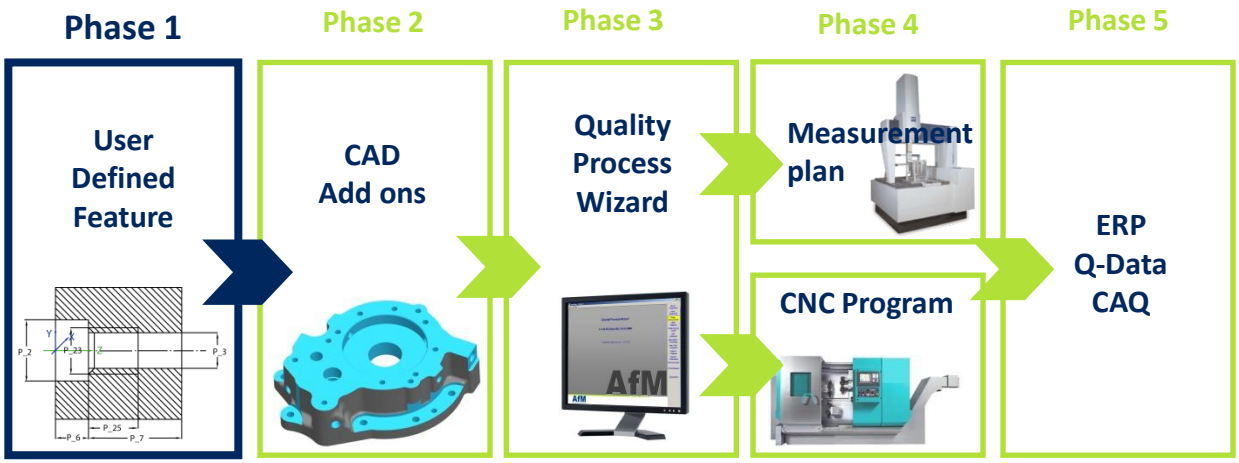
# UDF User Defined Feature

Automated creation of CNC programs based on UDF.




### Target groups

Companies that produce their own product on the basis of 3D CAD development, design and production. The majority of the finished products are defined as regular geometry elements (cylinder, planes, tapers, etc.).

### Level of the technology

In the CAD programs the possibility exists to construct functional geometric groups, which are comprised of primitive constructional elements using User Defined Features (UDF).

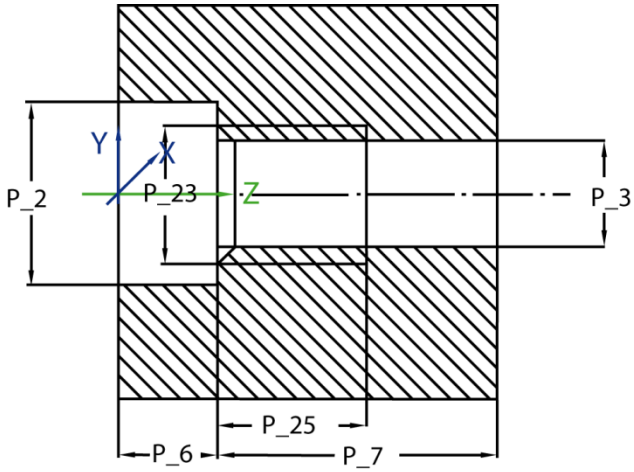
Geometry groups that are repeatable featured in various dimensions within the workpiece can be constructed quickly and with a standardised form with UDFs.

### Innovation

The possibility to pool interrelated features through UDFs in single general group, is used in CAD and for subsequent processes.

The standardisation of general usable „Basis“ UDFs is achieved through the clear type designation. These are made available as a library. The UDFs content is determined by defined parameters. Similar features have the same parameters in all UDFs (for example P6 = 1. bore depth). Customer specific adjustment of UDFs is possible.

The UDFs contain all the required information of manufacturing and measurement (for example surface finish values, fit, form and position, etc.).




## Type designation UDF: U_50

Constuctional parameter

Constuctional element U_50:

P_2 = 1.Bore diameter
P_6 = 1.Bore depth
P_3 = 2.Bore diameter
P_7 = 2.Bore depth
P_23 = Thread diameter
P_25 =Thread depth

The designer chooses the required standard element from their UDF library and enters the desired values in to the stored parameters. Hereby the UDF “Geometry groups“ are placed at the given position in the CAD model with all the features stored within the UDF. Existing UDFs can be modified to meet any customer specific requirements. The library can be expanded to hold any number of customer specific UDFs. The basic library also contains special UDFs for the definition of coordinate systems, as well as so called „Dummy“ UDFs that serve for the transferral of information of constructional elements that can not be defined over UDFs as regular geometry elements (for example free form contours).

The clear designation of UDF types and their parameters is the basis for structured data processing and error free communication.

### Your advantages

- Grouping of data with UDFs
- Continuous and clear designations already in CAD
- Expansion through additional information for subsequent processes
- Standardised system with UDFs replaces drawings
- Standardisation is the basis for data exchange and similar processes

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