

ASCCI WORLD-CLASS MANUFACTURING CASE STUDY

SENIOR FLEXONICS

COMPANY BACKGROUND

Located in Cape Town, Senior Flexonics manufactures thin-gauge flexible stainless-steel components and assemblies. The company was established in 1997 and is a subsidiary of Senior PLC, an international engineering solutions provider which specialises in high-technology components for the aerospace, automotive, defence, land vehicle, and energy markets.

Senior Flexonics' Cape Town plant supplies the automotive industry as well as other industrial sectors. The company's flexible metal components and assemblies are supplied to local producers of exhaust systems for leading brands of diesel and petrol passenger vehicles. The plant also supplies sister Senior plants in Europe.

PROJECT SCOPE

Senior Flexonics' complex and intricate products require advanced machinery to manufacture. This machinery requires constant maintenance as well as tool-changes. As a result, downtime is a regular occurrence and the plant's current manual capture systems are unable to accurately measure total downtime. The lack of transparency limits Senior Flexonics' ability to measure and manage downtime timeously, with issues only being highlighted at the end of shift and discussed 24 hours later during a process stand-up meeting.

The primary focus of the project was, therefore, to automate the recording of production and downtime data and improve the reliability of data for decision making purposes.

PROJECT OUTCOMES

An OEE system called Per4ma was installed on six critical pieces of equipment to provide work standards, scrap recording, and downtime tracking. All operators were trained on how to use the line control units and interpret data, and training was provided to supervisory and management staff to clarify how to run and analyse reports.

Collectively, these activities drove operational improvements in the areas of implementation over the duration of the project, with both internal scrap rates and production lost to internal materials' unavailability, improving meaningfully.

While OEE performance improvements could not be evaluated due to not having a "starting benchmark", knowing the status-quo is expected to assist in driving performance improvements.

"[Per4ma has ensured] data is available on a real-time basis which aids with the reaction to downtime and scrap contribution issues significantly quicker than previous practices. From a lean point of view, a number of non-value-adding data capturing process steps have been eliminated as a direct result of the Per4ma tracking units and web-based reports. Senior is very satisfied with the product and we are in the process of rolling out the next manufacturing area to use the same hardware and software due to its potential improvement benefits."

- Johan Mayer, Production Manager, Senior Flexonics