

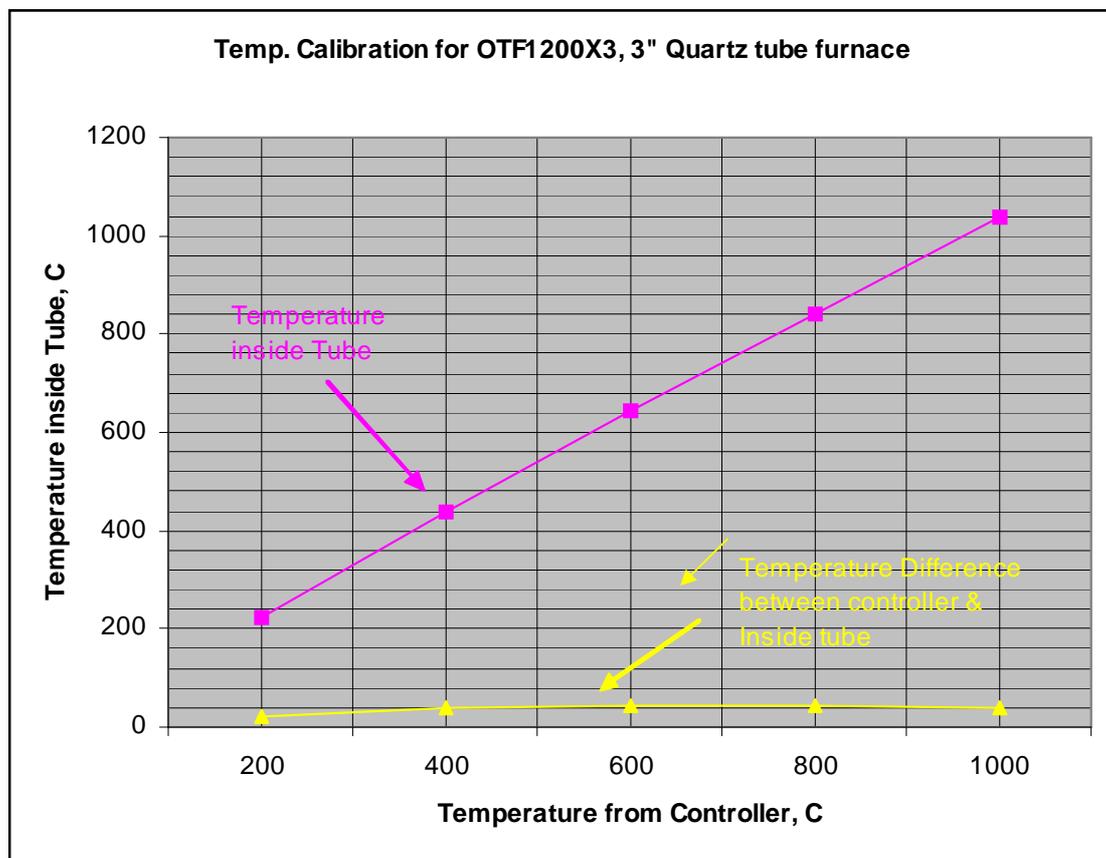
Temperature Calibration for OTF1200-3X (3" Tube furnace)

In order to achieve accurate firing temperature from inside tube furnace, you shall calibrate your tube furnace and set up temperature off-set from controller before use. ([Please click here to see how to calibrate tube furnace](#))

Please be advised that temperature difference quite larger between inside tube and outside tube of OTF1200X-3 (3" tube furnace) due to following reasons:

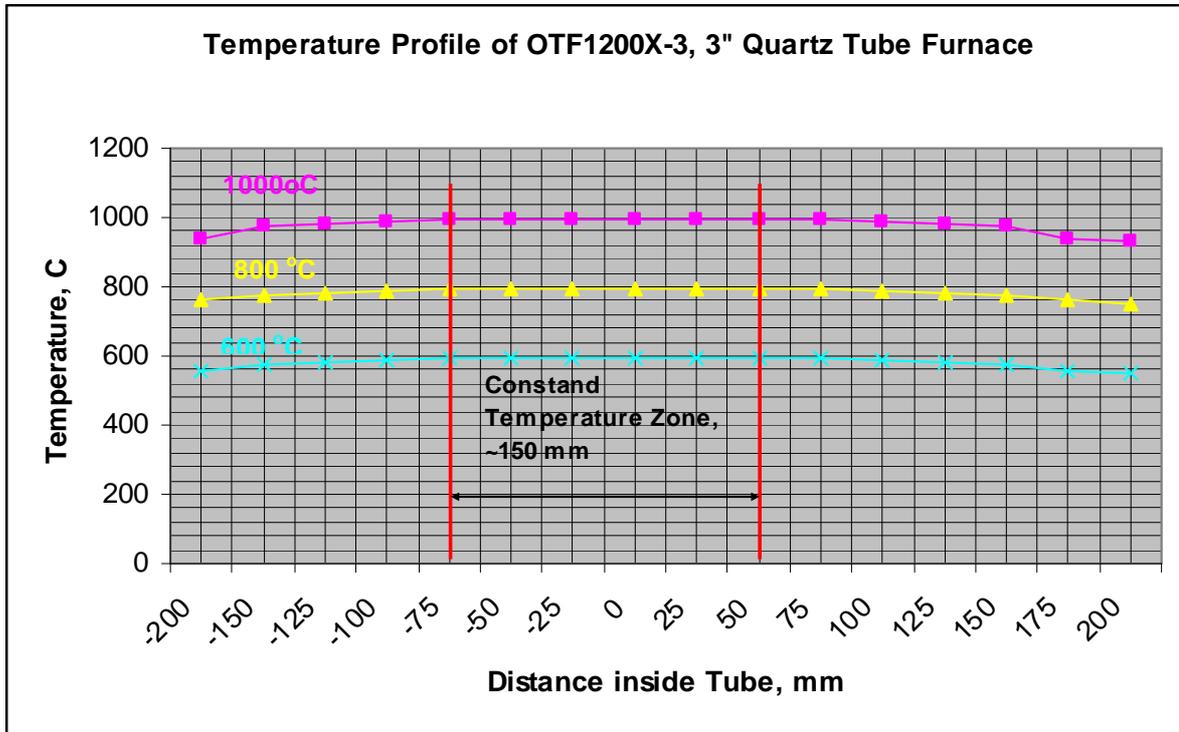
- Thermocouple position in controller is difference from center of tube
- Infrared radiation through quartz tube causes inside temperature is higher than outside

Typical temperature calibration curve for 3" OTF1200X tube furnace is listed as the below. The result shows that inside tube temperature is higher than temperature of controller from 10 °C (@100 °C) to 22°C@1000 °C without setting temperature off-set.



For your convenience, we have already pre-set temperature off in controller according to each furnace' condition before shipping(**Please be noticed that after setting temperature off-set, initial temperature displayed in the controller panel may be higher than room temperature**). However, we suggest you calibrate the tube furnace again at your target temperature before using. Please refer operation manual to learn how to set up temperature off in controller, e.g. change SC value

Temperature profile under various temperature is shown at below. The constant temperature within +/-1oC is about 150 mm. Please make sure place your sample in the constant temperature zone to get accurate result.



If you have any difficulty to calibrate the tube furnace, please contact MTI engineering at info@mtixtl.com

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