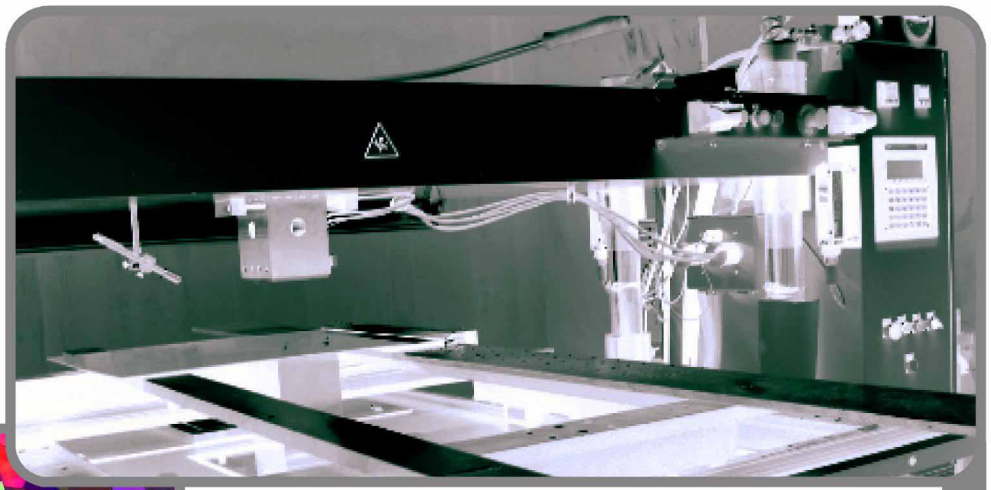
Recombination



High precision duplication and assembling of surface reliefs

3D AG possesses special know-how and owns State-of-the-Art equipments for the step-and-repeat replication (assembling) of various types of surface reliefs, such as holograms, special diffractive gratings, nanostructures and micro-structures, into suitable polymer materials.

The Recombination is a powerful process to duplicate and assemble micro- and nanostructures on a polymer surface, creating the base for a subsequent metallisation (electroforming) and mass replication (embossing, casting).

Recombination layout types
Wallpaper or as "patches / stripes"

Suitable surface reliefs
From submicron gratings up to approx. 50 micrometers depth

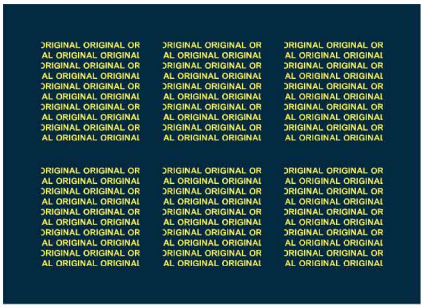
Active area
Maximum active area to be recombined is 914,4 mm x 762,0 mm

Single cell size
From 5 mm x 5 mm up to 152,4 mm x 152,4 mm

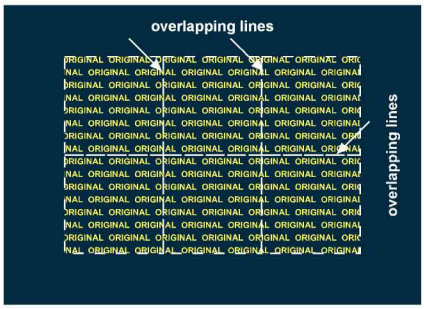
Single cell shapes
Various shapes possible, e.g. square, rounded, triangular, etc.

Boundary properties
Between each recombined single cell area, it is possible to create a small overlap or a gap, depending on the requirements of the application:

Drawing: Recombinated images for patch applications (e.g. labels).



Drawing: Wallpaper - type recombi- nated images with hidden overlapping lines.



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