A novel artefact for calibration of the height in 3D microscopy is presented. The artefact comprises three steps having a common vertical axis, which allows z-coordinate calibration at different magnifications without requiring repositioning. The artefact is suitable for transferring traceability to 3D techniques at the micrometer and nanometer scale, e.g. 3D SEM, confocal microscopes etc. Two different series of samples were fabricated using EDM with three steps of $2\pm5\pm7$μm, and $20\pm50\pm70$μm, respectively, from a 3mm diameter carbide wire. The artefact steps were calibrated on a stylus instrument according to ISO 5436 and measured on 3D microscopes.

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