

ENHANCING EFFICIENCY AND QUALITY AT SCHNEIDER ELECTRIC

Schneider Electric, a leading French multinational specialising in digital automation and energy management, boasts a workforce of approximately 165,000 employees worldwide. The company focuses on heating products, ranging from thermostatic radiator valves to electronic time clocks controlling heating and hot water. In recent years, their foray into smart Internet-connected solutions, such as their Wiser heating system, reflects a commitment to technological innovation.

Schneider Electric has relied on Vision Engineering technology for over a decade, transitioning from a simple bench microscope to Mantis and EVO Cam. This investment has rewarded significant efficiencies both in production and inspection.

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Incorporating new technologies, such as integrating new smart digital components into traditional heating controls, led to new challenges in consistency and reliability, compounded by the complexity of managing components sourced from third-party suppliers. Schneider Electric had to address these challenges to continue to lead digital automation, providing innovative and reliable heating solutions for customers globally.

The Mantis Elite stereo microscope plays a pivotal role in Schneider Electric's production processes at their Plymouth site, specifically in the Rework Area for PCB inspection. It provides operators with a powerful tool to inspect PCBs that have failed during production. Mantis enables high magnification scrutiny of tiny components, particularly those with 0201 specifications, and allows simultaneous inspection and soldering.

Mantis' unique advantage in Schneider Electric's workflow lies in its ability to facilitate precision inspection and soldering simultaneously.

In addition to the Mantis, Schneider Electric installed EVO Cam, which offers the capability to capture images of problematic items during PCB inspection. This is critical in identifying manufacturing issues, whether originating from the PCB production source or during the integration process. Over the years, continuous improvements have significantly reduced failure numbers to a negligible level – a powerful statement to the impact of Vision Engineering inspection products.

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As Schneider Electric continues its commitment to excellence in manufacturing, the success story of Vision Engineering's inspection products highlights the value of investing in high-quality inspection tools. Companies seeking to improve their production efficiency and product quality need to integrate advanced inspection technologies into their workflows.

"Vision Engineering has proven to be a reliable partner in our journey, delivering solutions that significantly contribute to our pursuit of continual improvement."

