X-RAY TOMOGRAPHIE OF STEEL FIBRE REINFORCED SHOTCRETE (SFRS)

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The composit material steel fibre reinforced shotcrete is applied widely in the geotechnics. The knowledge about the orientation of the steel fibres in the concrete is of decisive importance to model the mechanical behaviour.

The sampling and the X-ray tomography at the ÖGI up to the statistical evaluation of the steel fibre orientation is illustrated.

Orientation of the Steel Fibres, Mean value (87°) and Confidence interval

Schmidt projection with density distribution of steel fibre poles; low density at 50° and 230° (Stereo32)