C - 1600 °C)



# Application Specific Products



**Vacuum Arc Melting  
Furnace**  
(1700 °C - 2800 °C)



**Retort Furnace**  
(600 °C - 1200 °C)

**Vacuum Furnace**  
(800 °C - 2600 °C)



**Scientific Carbon Fiber  
Heat Treatment Line  
(Furnace) {Black Line}**



# Application Specific Products



**Stack Type Tube Furnace**  
(600 °C - 1300 °C)



**High Temp. Attachment  
for Tensile Testing**  
(600 °C - 1100 °C)

**Vacuum Tube Sealing  
Unit**  
(Tube Up to 25mm)



**Hydrothermal Autoclave**  
(Up to 200 °C and 3MPa  
Pressure)



# Application Specific Products



**Custom Reactor**

(Up to 900 °C and 100 bar Pressure)



**Impedance Measurement  
at High Temperature  
Setup**

(600 °C - 1200 °C)

**Muffle Furnace with  
Automatic Water  
Quenching Facility**  
(600 °C - 1200 °C)



**SOFC Testing Furnace**  
(600 °C - 1100 °C)



## Application Specific Products



**Incubator**



**Deep Freezer Cum Oven**  
(-60 °C to 300 °C)

**Induction Furnace with  
and without Vacuum**  
(Up to 2000 °C)



**3-Zone Split Tube  
Furnace**  
(600 °C - 1350 °C)



# Application Specific Products



**Top Hat Furnace**  
(600 °C - 1800 °C)



**Hydrogen Furnace**  
(600 °C - 1600 °C)

**Vacuum Oven**  
(Up to 300 °C)



**Hot Air Oven**  
(Up to 300 °C)

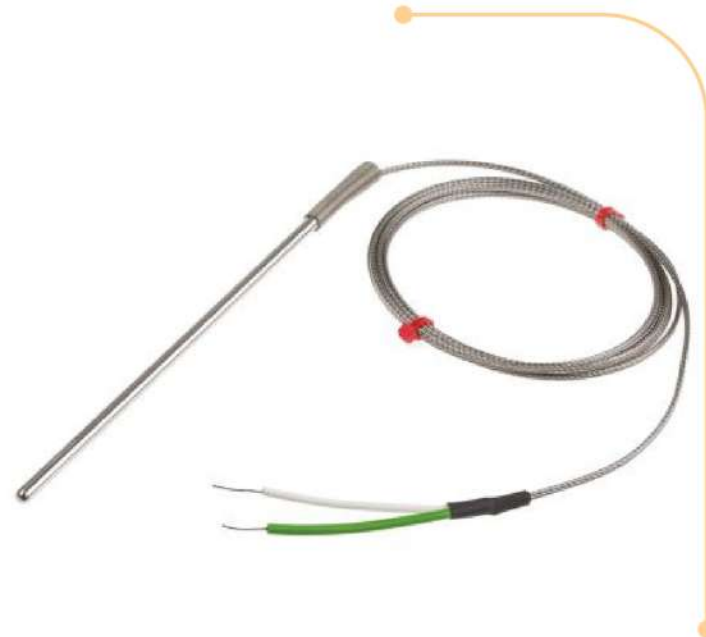


## Furnace Accessories



### Heating Elements

(MoSi<sub>2</sub>, Kanthal, Silicon Carbide)



### Thermocouples

(K, N, S, R, B)

### Insulation Materials

(Up to 1800 °C)



### Mass Flow Controllers

(MFC)



# Furnace Accessories



**Viton - O - Rings**



**Pressure Gauges**

**Radiation Shielding**  
(Ceramic, Quartz, Inconel)



**Tubes (Quartz, Alumina)**





# Furnace Accessories



**Controllers & Data  
Loggers**



**Agate Mortar & Pestle  
(Up to 8 Inches)**

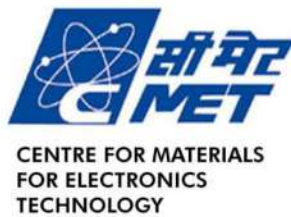
**Rotameter**



**Vacuum Flanges**



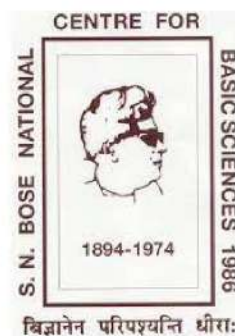
# Our Patrons



# Our Patrons



GRAPHITE





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**ANTS INNOVATIONS PVT. LTD.**

Unit No. 105, New Jivdani Industrial Estate No. 1,  
Off Western Express Highway,  
Dhumal Nagar, Vasai East,  
Palghar - 401208, Maharashtra, India  
**Ph.:** +91-89567 61576 / 89567 61574  
**E-mail:** sales@antsinnovations.com

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