

VALUE ANALYSIS

EARLY PROCESS OPTIMIZATION

SAVE COSTS AND OPTIMIZE PROCESSES THROUGH SUITABLE ANALYZES

With mechatronic value analysis, mechanical and plant engineering has a powerful tool at its disposal, that can be used not only for subsequent optimization but also for new developments. Both, the functions of the machine and the internal processes in the company are analyzed and their impact on costs and added value is assessed, and recommendations for action are drawn up.

Development of process and product

When developing new machines and products, machine and plant engineering is faced with the challenge that costs, market prices and margins must be set long before the exact design of a machine is known. Experience and estimation methods are then used to determine the costs.

However, these estimates can quickly become obsolete in the face of rapidly changing market requirements and developments across distributed locations. Also, deviations often only become apparent late in the process - in the worst case, only when the first orders are recalculated. There is then an urgent need for action to optimize the machine, which has already been constructed and perhaps has been sold several times, in terms of cost.



Recognize long term potential!

While potentials that can be realized in the short to medium term can often be identified in functional costs, mechatronic value analysis goes one step further. Only a holistic view makes it possible to identify long-term potential.

These can often be found in the company's processes and procedures. The realization of this potential requires a consistent, mechatronic structure and an adapted engineering process.

A corresponding toolchain supports this procedure and makes the costs in the entire development process transparent and understandable so that deviations can be quickly recognized in the future.



APPROACH

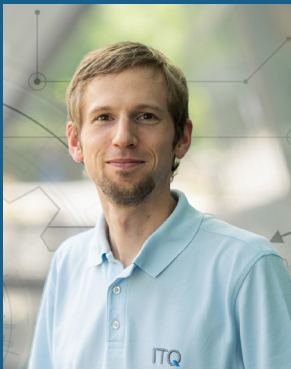
Sound recommendations

The value analysis provides tools and methods to leave the local perspective and enables a holistic view of the products and processes.

In any case, an interdisciplinary team is required to analyze the mechatronic functional structure and thus create the basis for the value analysis. Only when this structure exists, costs and sales prices

can be assigned and the value of individual functions determined and optimized. In addition to the functions and costs of the product, the processes in the company can also be analyzed.

This is where long-term measures come in that sustainably improve process costs, lead times and, process quality.



“The mechatronic value analysis is more than just the material and manufacturing costs. It gives us the opportunity to identify long-term potential.”

Marko Nagl
Software Engineer

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BENEFITS

Enable optimal processes

- Away from many local measures towards global optimization
- Holistic view of products and processes
- Savings in material costs of 10-25 % possible
 - Consistent, mechatronic structuring of the machine
 - Transparency in the entire development process
 - Integrated controlling
 - Minimization of friction losses
 - Integrated toolchain
- Questioning functions and structures that have grown over many years
- Strengthening interdisciplinary cooperation

SERVICES

We offer you!

- Structuring and processing existing data
- Cost analysis
- Develop alternative solutions
- Creation of a mechatronic functional structure
- Conducting and evaluating expert interviews
- Continuous tracking of measures and savings already achieved
- Analysis and optimization of development processes
- Development of mechatronic kits
- Conceptual design of a toolchain for consistent, mechatronic engineering
- Development of decision templates
- Solution-neutral definition of requirements
- Benchmarking, evaluation and selection of suppliers