

## Vibro-correlation

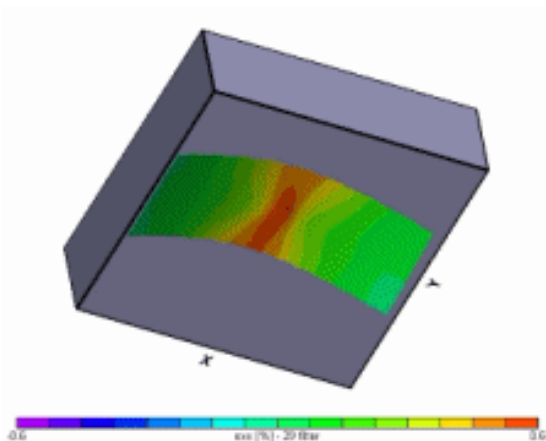
The **isi-Vibro-correlation system** combines the versatility of image correlation with high speed videostroboscopy. It's field of operation is 3D vibration and strain measurement. This permits simultaneous measurement of all three displacement axes on the entire surface of the sample.



Obtained results lead to the automatic calculation of strain distribution regarding the sample surface.

The Analysis of 3D deformation and strain is even possible when dealing with small or non visible movements. The process works on non-planar surfaces and can be operated in broad daylight.

The example on the left side shows strain on the x-axis of a vibrating surface which is connected midway and point-shaped to a shaker



Measured strain is scaled (red = traction, blue = pressure) and overlaid (deformation =  $u, v, w$ ) by surface vibration.

Measurements were carried out with samples/screen ranges of  $> 5m$  up to  $< 5mm$ .