

IMAGE PROCESSING SYSTEM
for TEXTILE- and CARPET CUTTING MACHINES

The dig**MAR** - visitex**LOC** – Image Processing System was specially developed for applications in the domain of textile cuttings. visitex**LOC** scans textile materials and automatically calculates cutting coordinates. Afterwards the coordinates are transferred to the cutting machine for further processing.



*Thanks to visitex**LOC** time-consuming manual cutting belongs to the past.*

For several years the technology is successfully used on carpet cutting machines of different manufacturers in Europe and the USA.

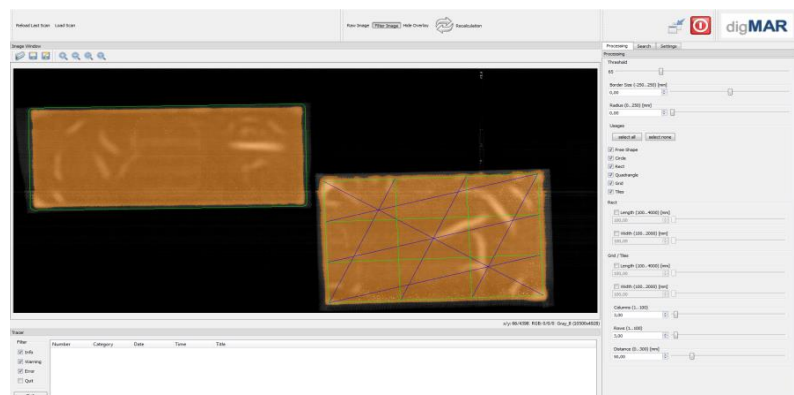
visitex**LOC** can be versatily used in different textile domains and will be further developed continuously by the needs of customers.

visitex**LOC** analysis-software with its intuitive user interface allows easy adjustment of parameters like:

- border-size
- corner-rounding
- tile- and grid- size

visitex**LOC** has predefined calculating modes like:

- free-forms
- quadrangles and rectangles
- circles
- tiles and grits



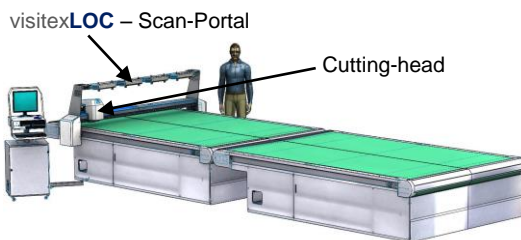
*Analysis-software showing cutting coordinates calculated from 3D scan:
Left-hand side: rectangle with border size of 25mm and rounded corners
Right-hand side: calculation of tiles out of rectangular blank*

visitexLOC is available in different configurations:

- The basic configuration of visitexLOC evaluates monochrome images.
- With the newly developed visitexLOC-C for color, it is now possible to evaluate color images.
- visitexLOC-3D uses a built in laser measurement system to generate 3D scans. So it is possible to calculate cutting coordinates based on height characteristics of the material.
- visitexLOC-C3D combines 3D measuring and color evaluation, naturally both technologies can be used simultaneously.

There are two ways to use visitexLOC on cutting machines:

On the **static** system the material is transported continuously under the visitexLOC – Scan-Portal, whilst the required image is built up.



For higher accuracy requirements, the visitexLOC – Scan-Portal can be mounted on the bridge of the cutter, where the vacuumed material can be individually scanned.

The different materials can be either manually mounted by hand or fed directly from roll.

Cutting machine with *moving* visitexLOC Scan-Portal



Static visitexLOC Scan-Portal

Technical Specifications

- Standard-Scan width: 2100mm (optionally 4100 mm available on request)
- Scanning speed up to 400 mm/sec.
- image resolutions from approx. 0.42 mm/pixel
- Up to 16 cameras incl. objective and filter
- Integrated lighting and shading of the scan areas
- Optional specified with color cameras
- Optional 3D measurement through Laser.
- Optimized analysis-software (Multi-Core Architecture)

For further information of visitexLOC, and for further products from digMAR, please contact us by telephone or email. We welcome discussions for individual solutions based on image recognition and look forward speaking to you.