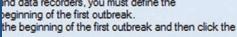
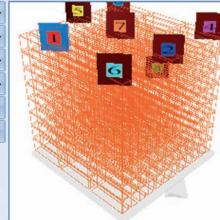
### Data management a of the oven software

## and data recorders, you must define the



Set





### **QLEVER Ceramics**

Themocouples [3]Thermocouple 3 \_ [4]Thermocouple 4

#### QLEVER Software for ceramics industry

QLEVER Ceramics is the new software developed by TMI ORION to fulfill the needs of the ceramic industry.

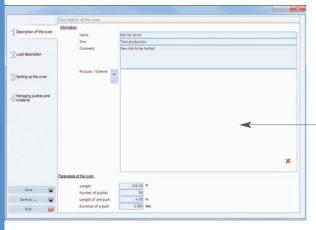
It takes into account the specificities of the kiln, carts and potentially dryers.

#### **Basic functionalities**

- Programs and reads the logger
- Analyzes the data
- · Exports the data to an .txt file
- Minimum, Average and Maximum values of every channel
- Quartz inversion slopes
- Time at temperature
- Slopes calculation at any point
- Rise and fall values
- · Real time data using the RF loggers

#### **KEY FEATURES**

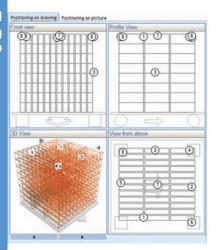
Kiln and Pushing process description



 Description of oven and wagon: length of the oven, number of pushes, duration and length

> Insert a picture or a scheme of your oven

#### **Load description and** thermocouples positioning in 3D



Load description:

type and number of products, thermo couples positioning either on different views (3D view available) or on a picture.

#### formation °C Name 1091 Quartz inversion P \*\*\* Firing Temperature \* Preheat Firing zone ... Slow cooling zone 01 552

# QLEVER Ceramics

Kiln setting

 Position of different elements such as fans, burners...inside the kiln, and relative scheme with distances



Incident and variable push rate

 Manages pushes and incidents with a variable push rate, so the software takes into account any change in the push rate due to an equipment failure or an incident while recording the data. You can mention the cause if you know it in the comment part.

N°				
	Duration	Explanation	Comment	ī ī
1	9 500	Process •		*
2	9 500			7 11
3	9 500			
4	9 500			
	11 000		A pack of bricks fell into the oven	1
8	9 500	Process		
	0	) ;		
1	-	to 1		
Q.Pr	ocess			
			Times.	lodify 🕖
	2 3 4 5 6 6 7 8 8	2 9500 3 9500 4 9500 5 11000 6 9500 7 9500 8 9500	2 9500 Proces 3 9500 Proces 4 9500 Proces 5 11000 Indident 6 9500 Proces 8 9500 Proces 8 9500 Proces 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 9 500 Process 3 9 500 Process 4 9 500 Process 5 11 000 Anodent A pack of bicks fell into the oven 6 9 500 Process 7 9 500 Process 8 9 500 Process 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1



## **QLEVER Ceramics**

Graph analysis and temperature mapping

The results given by the logger are linked to the kiln settings. The kiln scheme is set up below the kiln profile graph, so the user can know at the same time the temperature of the product and its relative position in the kiln.



- Maximum and minimum temperature per channel and the time they were reached
- Graphic features such as zoom, zones, automatic scales...
- Snapshots to paste the curve onto a report

#### **Temperature mapping**

QLEVER Ceramics displays the heating and cooling at each thermocouple located on the load through all the process in the kiln.

A color scale going from blue (cool) to black (extremely hot) shows the temperature rises and falls.

