

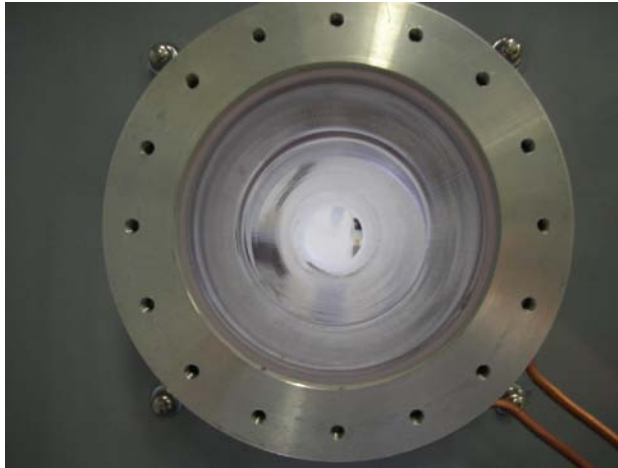


GC-P-1000

GAS CONTROLLED CHAMBER PROCESS FURNACES



MaterialsMates Italia



The view of a 150mm dia. quartz furnace for high temperature corrosion tests and the front of a pre-treatment oven for EN-10341 standards on magnetic materials

There are many processes and testing standards, both in industrial and research fields, that are based on the application of high temperatures in a controlled environment chamber.

Gas mixtures and humidity control, besides a well defined temperature profile are causing the physical-chemical transformation needed.

A suitable equipment is non-standard most of the times and hard to find on the market:

Materials Mates Italia gives you, for the first time, a complete line of test furnaces with all the features needed for your experiment or small production, in small or large volumes, up to 1000 °C.

The range of usable materials, a special cooling structure to follow precise ramp-down rates, comprehensive range of add-ons are making these products unique in fulfilling your needs.

Contact us, and talk to a specialist to find out more on the wide coverage of our solutions and take advantage of our experience in the field.



OVEN

Temperature range

Inner volume range (usable)

Gas-tight chamber

Heating system

Orientation

Insulation materials

Loading

Controlled ramp-down

Other features

CONTROL SYSTEM

Controller

Thermocouple (oven)

Interface

Communication protocol

Sample Thermocouple

Cascade controlling

POWER SUPPLY AND SIZE

Voltage mains

Power consumption

Size & weight

ORDER CODES AND OPTIONS:

Contact us for spec definition

Ambient to 1000 °C

600 mm x 150 mm dia with < 2 °C uniformity

(max dimension for tubular furnaces)

210 x 270 x 460 mm

(max dimension for chamber furnaces)

Inconel quartz (fused silica) or alumina for tubular

Inconel for chambers , Inconel/alumina/quartz

different shapes available

Super Kanthal 1350 °C wire (1200 °C)

one or three zones for high uniformity on tubular

types.

Plate-mounted wires with uniform/gradient power

distribution for chamber furnaces

Horizontal/vertical tube , front-opening chambers

Eco-fiber alumina,

Direct or slide-in on Inconel pipes

Ceramic/Inconel loading boats/systems on request

Compressed air system for controlled ramp rate

cooling and fast lower temperature stabilisation

Up to 8 separate chambers for different gases;

simultaneous tests on request.

Preheating/post cooling systems for feeding gas

fittings both on high temp/ low temp zones,

sensors input fittings, high current and/or signal

level gas-tight feedthroughs

Gefran 800P

Type N

RS-232 serial port

MODBUS

Type K (S on request)

through software only (2nd controller on request)

115 or 230 V (+/- 10%) 50 or 60 Hz single phase

up to 3 KW

400 Vac 3-phases up to 12 KW star or triangle

balanced loads

15000 VA max

Depending on models