

Rev. 1.0  
12-June-2023

## TRCF-0500-075075075 Temperature regulated curing furnace Product Datasheet

### General information:

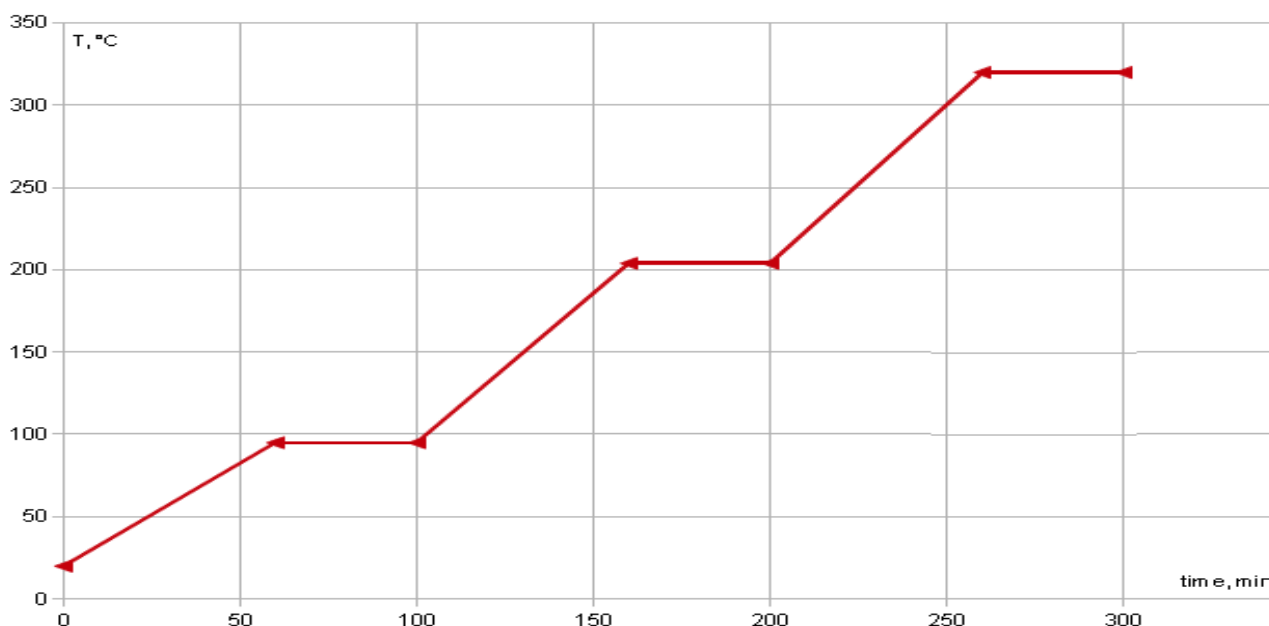


Furnace for heat treatment of parts during strain gages bonding, as well as other heat treatment works.

The furnace has a temperature controller to regulate the temperature in the furnace chamber in accordance with the heat treatment programs for various adhesives and cements used in strain measurement of parts and assemblies.

The use of preset programs ensures that the entire heat treatment cycle is carried out in automatic mode and eliminates possible errors associated with incorrectly setting the temperature and/or the time of temperature set-up or holding on the "shelf" by the user, and also frees the user from the need to reconfigure the controller to proceed to the next heat treatment step.

An example of a heat treatment program for NCC-3 cement, consisting of three steps:



A set of programs (up to 20 programs) is set during the manufacture of the furnace in accordance with the needs of the Customer.

In addition, there is a "Manual" mode, in which the user can independently set an arbitrary heat treatment program containing from 1 to 3 steps, for each step the following is set: temperature, temperature rise time and holding time at a given temperature.

Additionally, the furnace, when executing the program, registers the values of the actual and calculated temperature in accordance with the heat treatment program being executed with a period of 1 to 5 minutes, which makes it possible to check the correctness of the choice and execution of the program after the end of the heat treatment.

Table 1 - Main characteristics

Parameter name	Meaning
1. Working temperature range:, °C	0 °C - +50°C
2. Temperature control range, °C	0°C - +500°C
3. Temperature sensor type	Thermocouple chromel-alumel (type K)
4. Number of heat treatment programs	Up to 20
5. Temperature measurement error	Not more than $\pm(2^{\circ}\text{C}+1\%)$ .
6. Casting after the end of the temperature set	Not more than 3°C.
7. Temperature fluctuations in the furnace chamber during the temperature maintenance phase	Not more than $\pm 2^{\circ}\text{C}$ .
8. Power supply	3 x 380V $\pm 10\%$ , 50Hz.
9. Furnace chamber dimensions, mm	750 x 750 x 750
10. External overall dimensions, $\pm 5\%$ ,	1250 x 1450 x 1250
11. The presence of a fan	+
12. Guarantee period	3 years
13. Support	Technical support regarding usage and setting of treatment programs during first 3 months.

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**Examples of heat treatment programs**  
**A specific set of programs is installed at the request of the Customer**

<b>Heat treated material</b>	<b>Temperature T, °C</b>	<b>Set time S, min</b>	<b>Excerpt time E, min</b>
Adhesive EP-250	140	60	120
Adhesive GD-711, variant 1	70	60	180
Adhesive GD-711, variant 2, step 1	70	60	120
Adhesive GD-711, variant 2, step 2	140	60	30
Adhesive H-600 stage 1	135	60	120
Adhesive H-600 stage 2	165	75	120
Ceramic cement HG-1, step 1	100	60	60
Ceramic cement HG-1, step 2	200	60	60
Ceramic cement HG-1, step 3	300	60	60
Ceramic cement NCC-3, step 1	95	60	40
Ceramic cement NCC-3, step 2	204	60	40
Ceramic cement NCC-3, step 3	320	60	40
Drying after sandblasting	100	30	30
Drying 250°C	250	60	60