

#### DATA SHEET

S-LTS-1401-07-002 Rev.0

## Description

**LoopTunerSentinel** is software for tuning PID controllers, designed under a SAAS (Software As A Service) scheme, which allows the user to specify the behavior of the closed-loop process variable, reaching the production standards of each process. **LoopTunerSentinel** tune can controllers from different manufacturers on the market such as Honeywell, Yokogawa, Emerson, Foxboro, among others. It also has the ability to decouple interacting multivariable control loops. LoopTunerSentinel has the ability to tune without the need to manually change the control loop, as it allows the dynamics of the closed-loop process to be determined.

#### Resume

- Historical reading of .csv type and any other format provided by the client.
- Generation of process models.
- Tuning of closed or open loop PID controllers.
- Multivariable attunement.
- Multivariable decoupling.

### **Typical applications**

**LoopTunerSentinel** allows the tuning of PID controllers from any process industry such as.

- Oil and Gas.
- Manufacturing.
- Petrochemical.
- Foods
- Fertilizers.
- Compression
- Among other.

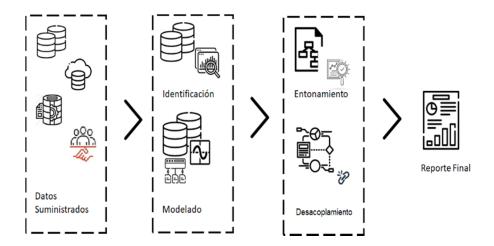
#### Workflow

MCL Control delivers a document detailing the field test, a step-by-step guide for closed-loop data generation and/or in automatic mode of the control loop(s) to which optimal tuning will be applied using the **LoopTunerSentinel** tool.

El cliente ejecuta lo establecido por MCL Control y suministrará la data obtenida.

MCL Control sends the customer the optimal tuning parameters of the controller for each loop, which will again apply the field test that will allow observing and validating the optimal performance of the tuned control loops.





#### **Communications**

The **LoopTunerSentinel** service works as an offline service, therefore, it only needs variable histories in .csv format, which are fed to the application to generate the plant models and subsequently carry out their respective tuning.

## Security

MCL Control proceeds to perform the optimal tuning of the loop, using the LoopTunerSentinel tool in which a model is built from the data through a system identification process, and then using said model, taking into account the dynamics of the process and the desired response, which must have been previously defined in agreement with the client, in the event of a disturbance and/or change in the setpoint, finally obtaining the intonation parameters.

### Warranty

MCL Control issues a report showing the initial and final performance of the control loops, which were optimally tuned. Validating the desired response of the system to disturbances and changes in the setpoint as agreed. The following figure shows the workflow.

### **Order Information and Assistance**

Information of order:

Part	Description
XX-XX	XX-LoopTuner-XX

# **Support**

MCL Control

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