



The know-how of canned seafood (fish, shellfish) is ancestral. The development of new recipes and the use of new packaging are pushing to revisit sterilization practices.

In order to optimise the cooking time of canned sardines, and to obtain the desired textures, the first step was to measure the temperature at the heart of the fillets and calculate the F0 value. The introduction of miniature temperature loggers in cans has contributed to better control of thermal processes.

Surimi producers sometimes have problems clipping on their heat-sealed trays. Monitoring the deformation of the packaging during pasteurisation enables the process to be adjusted and avoids any geometric defects. The sealing conditions can also be reviewed.

Verrines of scallop mousse, for example, deserve special attention. On the one hand, the formulation must take into account the fragility of the raw material. On the other hand, the cooking must be perfectly adjusted to preserve the flavours and textures. The precise adaptation of sterilisation to the thermal behaviour of the mousse enhances its taste profile.



### TEMPERATURE MEASUREMENT



3 ranges of loggers suitable for pasteurization and sterilization (accuracy : 0,15°C / T°C max : 140°C)

**ThinLOG** for your current applications :

- Metal can, plastic tray, jars
- Thermal mapping

**AXImicro** for all your demanding applications :

- Extreme miniaturization for all the thinnest packaging such as pouches
- Supports vacuum as strong pressures

**HeatLOG** for your standard and microwave treatments and for bottles with narrow necks



### DEFORMATION MONITORING



- Probe for direct reading of deformation packaging
- Positions on all sides to study targeted defects
- Allows adjustment of process to optimize heat transfer or allow downgauging of packaging



### VACUUM MEASUREMENT



- Digital display Manometer/Vacuum gauge
- Qualifies capping and heat sealing injections (steam, gas)
- Measures the residual vacuum after treatment
- Check retort pressure

## SALE – RENT - ADVICE – AUDIT - TRAINING

### Product development and improvement

- Optimization of cooking without changing the desired stability
- Improved material yield

### Elimination of packaging deformations

- Identification of the origin of leaks, panelling and bombing
- Thermal process adjustment for new packaging and loading plans

### Energy savings on retort consumption

- Reduction of steam and compressed air exhausts
- Gain in cooling efficiency to reduce water consumption

### Productivity gains

- Reducing process time without compromising quality ( stability and organoleptic )
- Reduction of F0 and Cooking Value dispersion

### Study of retorts and tunnels microwaves

- Mapping, cold spot search and homogeneity control
- Validation of the sterilizing / pasteurizing value by heat penetration study

## METHODOLOGY

- **Selection** of the product / packaging to study ( the most penalizing )
- **Instrumentation** as needed : **temperature and pressure loggers, deformation probe,** control of valve openings
- **Monitoring and analysis** of the cycle to identify action levers
- **2 to 3 optimization tests** adapted to industrial constraints
- **Validation** of modifications on a full load

# AXITHERM

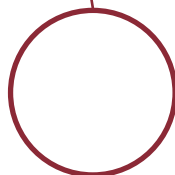
MANUFACTURE AND SALE OF TEMPERATURE LOGGERS  
 DEFORMATION PROBES  
 EQUIPEMENT RENTAL AND REMOTE ASSISTANCE  
 ON-SITE TECHNICAL INTERVENTIONS

## Your interlocutors

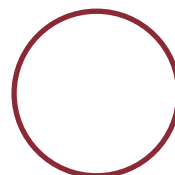
Axitherm was born in 2002 under the impetus of Alain Fournial, current manager of the society, to offer efficient services and measuring Instruments adapted to food industry.



**Alain FOURNIAL**  
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We work everywhere...  
 For all your applications



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