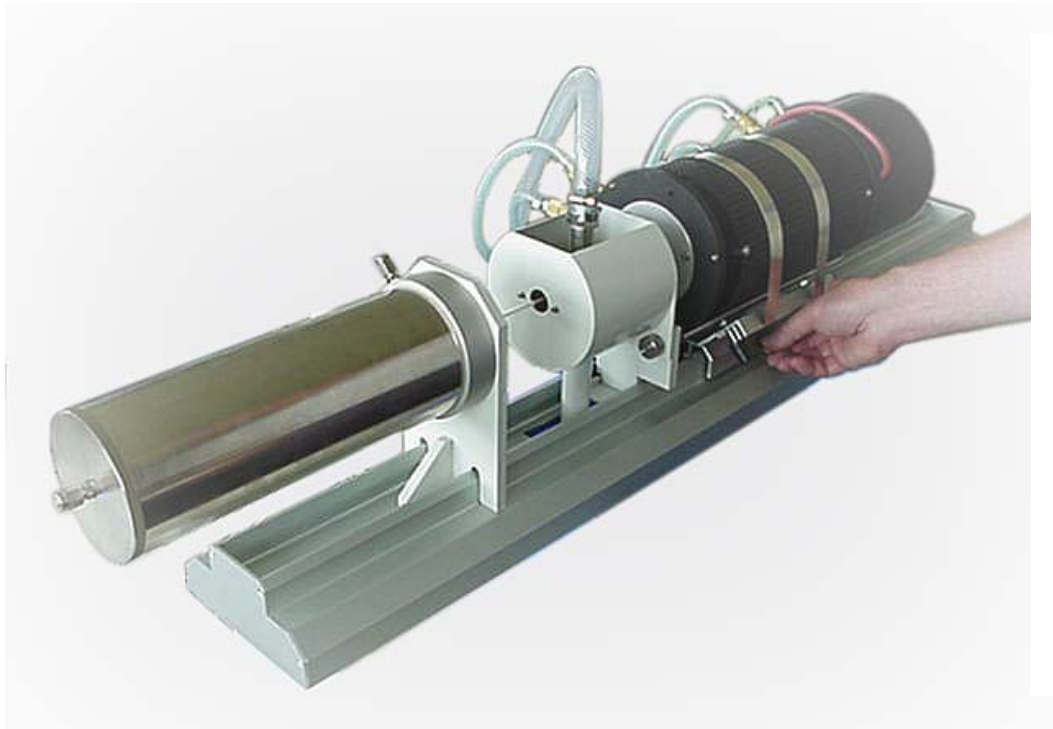


Linseis Quenching DIL Option L75/071



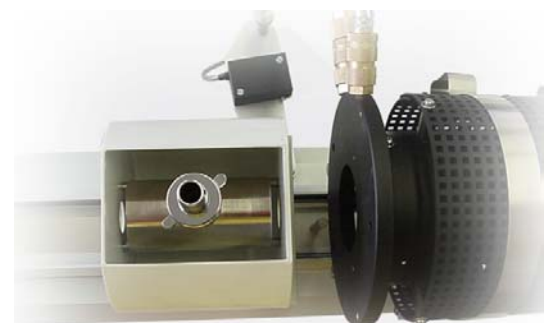
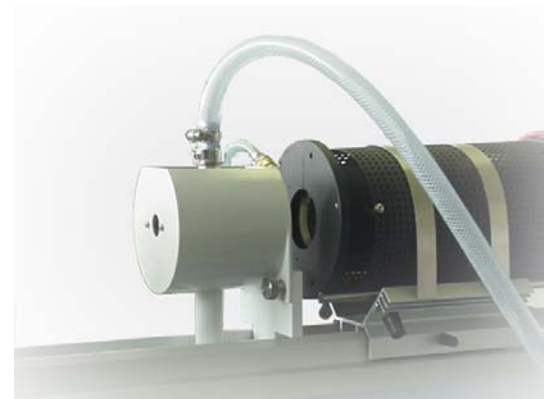
Picture: L75 Dilatometer with quenching option

The quenching option L75/071 is available for Linseis dilatometers of the series L75. These dilatometers are vacuum tight systems, as the quenching process can only be run normally under protective atmosphere of nitrogen. The used sample sizes are 2,8mm diameter and a length of maximum 10mm. The sample is sitting at the end of a closed quartz protection tube with about 3mm diameter. It is contacted with a push rod which has a thermocouple at it's end with the thermocouple type S.

The code of the measuring system is L75/105. The dilatometer heats the sample up to 1000°C.

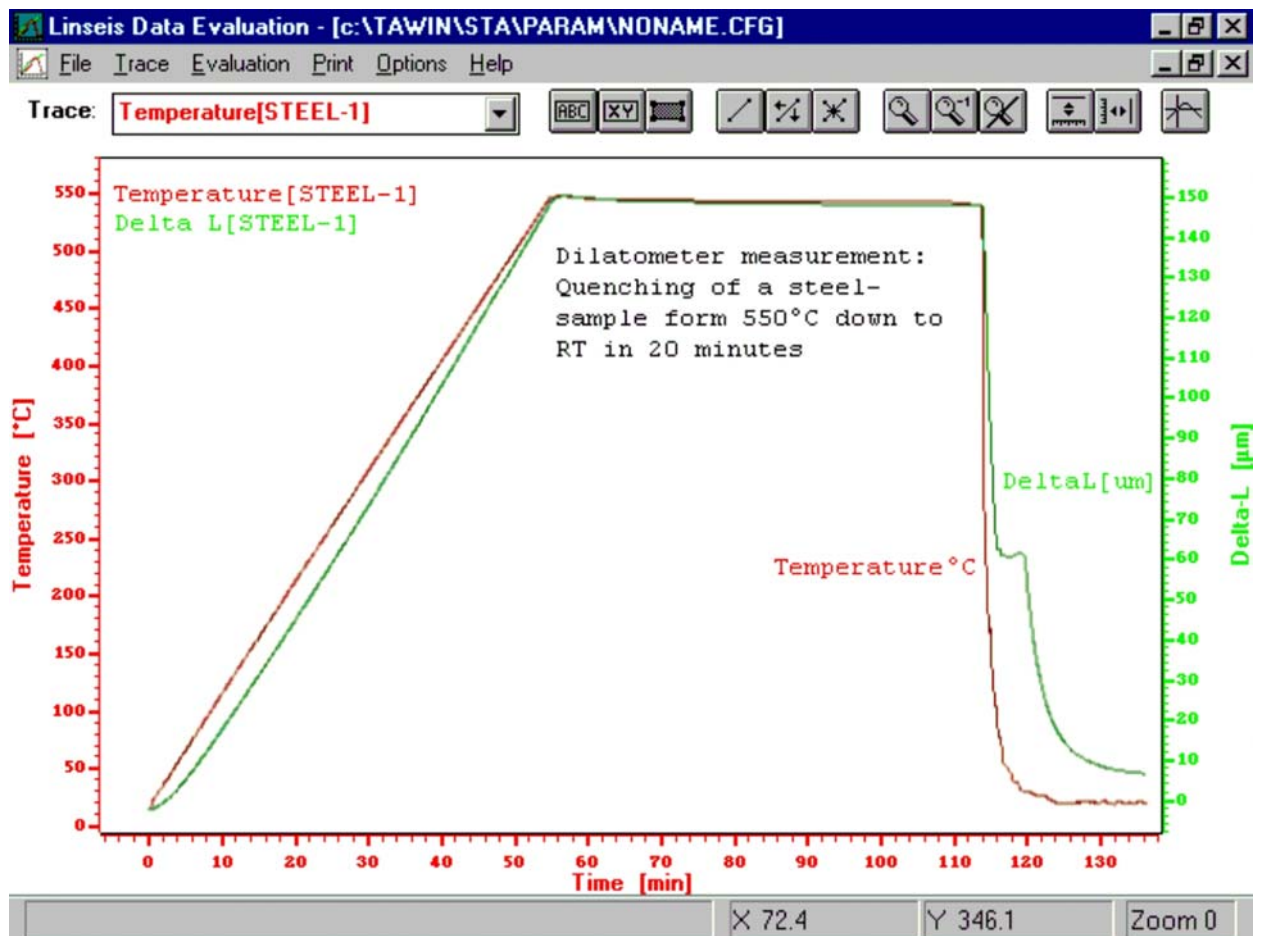
When this temperature is reached, the furnace is sled away from the sample / measuring system and the quenching system is now sitting over the hot sample. At the same time a water valve is opened and the water is shed through a water shower on the measuring system / sample.

Picture: Details of quenching option



Linseis Quenching DIL Option L75/071

Application



A typical application for quenching is shown with a metal sample which is cooled down in seconds from 1000°C to 100°C. The shown diagram explains the process of under water welding of a big shipping wharf in Canada.