

Data transfer

Once the geometric data of a workpiece are created, they can be used to generate technical drawings with dimensioning, and instructions concerning material and manufacturing. They also form the basis for NC-programming. The transfer of geometric data from a CAD-system to a CAM-program is usually accomplished with neutral data exchange formats, like DXF or IGES. CAD/CAM link-ups do very rarely function straight away. They require purposeful testing of the various adjustment options of the export and import filters in both programs.

In order to successfully transfer the geometric data of the workpiece to a CAM-system, various things need to be considered already at the time the workpiece is generated in CAD.



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All geometric data need to be geometrically perfect. Even the smallest deviation of transitions, e.g. between a straight line and a circle, means that the straight line is not accepted as a tangent. Geometric parts that exist twice, or geometric leftovers that were not trimmed or deleted, also cause problems generating the NC-contour. Lines used to help with constructing or dimensioning, and hatchings are considered to be geometric elements by the CAM-system, and should therefore not be passed on in the first place. Working consequently with different levels in the CAD-system not only facilitates the data transfer, but also the generation of the NC-process in the CAM-program.

