

# Magics RapidFit

## The automated solution for fast and efficient fixture design!

Quickly design cost-efficient fixtures to secure large parts with complex shapes! Firmly positioned, these parts can then easily be checked, measured, machined, transported, glued or assembled. Speed and quality are two of the biggest concerns in rapid prototyping. You can achieve both by creating and using Magics RapidFit-based fixture elements. It's the ideal solution for the design and set-up of a support system for your parts.

### Creation of easy-to-use and cost-effective fixtures for

#### Visual control of prototypes & pre-series

- ▶ Visual control is the first step to obtaining a qualitative impression of the prototype's accuracy.
- ▶ Easy to use reference gauge checks the overall quality of every part of the pre-series, especially on critical points chosen during the fixture design.

#### Quality control

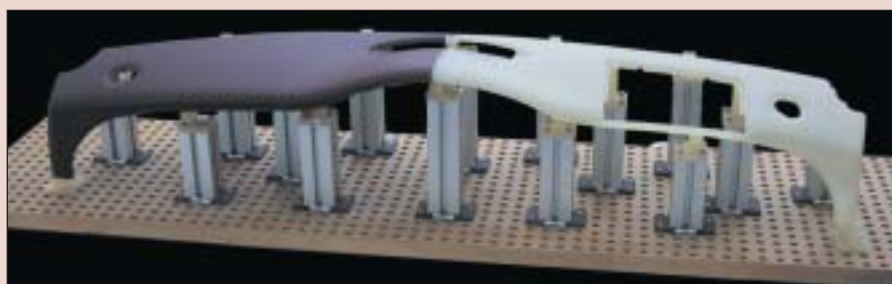
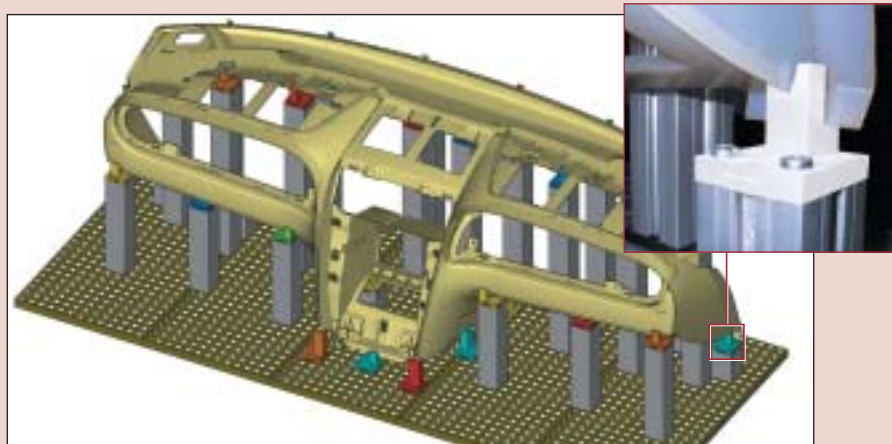
- ▶ Boost the accuracy of measurements, especially in case of form instability, with a support structure for a part based on the designed mounting points and in the preferred orientation (e.g. CMM fixtures).
- ▶ Easily check fixed reference points (for example, fixing features).

#### Geometric stability & conformity

- ▶ Accurately glue and/or assemble parts by using the fixtures as reference points or lines.
- ▶ Eliminate part warping by conformation of the part.
- ▶ Avoid damage or deformations of fragile, large components during transport.

#### Operations on complex parts

- ▶ Machining operations like drilling holes.



- ▶ Fitting inserts and electronics (such as printed circuit boards, buttons, displays, etc.).
- ▶ Final processing of castings.

#### Professional part presentations or demonstrations

- ▶ Display the parts in the desired orientation. For example: present automotive parts as they will be mounted on the vehicle.

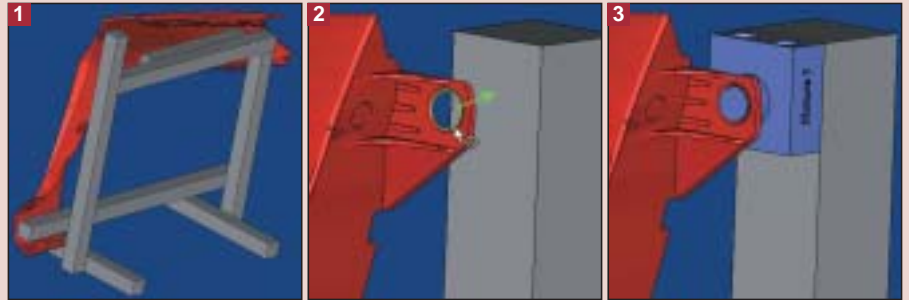


*Magics RapidFit fixtures can also be used to ease machining operations.*

## Fast and unique solution for fixture design

### ▶ Automated fixture design based on your customised settings in only a few steps:

1. Create the support system with base plates and/or beams.
2. Indicate the contact points where fixture elements are needed and define the type of contact (for example, orientation of fixture base and contact; shape of fixture base).
3. Let Magics RapidFit create the fixture element, precisely fitting the contact to the part automatically.



### ▶ Individual fixture element geometry:

The fixtures have a unique and well-defined geometry. They will fit to the part only on the specific spots you've indicated.

### ▶ Labelling for easy identification and positioning:

Fixtures are automatically labelled with the assembly position and the parts' name(s). This not only allows speedy set-up of the system, but also enables easy identification, storage and reuse if required.

### ▶ Easy and quick fit with the part:

Thanks to a straightforward assembly method, the system is quickly ready for use. Fixture elements can be mounted easily on a RapidFit base plate or on beams of common, modular fixturing systems.

### ▶ Compatible with any modular fixturing system:

With the software, you can easily design fixtures that are compatible with any types of beam and plate based system.



*In combination with an ALUFIX system*

### ▶ Time- and cost-effective production:

Once created, you can easily produce fixtures with various production techniques. Because RP technologies are time-efficient and cost-effective, these provide the ideal solution for manufacturing fixture elements. The elements can be built simultaneously with the part, which further increases your time savings.

### ▶ Document generation to guide the fixture assembly:

Magics RapidFit enables you to generate reports, a great help to set up the actual system quickly. It takes only a mouse click to export the set-up on the screen into a nice, clear document, ready for printing.



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Software