



Fig.1 - Horizontal data-plucometro, usually used to measure dimensions according to legislation EN ISO 10545-2.



Fig.2 - Coordinate measuring machine (CMM)




Fig.3 - Portable 3D measuring arm.

Max. difference for each dimension
Tests carried out for each sample on three lots of 10 tiles

	Δ (PL-CMM)	Δ (PL-Arm)	Δ (CMM-Arm)
Length and width (%)	0.05	0.05	-0.05
Straightness of sides (%)	0.0	0.0	0.1
Rectangularity (%)	-0.3	-0.2	0.1
Centre curvature (%)	0.0	0.0	0.0
Edge curvature (%)	0.1	0.1	-0.1
Warpage (%)	-0.1	-0.1	0.0

Tab.1 - Maximum differences obtained with the three techniques employed – plucometro (PL), CMM and measuring arm. Dimensions determined according to EN ISO 10545-2 “Determination of dimensions and surface quality”.

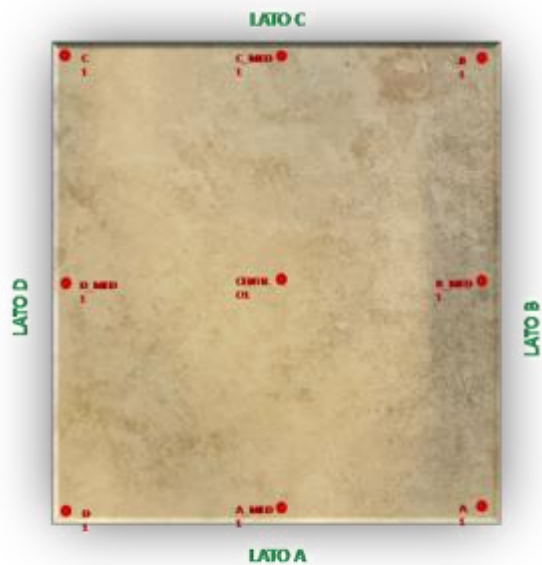


Calibration Tile
300x300 mm

Differences obtained on a calibration tile

	Δ (PL-CMM)	Δ (PL-Arm)	Δ (CMM-Arm)
All dimensions Absolute values (mm)	0.0	0.0	0.0

Tab.2 - Differences obtained with the three techniques on a calibration tile.



- Total Points: 21
- Points on the side at 5 mm from the edge
- Points on the surface at 10mm from the edge

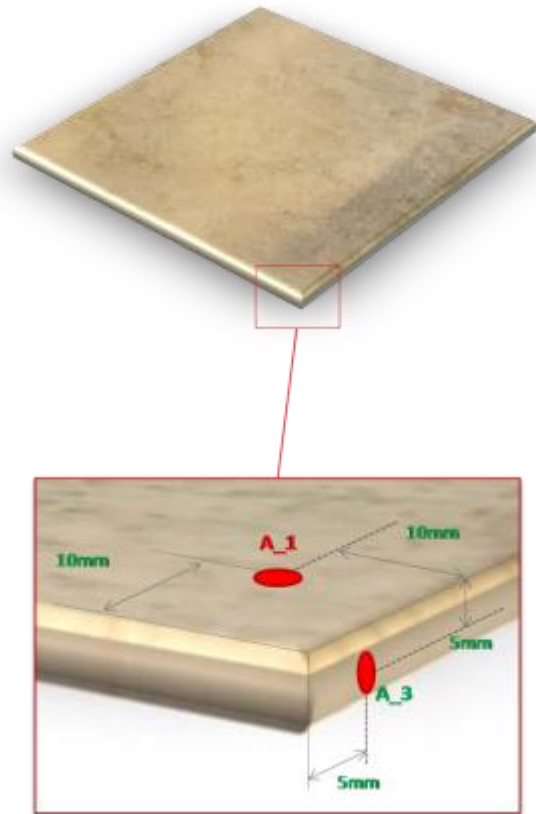


Fig.4 - Picture of the points considered when measuring out dimensions according to EN ISO 10545-2 regulation.