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|-----------------|--------------------------------|---------------|----------------|
| Title: | Time Temperature Change | ID: | |
| | | 0236 | |
| Date in: | Response: | Model: | Author: |
| 2002-09.25 | 2002-09-25 | - | CMa |

A:

There is no specification. The reason of the relatively slow temperature ramp-up is in the safety design of the unit. In case all temperature controllers would fail the unit will not get warmer than ~80°C. A Heraeus will climb to temperatures where there is risk of fire and a 100% chance of permanent damage of the robotics.

Because the StoreX is designed to hold a (precision) handling the incubation chamber is made of much thicker steel for stability reasons. This is another reason why temperature rises slower.

Is the temperature rise time a problem for this customer? Do need to increase the heat up speed?

Q:

Do you have any timing studies on heating and cooling rates? I have a customer that is performing some comparisons between the Heraeus and Zymark-Liconic modules and they seem to find that there is a great difference in the amount of time it takes to reach assay temperature?

Any info is greatly appreciated.

A:

You will need to specify exactly what units he is comparing e.g.

The heating of the StoreX is NOT designed to do fast ramps. The heating will reach ~80 deg. This is for the case when all safety features would fail. This is why temperature rises slowly when it gets towards 70°C.

The incubation chamber in the StoreX is made of much thicker steel for mechanical stability reason. This is another reason why temperature changes slower.

If the customer is looking for temperature ramps we would adapt the climate part.