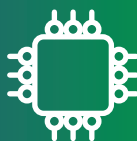# Empowering a scientific approach to tanning
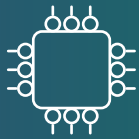

SMART DRUM
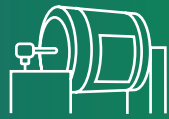
ITALPROGETTI   **SPIN 360**

Functionalities

Data acquisition

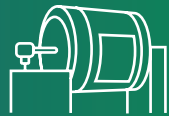**Pilot processes** using the simulated modifications

Assessment of environmental impacts and costs

Leather quality check

Identification of the most important contributors

Industrialisation of the modified processes

Simulation of the effects of process modifications

Monitoring of process performances

How Smart Drum works

USER INTERFACE

ELABORATION UNIT

DATA COLLECTOR
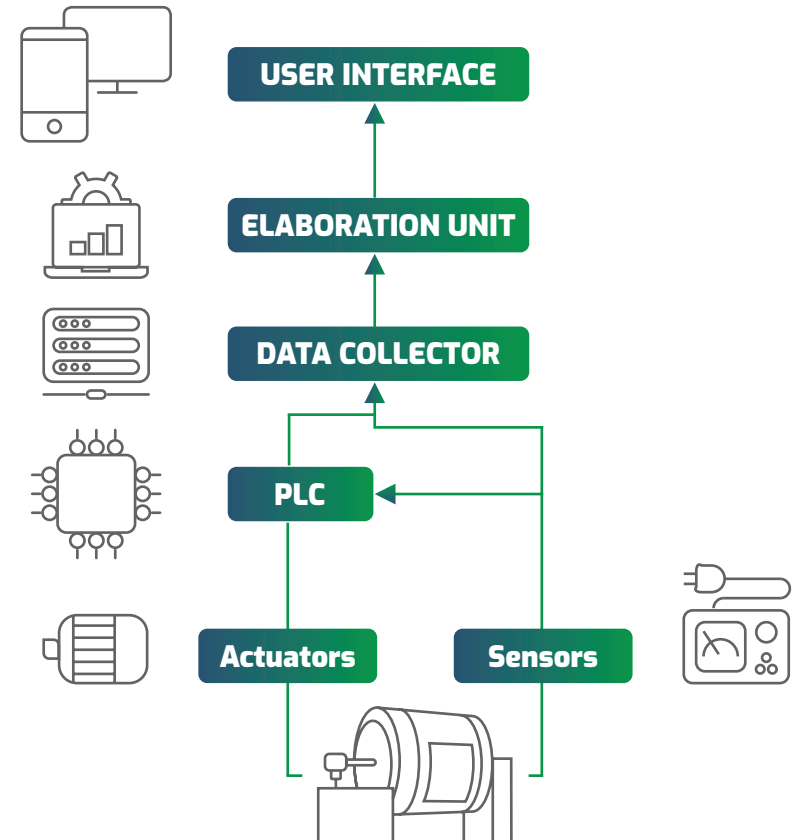
PLC

Actuators

Sensors

Smart sensors connected with elaboration units and intelligent software allow to obtain real time process data and consumption of energy and resources
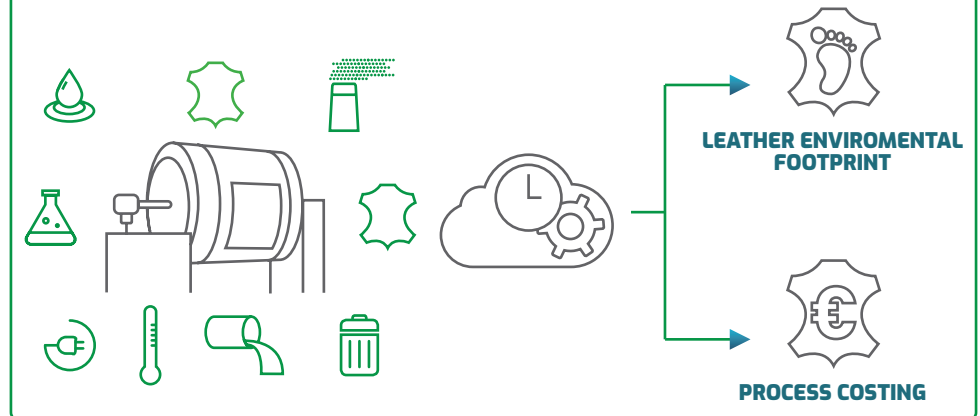
All data are visualised in advanced human machine interfaces and are provided to technicians.

Technicians of tanneries are enabled to scientifically analyse the performances of their processes, formulate hypothesis for improvement, test their ideas, validate the results.

Process data elaboration

LEATHER ENVIROMENTAL FOOTPRINT

PROCESS COSTING

Improvement

Smart Drum empowers a process of continuous improvement of the tanning processes: assessing impacts and costs, simulates process performances with the aid of advanced software, defines new production recipes with lower impacts and costs, tests them and verifies leather quality.

Impact Assessment

Process Simulation

New Industrial Processes

New Process Data

Leather Quality Check

PLAN

DO

ACT

CHECK

Continuous improvement

Simulated Impact

Process Trial