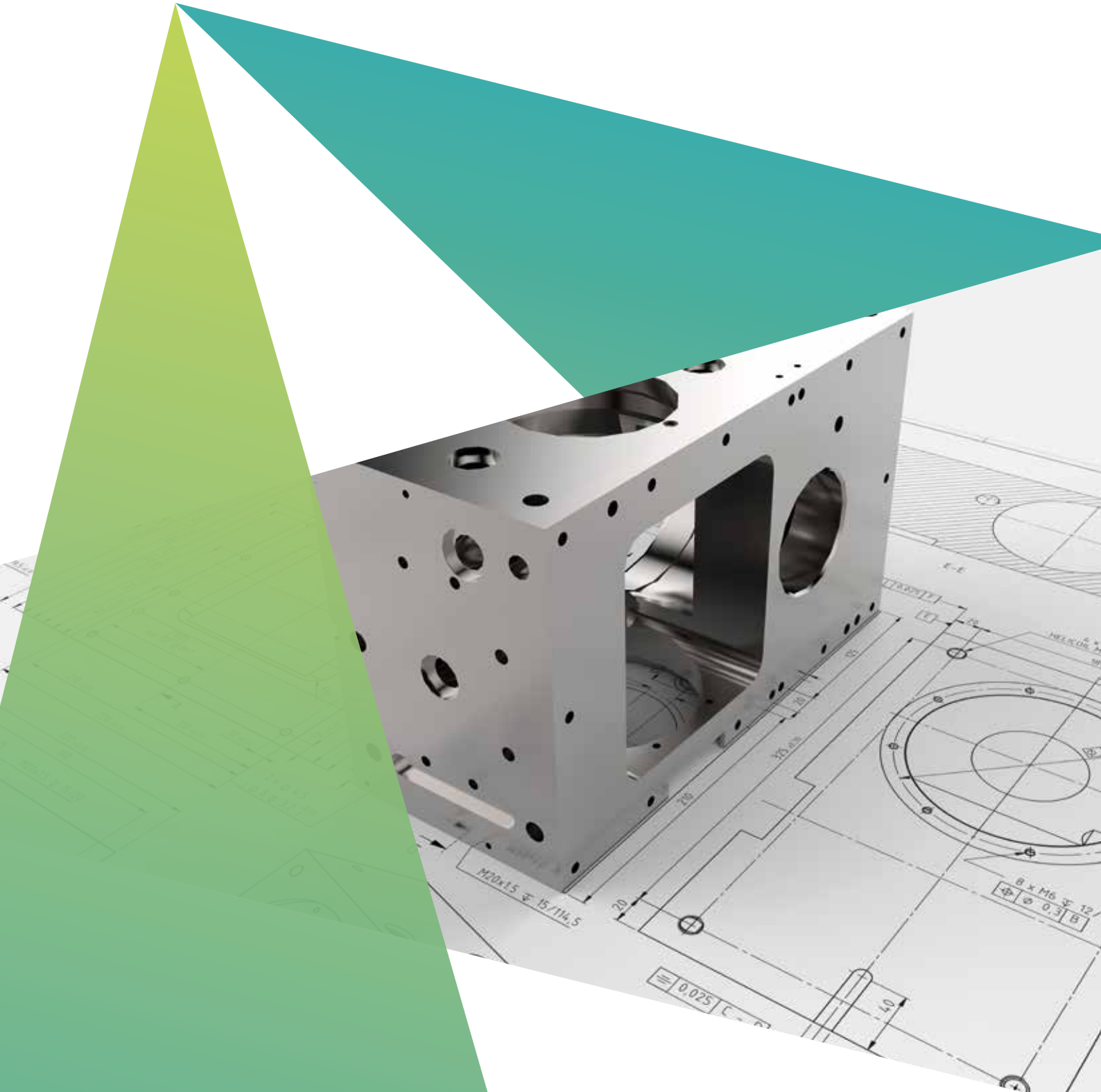
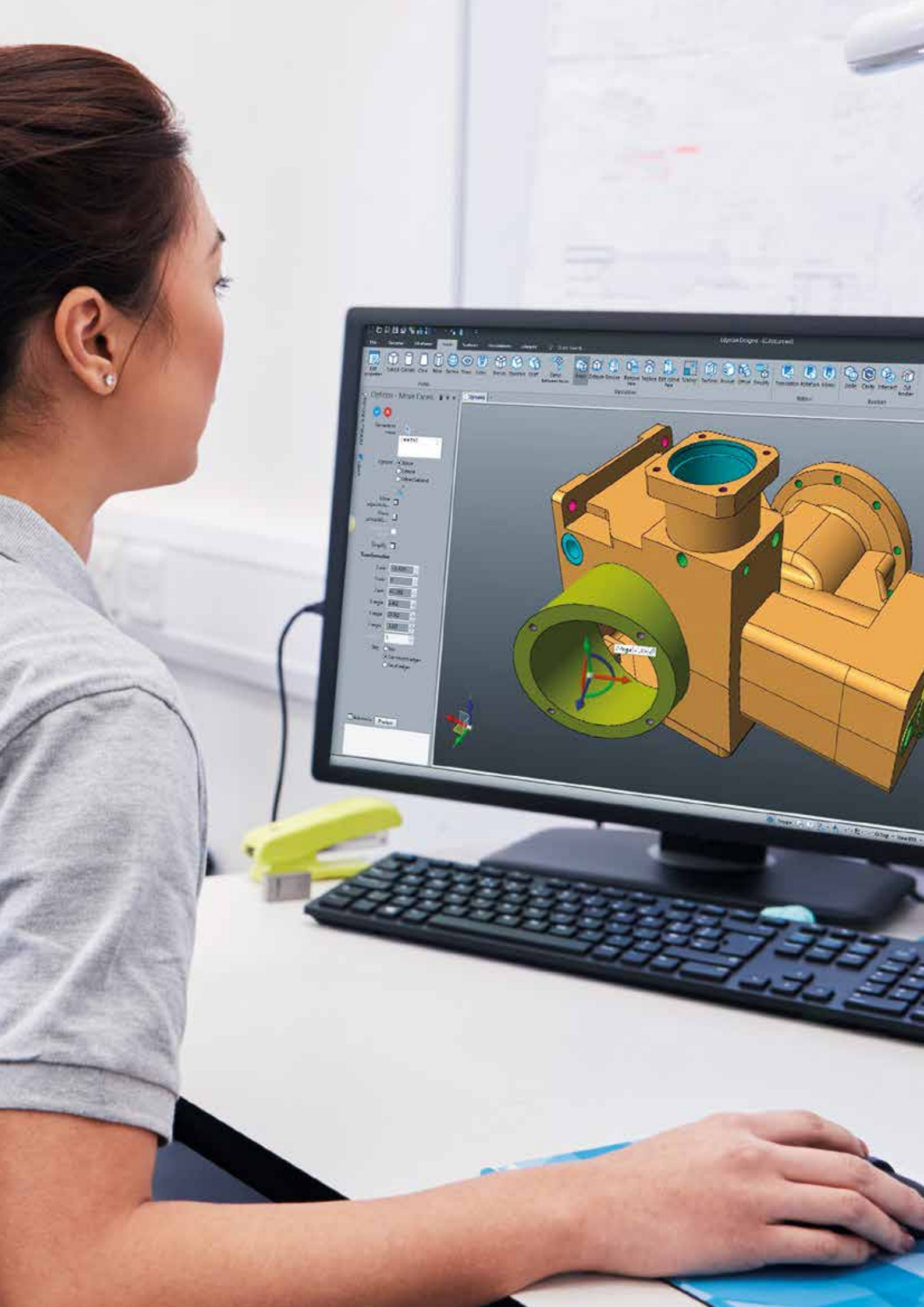
HEXAGON

Brochure

EDGECAM Designer

Filling the gap between CAD and CAM





Direct modelling

Direct modelling frees the user from the constraints of a traditional modelling system. Rather than modifying a lengthy series of parameters to make a design change, direct modelling allows the user to push, pull and drag the geometry to obtain their desired shape. These changes can be completely freeform or driven by numeric increments and measurements taken from existing geometry. Knowledge of how the original model was constructed is no longer necessary and design changes are not constrained to the original methods of creation. Direct modelling gives the user complete freedom of construction whether creating a new component or modifying an existing design created in any of the myriad of CAD formats that Designer supports.

Ease of use

Simple menu and icon commands with context sensitive online help make it quick and easy to start using EDGECAM Designer. Dynamic rotation, zoom and pan, together with programmable function keys and mouse buttons help speed up the operation of the software. Unlimited undo and redo operations with user definable bookmarks enable the designer to move backwards and forwards throughout the design process. Multi-layer and multi-origin control with user definable colour pallets and line styles makes it easy to review, create and work with very complex designs. Lightning fast rendering, transparency control and dynamic sectioning make it easy to visualise CAD files and large assemblies.

Model healing

Small gaps between surfaces on imported models can be automatically healed preventing the time consuming process of rebuilding very small surface patches. Where surfaces are corrupt or missing EDGECAM Designer will automatically create the edge curve geometry making it easy to rebuild new faces using the comprehensive surfacing suite. Automation makes the time consuming process of model cleanup much faster and simpler. Closing a surface model to produce a solid body eliminates construction problems later in the design process and immediately brings the benefits of solid modelling to the user. The ability to seamlessly switch between solid and surface technology provides unlimited freedom, ensuring the user can work with difficult CAD data.

Feature Suppression

Many times the incoming CAD data includes geometric features that are either unnecessary for CAM, or will not be created by the machining process itself. Post-machining processes such as laser engraving, electrode marking and other techniques are often represented on the model. While this was important for the CAD design and will ultimately reside in the final component, such markings often impede the job of the CAM programmer. With EDGECAM Designer, removing these markings and even saving them for later operations is just a mouse click away.

Model Simplification

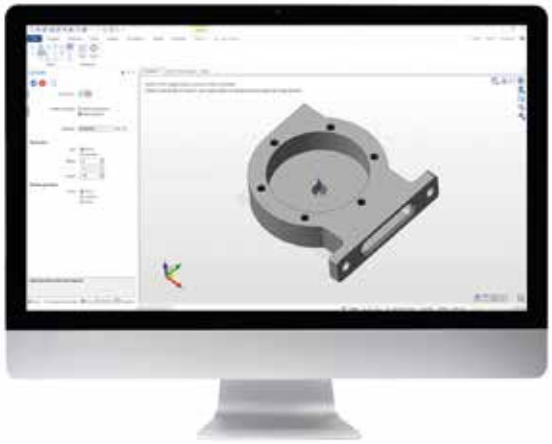
Along with suppressing certain features of the model not used for machining, the user may wish to simplify the geometry during various stages of the machining process. Removing portions of the model, such as intersecting features, makes the machining process faster and provides better results. The ability to modify the model without being held to the constraints of a previous construction method or feature tree is incredibly powerful.

Creating model variations for each stage of the machining process becomes simple and your machining results become both fast and of higher quality.

Powerful Sketching

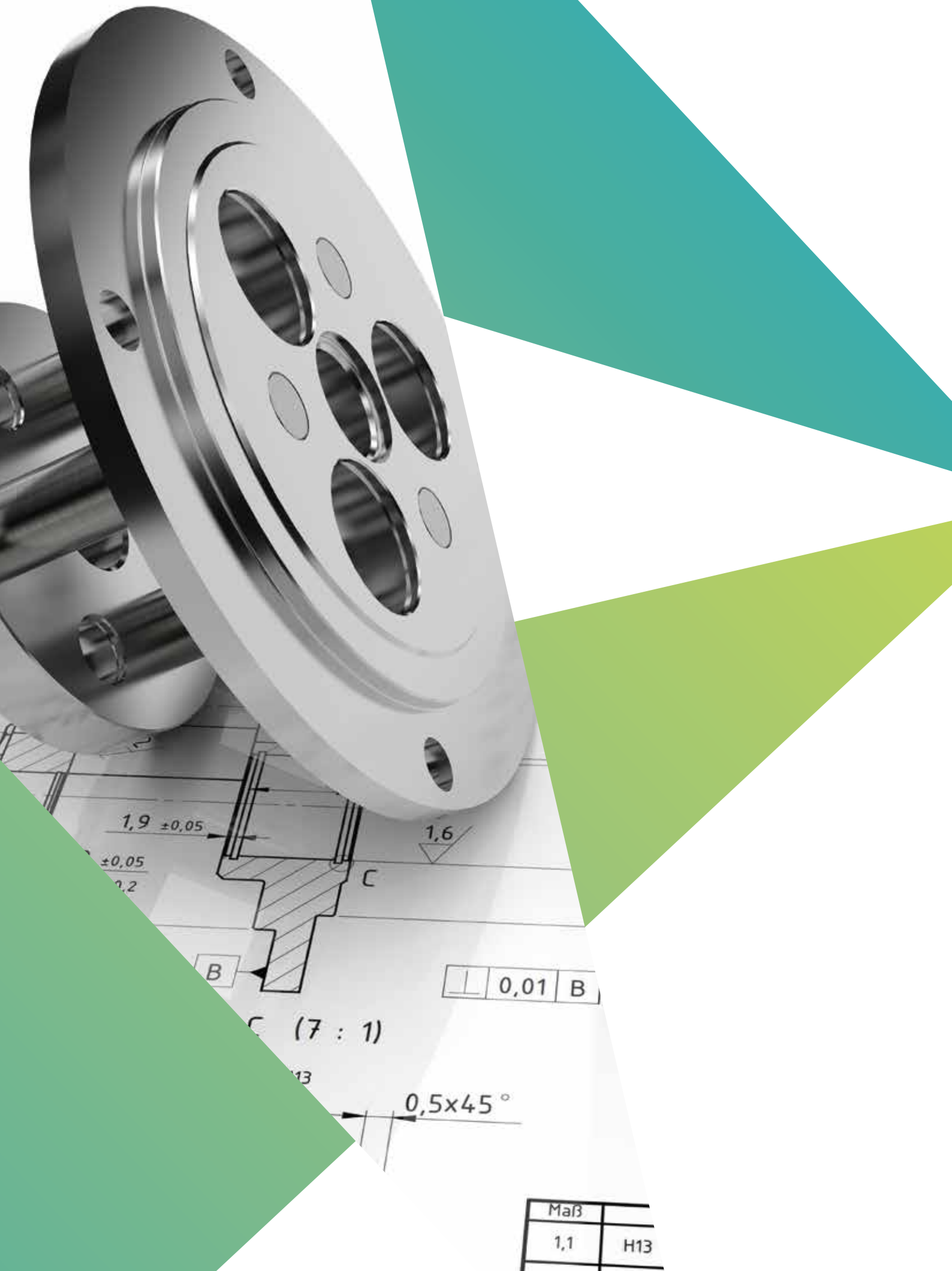
EDGECAM Designers sketch capabilities allows for the creation of two dimensional shapes using free form input. While the user can rely upon the traditional methods of coordinate based input, free form sketching intelligently interacts with surrounding geometry. This ability to intuitively create implied constraints with other geometry expedites the sketch creation process while maintaining the maximum flexibility for future changes.

2D drawing creation



Powerful solid functions

EDGECAM Designer fills the gap between CAD and CAM. From fixture design, to part repair & modification, EDGECAM Designer is the ultimate CAD solution for taking geometry through to manufacture."


1,9 ±0,05
±0,05
1,6
C
B
0,01 B
(7 : 1)
0,5x45°
Maß
1,1
H13

Geometry for Machining

EDGECAM Designer provides a host of geometry creation techniques that are critical to the machinist for model preparation. Hole capping is a great example of the simple and easy to use features of EDGECAM Designer that help to ensure that surface machining provides the best possible results. This feature can be used to cap anything from a simple drilled hole to a complex open cavity with just a few clicks of the mouse. An extensive range of curve creation routines vastly improves boundary creation and simple but powerful surface creation techniques provide the machinist with more power than ever before.

Working with 2D Data

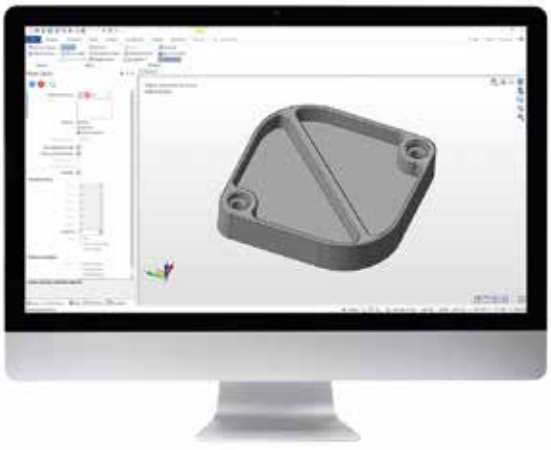
EDGECAM Designer supports the import of DXF and DWG files allowing the user to transform existing 2D data into a 3D model by simply reusing the imported profiles from the original data. Imported data automatically creates sketch profile regions making the transformation from 2D to 3D easier than ever.

Extensive Range of CAD Interfaces

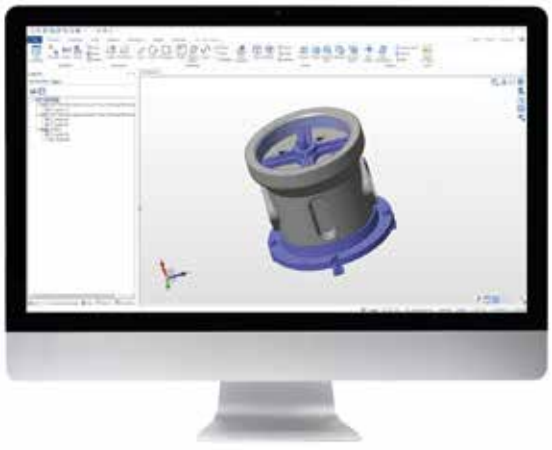
EDGECAM Designer imports data from a wide variety of exchange formats including Parasolid, IGES, STEP, ACIS, DXF, DWG, STL and VDA files as well as native data from the following CAD systems:

- Catia V4 & V5
- Pro/ENGINEER & PTC Creo
- Autodesk Inventor
- Siemens NX
- SolidWorks
- Solid Edge

The extensive range of translators ensures that users can work with data from almost any supplier. Very large files can be handled with ease and companies working with complex designs will benefit from the simplicity with which their customer's CAD data can be manipulated.



EDGECAM part in Designer interface



EDGECAM Designer mill turn part in clamping device

HEXAGON

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Manufacturing Intelligence division provides solutions that utilise data from design and engineering, production and metrology to make manufacturing smarter. For more information, visit hexagonmi.com.

Learn more about Hexagon (Nasdaq Stockholm: HEXA B) at hexagon.com and follow us @HexagonAB.

Printed in Gloucester. January 2020