



# HEAT TRANSFER DIGITAL TWIN

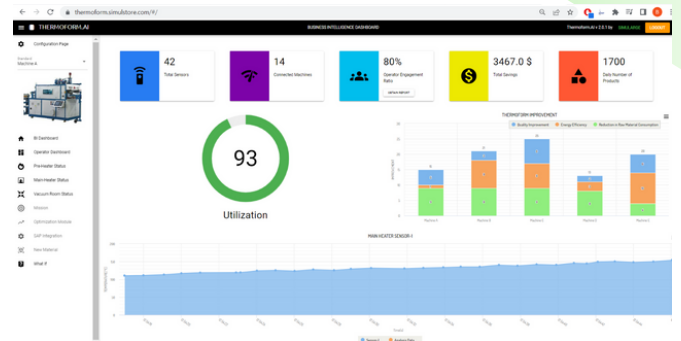
**Reduce the defect on thermoforming process upto 50%, reduce the material consumption at least 5% and overall increase the OEE in the level of 10%**

## SOLUTION DESCRIPTION

**A Thermoforming Digital Twin (SaaS) for appliances and automotive companies that prevents scraps and optimize plastic thickness & energy consumption unlike monitoring-only solutions in the market.**

This Digital Twin will have the ability to **simulate both thermal effects as well as deflection on materials** through thermomechanical loads.

Using temperature measurements, heating elements will be calibrated based on **radiative heat transfer formulations.**



## MAIN BENEFITS

**Thermoforming Digital Twin will help thermoformed plastic part manufacturers to reduce raw material & energy consumptions thanks to its optimization algorithm and defect prevention capability.**

- ▶ Reduce the thickness and scrap and the cost
- ▶ Reduced cycle time
- ▶ Energy consumption optimization
- ▶ Increased throughput

PRODUCT OWNER



The ZDZW project has received funding from the European Union's Horizon Europe programme under grant agreement No 101057404.