Modular Software Solutions

Powered by **4i Platform** Industrial IoT

What We Solve:

Our **Modular Software Solutions** (MSS) allows you to automatically extract all the relevant data from your plant and synchronize them with your ERP and all the systems in your plant floor. MSS tracks production, quality and machine availability, providing **processed data** along with automated workflows.

Connecting to both the plant's control and information systems, **MSS automatically detects** production delays and allows you to determine the causes of downtime. It tracks your KPIs to help you take meaningful steps toward continuous process improvement.

How We Do It:

MSS automatically acquires, processes and analyzes data from your plant. It transforms lots of data points into **valuable insights** you can use to make informed decisions.

You may choose to store data onsite in the plant. Alternatively, you can opt to utilize our secure cloud storage and be able to access production reports anywhere and at any time.
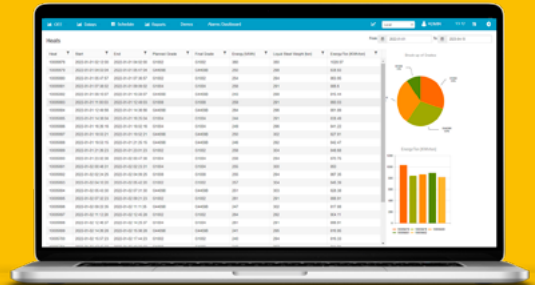
Increase efficiency

Reduce costs and downtime

What we achieve:

Monitor failures and downtime

Monitor production with real data in **real time**

Improve decision-making and save energy

AustralTek

3 Modules:

1 ▶ DELAYS:

The **Delays Module** records machine downtime, detects delays and identifies their causes automatically, generating precise and accurate information.

The system monitors the on-off signals or normal running signals of each piece of equipment, such as power-on in an EAF or LMF, StrandRunning in a Caster, LineRunning in a Mill, or the signal that indicates that a particular piece of equipment is stopped.

If necessary, an operator can declare the cause of specific delays manually, but he cannot change the start and end times of the delays; this way you can be sure the information is **100% reliable.** With the information provided by this module, very useful analyses can be provided/carried out:

▶ Easily identify the most common **causes for delays** in order to take corrective action to reduce their occurrence.

▶ Identify **patterns of occurrences** of particular causes for delays with relationship to certain operators, equipment or even transitions to a batch with a different steel grade; such correlations could become the basis for informed changes to processes, such as adjusting procedures when changing grades.

▶ Determine the **actual time** that processes take so that operation manuals can be updated, such as process time per heat for specific steel grades, tapping time, etc.

▶ Evaluate the **quality** of consumables, such as electrodes, by analyzing the delays related to the use or change of such supplies.

2 ▶ ELT – Maintenance and Use of Equipment:

ELT tracks the usage of equipment in order to **lengthen the lifespan** and ensure the proper functioning of each piece of equipment.

The **ELT** module provides several functionalities:

▶ Establish criteria for when it's time to perform specific **equipment maintenance**, such as everything related to refractories and ladles.

▶ Send **email notifications** when it's time to perform maintenance on specific equipment.

▶ Keep a complete, detailed record of repairs and equipment usage by automatically obtaining **total time in use**, time since the last repair or maintenance completed, the time spent in Maintenance, etc.

▶ Maintain an **inventory** of replacement or repair parts in stock.

3 ▶ CENERGY – Tracking Energy Sources:

The consumption of gases, liquids and energy are a critical element of industrial processes; therefore, knowing the **details of the consumption** of these resources can be a key tool for improving procedures.

The **CEnergy** module provides several functionalities:

▶ **Record and store** consumption data to be evaluated and summarized for distinct periods of time.

▶ Display **consumption in graphics** that allow you to easily detect situations when usage is outside normal levels.

▶ Display **historical data** in tables that allow you to easily compare consumption in different time periods.

▶ Display **graphics of real-time** usage for an overview of the plant at any given moment.