



# acoustic microscopy

## Plastic components

Plastic components with complex shapes are frequently produced by injection moulding. Defects and faults, such as material inhomogeneities, voids etc, contrast well under the acoustic microscope and can therefore be easily detected.



**Fig. a:** Apart from a void ( air inclusion), the tip of a gear wheel also exhibits material inhomogeneities (consolidations),

**Frequency:** 1,3 GHz

**Image width:** 500  $\mu\text{m}$



**Fig. b:** On this part of the gear wheel scratches can be seen which were probably caused during aftertreatment of the surface.

**Frequency:** 1,3 GHz

**Image width:** 2 mm