



Seeing beyond

ZEISS Metrology Expert Tip



**The Most Important Rule in X-Ray
Measurement for Fixturing.**

Which Material is Best Suited for Component Fixturing

When measuring and inspecting components with industrial ZEISS X-ray systems, there is an important rule for clamping fixtures that must be observed.



In principle, the material with the lowest density should be selected for fixturing a component.

It is not possible to generalize which fixturing material should be selected for a specific product material. In addition to the density, the choice of clamping material is also influenced by the weight and size of the product and the desired scanning result. It is important that the fixturing device is stable and does not move during the scan. The correct choice of fixturing material has a significant influence on the quality and duration of the scan.

How to Make the Right Choice of Fixturing Material

A foam holder can be used for small products (image 1). However, if it is a large casting part, foam is not suitable as it will be deformed. In this case, a more solid fixture is needed (image 2). If there were a battery with a plastic housing on the fixture shown, the difference in density between the battery housing and the fixture might not be small enough. In this case, we recommend clamping polystyrene between the part and the fixture. However, if only the inside of the battery and not the housing were considered, the device would be suitable.



Image 1: ZEISS OmniFix CT foam



Image 2: ZEISS OmniFix CT flex

**ZEISS Original Accessories
are available in the
ZEISS Metrology Shop.**

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