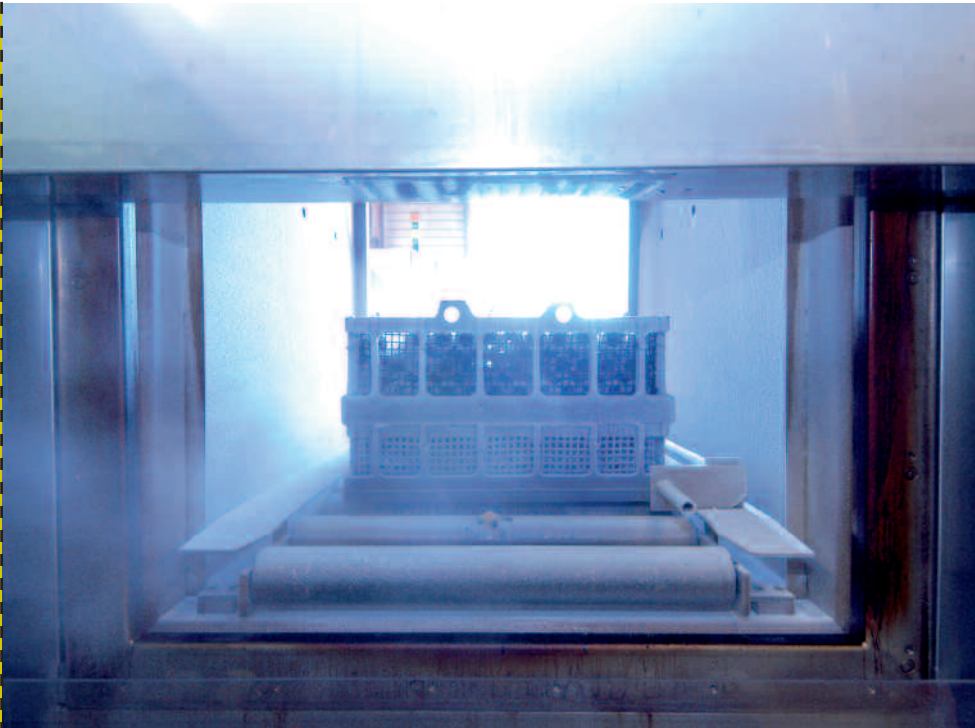


# **ALNAT** *Cryo*

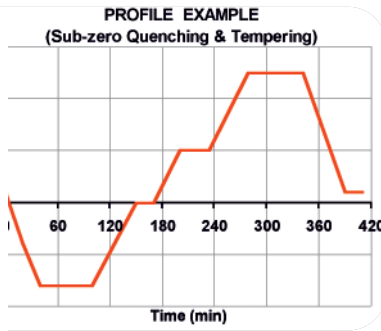


Cryogenic solutions for sub-zero quenching treatment

**ALNAT Cryo** solution offers customized equipment for cryogenic quenching treatment with major benefits:

- Temperature treatment from -160°C up to +300°C
- Highly insulated stainless steel chamber with accurate temperature regulation: +/- 1°C
- Upgrade of your process performance
- Easy heat treatment cycle programming
- Load up to 1000 kg
- Integrated safety procedures
- Telemetry for remote monitoring and reporting

## A complete management of temperature profiles



- **Temperature control**

The chamber design associated to specific nozzle injection system ensures an accurate temperature monitoring of  $\pm 1$  °C.

- **Temperature cycle**

The specific temperature profile is adjusted and stored at your convenience

- **Reheating**

After cryo-treatment, if required the load is warmed up from room temperature to 250°C for tempering

## A customized and standard equipment design

- A range of standard stainless steel cabinets from 300 to 1400 liters.
- Options : slash door, loading rolls, heating capacity, data acquisition and transfer solutions.
  - Monitoring of the equipment from a remote process controller
- Safety management : door detection, overpressure exhaust, air venting before opening.
  - Consulting and training on gas handling and safety



ALNAT Cryo Standard Model	300 C	630 C	1200 C	M 1400
<b>External Size</b> (mm) [w x d x h]	810 * 1150 * 1825	902 * 1450 * 2125	1202 * 1750 * 2125	2090 * 2210 * 1840
<b>Internal Size</b> (mm) (For current Load)	700 * 600 * 700	700 * 900 * 1000	1000 * 1200 * 1000	1110 * 1110 * 1110
<b>Volume</b> (Litres)	300	630	1 200	1 400
<b>Current Load</b> (Kg)	100	150	200	1000
<b>Max. load</b> (Kg) (With reinforced frame)	250	500	800	
<b>Chamber weight</b> (Kg)	340	550	750	800
<b>Temp range</b> (° C)	- 120 / + 250	- 120 / + 250	- 120 / + 250	- 160 / + 300
<b>Temp Control*</b> (° C)	± 1	± 1	± 1	± 1
<b>Cooling rate</b> (° C / min)	6	6	6	5
<b>Heating power</b> [min // max] (Kw)	2.9 // 7	5.1 // 14	7.7 // 21	11 // 30

\* On empty chamber