PRODUCT DATASHEET

Tube Furnace for Ceramic and Carbon Membranes

Sintering and pyrolysis under gas





DETAIL – QUARTZ WORK TUBE

OVERVIEW

The Tech Inc. Tube Furnace for Ceramic and Carbon Membranes sinters ceramic membranes and pyrolyses polymer precursors into carbon membranes under controlled gas. Quartz or alumina tubes with sealed flanges allow nitrogen, argon or hydrogen atmospheres, and a programmable controller runs ramps and holds.

MODELS AND CONFIGURATIONS

- **1200 °C furnace** – quartz tube.
- **1600 °C furnace** – alumina tube.
- **Split tube** – fast loading and cooling.
- **Rotary tube** – powders.

TYPICAL DESIGN DATA

Maximum temperature	1200 or 1600 °C
Tube diameter	50 to 100 mm
Heated length	About 300 to 600 mm
Atmosphere	Air, N_2, Ar, H_2 blends, vacuum

APPLICATIONS

Ceramic membrane sintering, carbon molecular sieve membranes, catalysts, annealing of thin films and materials synthesis.

KEY ADVANTAGES

- **Controlled atmosphere** – sealed flanges and gas flow
- **Programmable** – multi-segment ramps
- **Versatile** – sintering, pyrolysis and annealing

Designed and built by Tech Inc. · **Part of the Davey Group since 1990**

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