



MECHANICAL HARDNESS INSPECTOR

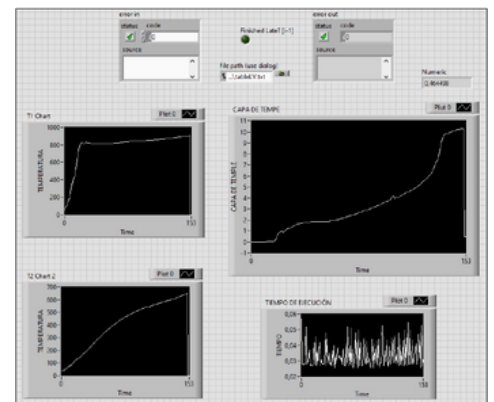
Reduces material waste to 1% and energy consumption by approximately 25%

SOLUTION DESCRIPTION

The Mechanical Hardness Inspector offers an innovative inspection solution utilizing **digital twin technology to delineate microstructural and hardness evolution during induction heat treatments.**

Through the utilization of digital twins and Recurrent Neural Networks (RNNs), the production process becomes digitized, enabling **real-time monitoring and analysis.** This integration facilitates **quicker analysis** and **informed decision-making**, thereby **amplifying production efficiency.**

This inspection, powered by digital twin, serves as a valuable tool for industrial partners implementing **induction heat treatments.**



MAIN BENEFITS

- ▶ Automatic unitary inspection
- ▶ Automatic in-depth hardness estimation
- ▶ Early process failures detection
- ▶ Real-time non-destructive inspection

PRODUCT OWNER:

ikerlan
MEMBER OF BASQUE RESEARCH
& TECHNOLOGY ALLIANCE



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