

Quality control method of 3D printing using selective laser sintering technology involves applying a layer of powder to a platform, forming a voxel model of that layer, and determining its fractal dimension. Simultaneous angled imaging of the powder layer is performed using stereo cameras, from which additional information about the internal microstructure of the powder layer is obtained by dividing it into sublayers, calculating the fractal dimension and the degree of pore clustering to identify hidden inhomogeneities, after which a piezo-vibrational influence with adjustable characteristics is applied to the powder layer, which causes a change in the spatial arrangement of the powder particles, and the powder packing is adjusted by leveling and compacting it in accordance with the analysis results. In addition to this, a powder layer with stabilized parameters is formed prior to the sintering stage.