

# ENVIRONMENTAL CHAMBER FOR TENSOR CHECK



## Overview

The Environmental Chamber is an accessory applicable to the Tensor Check tensile tester to carry out tests at controlled temperature.

- The Climatic Chamber can be supplied without refrigerating unit allowing to carry out tests between room temperature and +250°C.
- The refrigeration unit, which can also be installed after the purchase of the Climatic Chamber, extends its use to carry out tests between -40°C and +250°C.



## Installation

All Tensor\_Check-Profile tensile testers are set up for the application of the climatic chamber that can be purchased and installed even after the purchase of the instrument

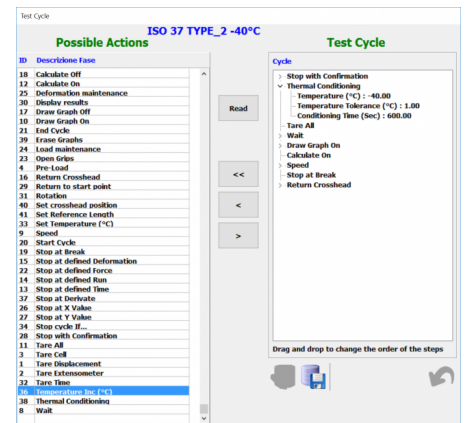


## Test Cycles with Temperature set

The TensorCheck software allows you to directly adjust the climatic chamber. In this way it is possible to prepare test cycles that combine the temperature regulation and the execution of the mechanical stress of the specimen when the required conditions have been reached.

The climatic chamber control functions allow you to set:

- Set of temperatures
- Thermal gradient
- Thermal conditioning time within the set tolerance limits.



## Tests at Low Temperature

The instrument produced by Gibitre uses a Refrigeration Unit to reduce the temperature.

The use of the refrigeration unit, compared to cooling by liquid nitrogen, allows to:

- Check the test temperature perfectly, avoiding oscillations that may alter the results.
- Carry out long-term tests without risking to end the liquid nitrogen supply before finishing the test
- Eliminate the hazards related with manipulation of nitrogen



## Extensometer for Environmental chamber

The Climatic chamber can be equipped with an internal differential strain gauge for measuring the temperature-controlled differential elongation.

The strain gauge complies with the requirements of ISO 5893, has a resolution of 0.01mm and a total stroke of 400mm.

The strain gauge can be moved to the bottom of the chamber for testing that does not require it.

The digital linearization of the elongation reading guarantees extreme measurement accuracy over the entire stroke.

## Displacement of the Environmental chamber

The Environmental chamber is positioned on aluminum guides and can be easily moved back and forth to perform tests with or without temperature control.



## Usable grips

The Environmental chamber is positioned on aluminum guides and can be easily moved back and forth to perform tests with or without temperature control.

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<b>Temperatures (with Refrigerator)</b>	Between -40°C and +250°C
<b>Temperatures (standard chamber)</b>	Between room temperature and +250°C
<b>Internal Dimension</b>	(W x D x H) 240 x 230 x 600 mm
<b>Differential Extensometer</b>	Mechanical extensometer with 0.01 mm resolution (conforming with ISO 5893 Standard - Class E)
<b>Noise Level</b>	65 dB(A) (with cooling unit)

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