"optimap" - Smart Process and Potential Analysis

optimap - Approach for efficient AS-IS mapping and structured optimization of processes

The optimap method developed by CTC GmbH Stade opens up new ways of saving costs and increasing productivity and of ensuring quality for manufacturing processes in the aviation industry. This innovative approach is supported by the software and process planning experts of HDE Consulting GmbH in Stade.

optimap aims at identifying technological and organizational potentials, offering the possibility of deriving short, medium and long term measures to optimize existing workflows.

In a first step an analysis of needs is carried out which is tailored to the customer requirements and the purpose. The results obtained, i.e. any necessary changes, serve as input into the flexibly adaptable tool to perform the optimap process.

At the heart of this new approach is an AS-IS analysis on the shopfloor in real time which is carried out by highly skilled engineers, based on customer-specific data, if any. A tablet-assisted application provides on-the-spot documentation of all significant technical characteristics and potentials of the end-to-end process chain without compromising series operations.
Due to the thorough photo documentation and direct text-to-picture allocation, procedures and documentation can be generated without additional effort. All data recorded are stored in online databases. The application’s flexible structure allows to easily feed back these data into planning tools such as DPE or SAP. Due to the continuous synchronization of data with a central server, the process specialists of CTC GmbH are able to remotely influence the on-the-spot analysis processes right from the first day.

Another benefit of this approach is the immediate pre-assessment of potentials, waste issues and optimization potentials by the experts working with the analysis tablet. As a consequence, the assessment and analysis of recorded data following the process analysis requires less time and effort. The implementation of ad-hoc improvements may in some cases be launched immediately or even during the mapping phase. Besides ad-hoc measures such as avoiding waste, adhering to work schedules and capacity optimization, the potentials are classified into mid-term and long-term optimizations. Mid-term measures could be, for example, defining and validating the rate capability or optimizing manufacturing processes by means of line balancing. The pronounced aviation expertise of the CTC process specialists facilitates the evaluation of the technologies used and, if need arises, the development of alternative technological processes and technical modifications of the product and/or process as a long-term measure to optimize processes.

optimap has already been used successfully in several projects with varying purposes for production and assembly operations of the Airbus plant in Stade.

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