



— SVENJA FISCHER

Problem detected - problem averted: How artificial intelligence supports axis diagnostics

Artificial Intelligence (AI) is supporting TRUMPF in making great strides in simplifying, accelerating and improving the quality control system. The machine production plant for the TruLaser 5030 fiber machine collects a tremendous amount of data that the AI-solution analyzes automatically. If the AI solution detects an anomaly, it pinpoints where the fault lies and offers suggestions from its knowledge database on how to rectify it.

— Young but wise

This process was made possible by the tremendous amount of data that the machine production plant collects every single day in Grüşch, Switzerland. During initial commissioning of the machines at the plant, sensors capture several thousand items of data in a quick test and send it through the controller to the cloud, where the AI solution performs an automatic analysis. That enables experts to run far more checks on the machine than you would normally get in a standard acceptance test. If the AI solution detects an anomaly, it not only pinpoints where the fault lies, but also offers suggestions from its knowledge database on how to rectify it.

— Hand in hand: Men and AI

This would all be a lot harder without AI, because the TruLaser 5030 fiber is a very complex machine with individual parts that are often engaged in very different tasks. The AI solution helps engineers make the right decisions, for instance by eliminating the risk of them replacing drive components in the TruLaser 5030 fiber that, in the worst case scenario, may not even be the cause of the problem. That saves time and resources.



