

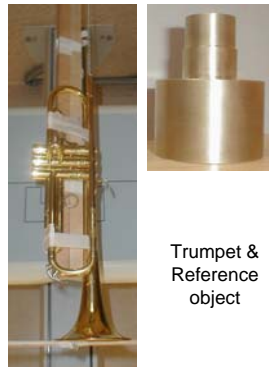
# Radiological measurement of trumpets

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Flat-Panel-Detector (FD)

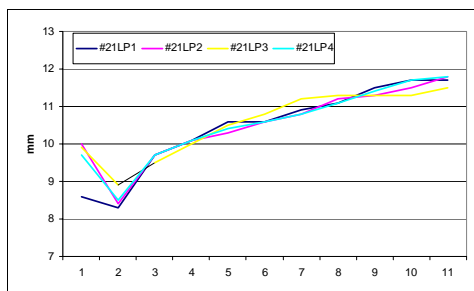
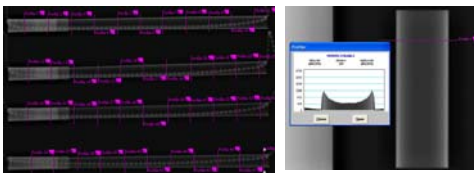


Trumpet & Reference object

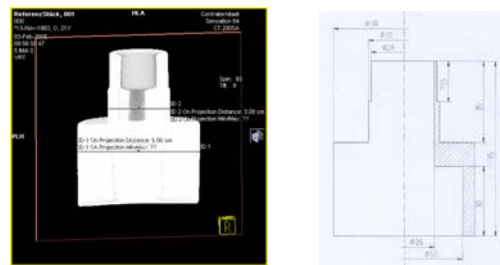
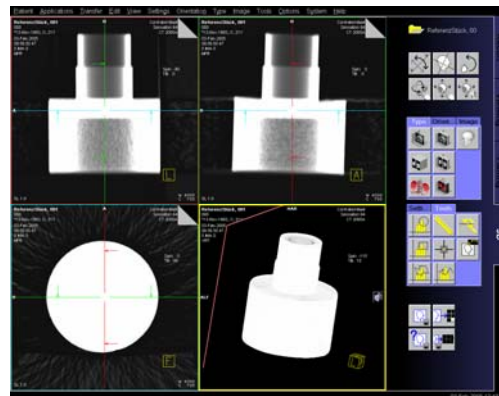


Computer Tomography (CT)

## 2D Measurement of trumpet leadpipes



## 3-D-picture of reference object



**Measurement of the leadpipes with the flat panel detector (FD) was possible with a resolution of 0.1 mm.** That's about 10% of the diameter and useful information. Other parts of trumpets (bends) could not be measured. To use FD as a standard method, image data processing must be improved and automated. (Zach)

**Measurements of the reference object by computer assisted tomography (CT) revealed difficulties with the interior positioning of the object and with different wall thicknesses. CT - Measurements with an accuracy of 1 mm is possible!** This method is therefore only useful for larger diameters. (Rößler)