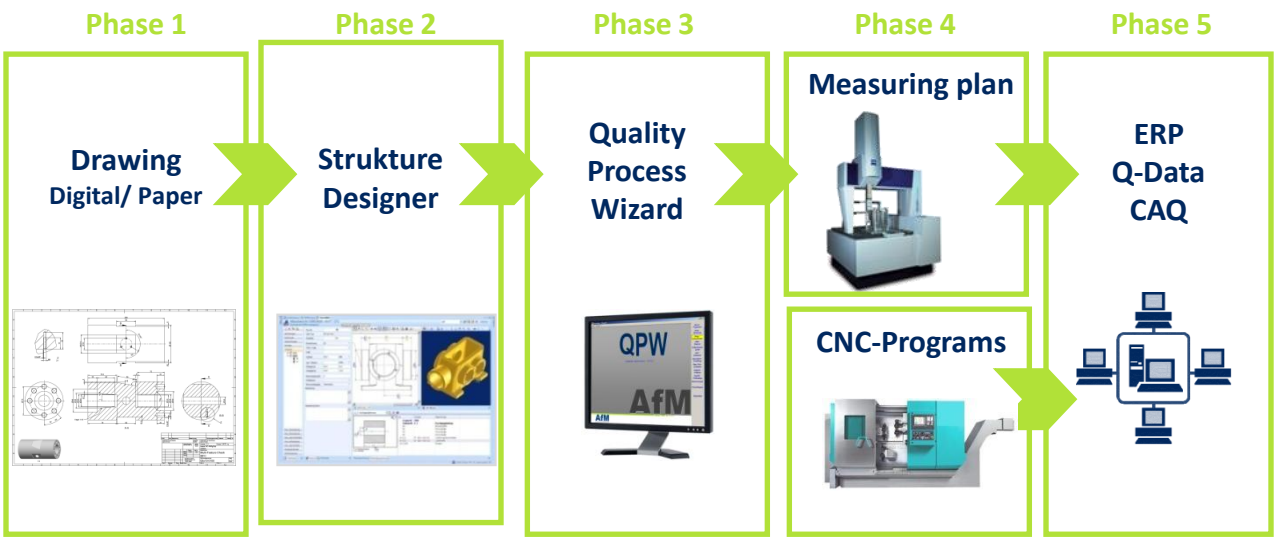
Drawing based process optimisation



Target group

Manufacturing companies, who have no in-house CAD development. The products are produced on the basis of CAD files or technical drawings.

Level of the technology

Manufacturing companies often receive product information from various sources:

- 2D drawings in digital or Paper form (IGES, PDF, DXF,etc.)
- 3D volume models in various formats (STEP, VDA, Native, etc.)

This data often has to be repeatably entered into various systems in various departments for subsequent processes. This is usually carried out manually and therefore complicated and prone to error. The designation of individual features is arrived at randomly and thereby not clear or continuous within other processes. Every design modification results in the repeating of this processes and increases the error rate.

Innovation

The Structure Designer from AfM simplifies this repeated complication significantly! Irrelevant to the format of the data present , all information will be gathered together in a single central location, given clear numbering and prepared for use in any subsequent processes in an optimal structured form. Modifications also occur centrally.

Cross process structured and complete data

Interrelated individual features, that are present on different drawing elevations are given a clear number and summarised as constructional elements. For this AfM offer a comprehensive library of general usable constructional elements grouped by their individual features. The complete information is obtained for subsequent processes through the central preparation of the data in Structure Designer.

Cross-disciplinary process optimisation

Interfaces for the continuous exchange of the prepared data

Through a standardised .xml interface the entire data will be transferred to any subsequent processes!

QPW for the preparation of data

The data will be read in to the QPW through existing interfaces. There it will be supplemented with further customer specific information for manufacture, measurement, Planning, purchasing and sales and then interlinked. Hereby are the subsequent processes simplified significantly. In QPW customer specific manufacturing methods can be defined, which are required for producing the constructional element (UDF). The necessary tools will be allocated to these manufacturing methods. The information as to which machines the relevant tools can be used on will be stored. Additional the tool-, machine-, operator- and general costs as well as the tool life for existing tools and production facilities can be stored.

Planning, purchasing and sales

The linking of the constructional elements (UDF) with this additional information permits an automatic planning process and the establishing of production costs at „the press of a button“. Offer can be prepared quickly and easily. For enquiries to supplies the realistic production costs already exist on the basis of the data prepared in QPW. Tooling costs can be arrived at from the production quantity.

Manufacturing and measuring technique

Customer specific strategies regarding manufacturing and measurement techniques can be stored in QPW. The QPW automatically creates a complete and ready to run CNC program for coordinate measurement devices and machine tools using the stored strategies For the creation of machining programs the manufacturing Know-How present in the existing machining cycles is used. This will be completed by QPW using the parameter values from the constructional elements (UDF).

Simplified communication

The clear designation (stamp number) created by Structure Designer for the constructional elements (UDF) remain constantly unchanged throughout all processes.

Hereby the internal and external communication and the structured exchange of data is dramatically simplified.

Comparable results

Machining and measuring results will be comparable,when the identical program is employed both internally and externally.

Continuous data exchange

Interfaces for the exchange of the created data to higher level ERP or CAQ systems exist.

Attractive prices models

Low acquisition costs (pay by use) as well as the user based billing for QPW reduces financial risks.

Your advantages

- Drawing based standardisation
- Individual features grouped in constructional elements
- .xml interfaces fro the export of the prepared data
- Continuous clear designation
- Production costs „at the press of a button“
- Automated planning process
- Automated CNC program generation
- Cost savings and error reduction

AfM Accuracy for Machines

AfM Technology GmbH
Gartenstraße 133
73430 Aalen
Germany

Phone +49 (0) 73 61 88 96 08-0
Fax +49 (0) 73 61 88 96 08-99

www.afm-tec.de
info@afm-tec.de