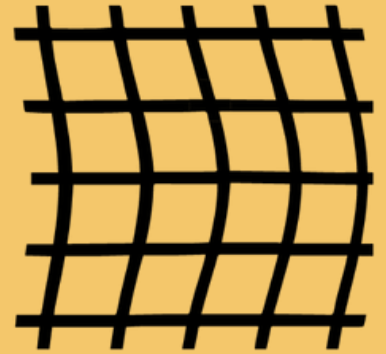


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Vision Empowering Automation



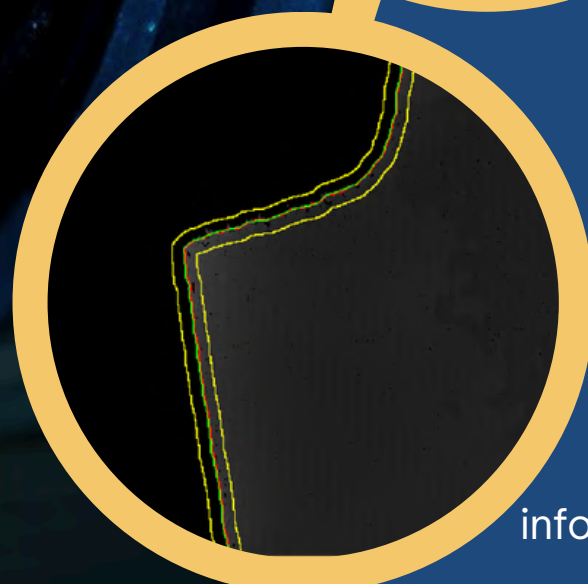
**Bow & Skew
&
Match Cutting**



Contour Cutting



Quality Control



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High-Speed Scanning

- **Fast Scanning:** Scan the entire cut table in a single pass at speeds of up to 100 m/min.
- **Full-Width Scan Bridge:** Ensures comprehensive and accurate scanning across the entire fabric width.

Bow and Skew Processing

- **Automatic Adjustments:** Automatically adjust bow and skew to align all repeated fabrics, including “plain but not plain” patterns, through precise grain line detection.
- **Advanced Fabric Handling:** Effortlessly process small repeats and manage fabric inconsistencies with varying repeat changes through adaptable modes
- **Manual Control:** Manually adjust bow and skew using a quick, intuitive interface that adheres to pattern constraints and provides visual feedback.

Fabric Database

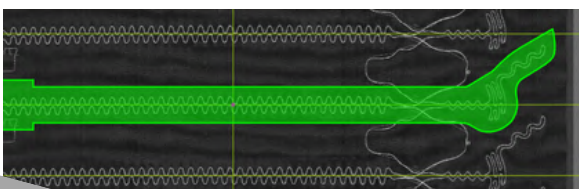
- **Streamlined Operations:** Build your fabric database once and effortlessly utilize it for all future operations, saving time and ensuring consistency.
- **Automatic Detection:** Automatically detect and correct repeat variations across multiple rolls of the same design.

Cutting-Edge Algorithms

- **Integrated Nest Engine:** The unmatched Nest Engine is seamlessly integrated into the comprehensive software suite.
- **Advanced Algorithms:** Utilize our advanced algorithms to calculate fabric distortion and repeat variations, ensuring precise and reliable results.

Ease of Use

- **User-Friendly Interface:** Streamline operations with an intuitive design that caters to all skill levels.
- **Visual Feedback:** Get clear visual cues throughout the application, ensuring precision and confidence at every step.
- **Quick Training:** Accelerate learning, reducing downtime and boosting productivity.



Unmatched Flexibility

- **Renest on Cutter:** Optimize piece layouts in real-time on the cutter for improved efficiency.
- **Manual Adjustments:** Move pieces manually while maintaining layout constraints.
- **Roll Continuity:** Transition to a new fabric roll without interruptions.

Enhanced Workflow Integration

- **CAD Compatibility:** Integrate with your existing CAD production environment.
- **Pattern Linking Optimization:** Optimize pattern linking to facilitate easier flow matching and improved precision.
- **System Integrity:** Experience seamless integration with other systems, including the import of nesting constraints like Motiv Links and Piece Links.

Cost Efficiency

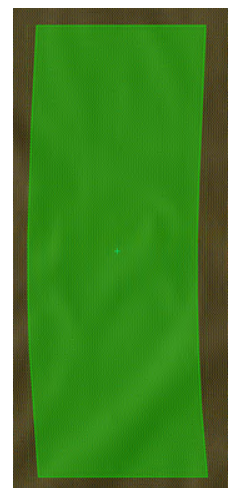
- **Low Operating Costs:** Benefit from optional maintenance programs, offered at a low price, with no compulsory subscriptions.
- **No Hidden Fees:** Retain control over your files and nest markers on-site, with zero encryption, no pay-per-nest charges, and no hidden fees.

Integrated Offload Software

- **Efficiently bundle pieces** with our integrated offload software option, streamlining post-cut processes.

Seamless System Compatibility

- Our solution ensures full compatibility with existing cutting systems, supporting the import of nesting constraints such as motif links and piece links. This allows for a smooth transition and integration without workflow disruptions.



BOW & SKEW SOFTWARE SUITE

Revolutionize Furniture Cutting with Our Advanced Vision System

Our cutting-edge scan system and software for cutters in the furniture industry stand out by delivering exceptional performance, operator-friendly features, and unbeatable efficiency. Here's how we bring unparalleled value to your production:



dFabric

- Create a comprehensive Fabric Database with just one digital measurement.
- Automatically corrects variations such as shrinkage, ensuring accuracy and consistency.



dMark

- Facilitates the import of pieces and the definition of position-, link- and other nesting-constraints.
- Ensures proper alignment and connectivity of nested patterns, optimizing cutting accuracy.



dNest

- Connects to the world's most powerful nesting engine.
- Allows nesting of pieces in the CAD room, in real-time on the cutter (adapting automatically to repeat changes), or on a dedicated nest server.



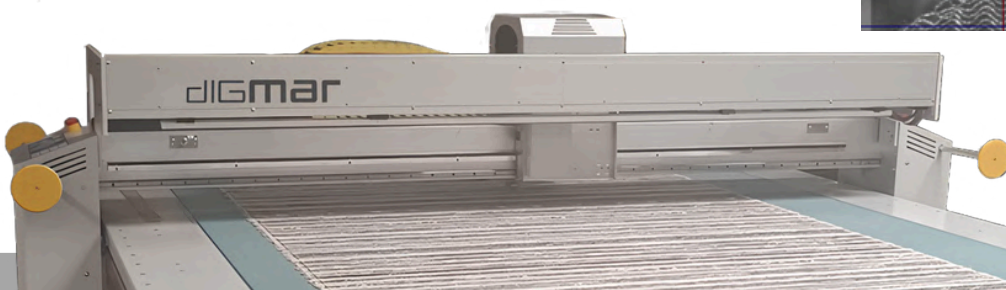
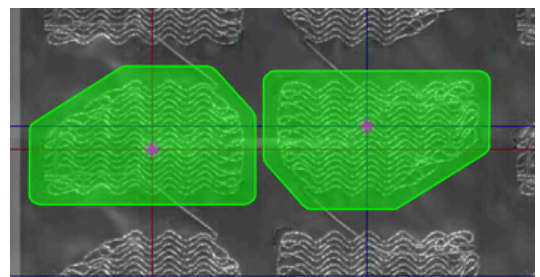
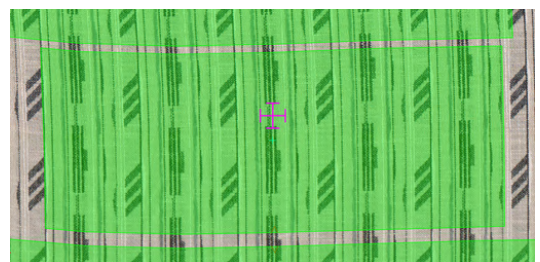
dCut

- Provides an intuitive, operator-friendly interface to control the cutter.
- Minimizes user input, allowing the user to focus on unloading cut parts and reloading new material.
- Advanced intelligent software streamlines operations, ensuring maximum productivity.



dImport

- Optional application for importing CAD files, even when industry standards are not strictly followed.
- Ensures compatibility and smooth integration with current workflows.
- Enables the use of existing data, ensuring smooth transitions and compatibility with legacy systems for uninterrupted workflow efficiency.



PRECISION CONTOUR CUTTING

digmar
VISION Systems

Intelligent Solutions for Automated Cutting Processes

Specialized image processing system for textile and carpet cutting machines, designed for fully automated contour detection. Using state-of-the-art 2D and 3D scanning, it accurately calculates cutting coordinates from the contours and transmits them to the cutter, eliminating manual adjustments.

Optimized Cutting Strategies for Maximum Efficiency

Our solution provides a range of predefined and customizable calculation modules, allowing operators to determine the most accurate cutting coordinates:

- Free-Shape, Rect, Quadrangle, Circle
- Custom vector-based calculations, predefined shape imports (DXF, CUT, PCX, BMP, TIF, PNG, JPG, ...)
- Tiling & Grid Functions

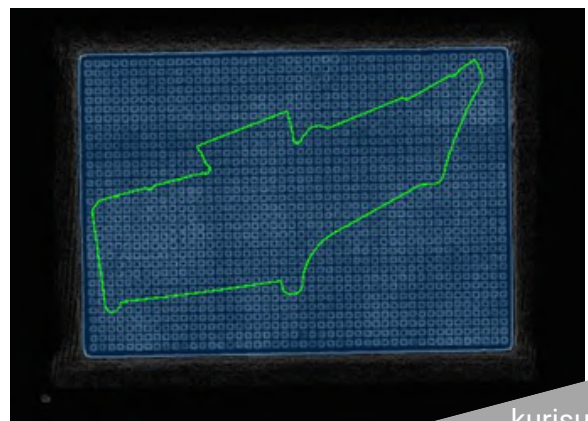
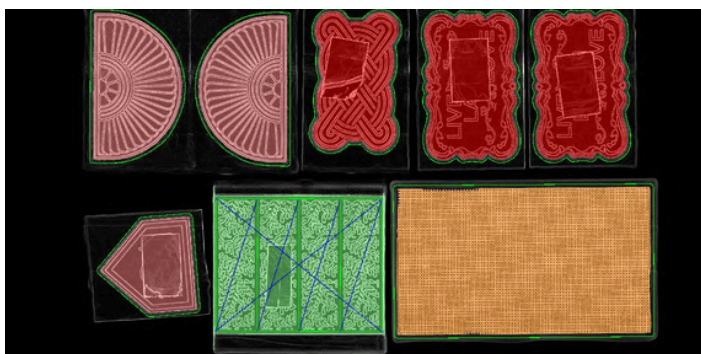
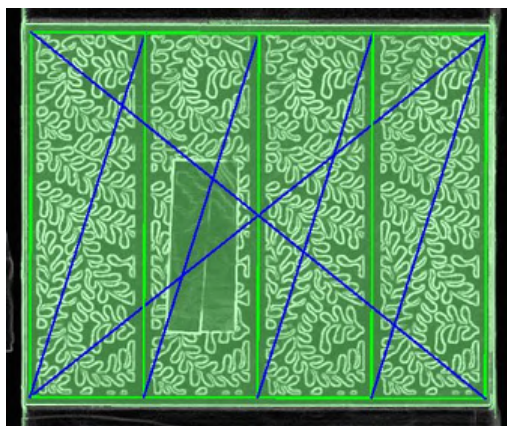
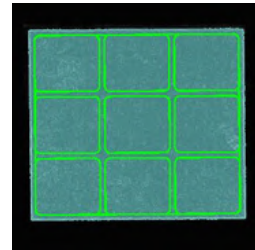
All calculation modules are customizable to match specific production needs.

Seamless Digital Workflow & Production Insights

Integrates effortlessly into digital production environments.

- Live production monitoring & statistics for process optimization
- Automated shift reports (including CSV export via email)
- Customizable software modules to match customer-specific workflows

This ensures a highly efficient cutting process, allowing operators to focus on material handling while maintaining high productivity and accuracy.



A high-precision optical inspection system designed for automated measurement and quality control of textile cuttings, widely used in industries like automotive.

Advanced Scanning & Measurement

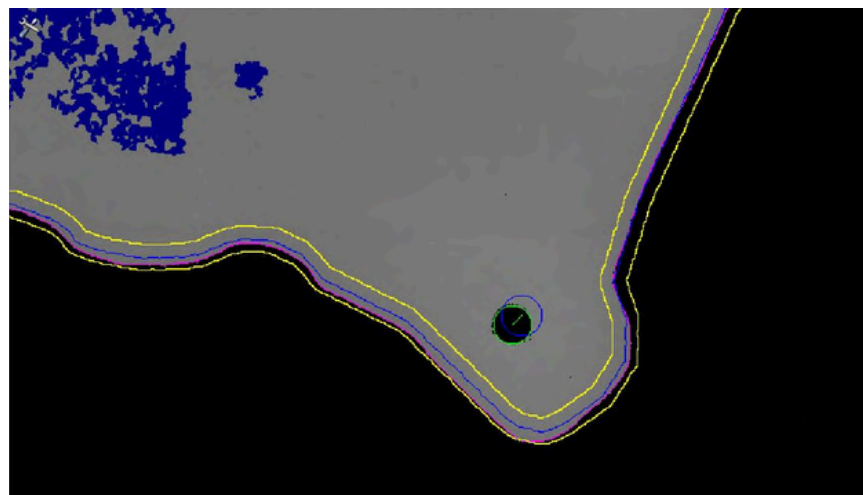
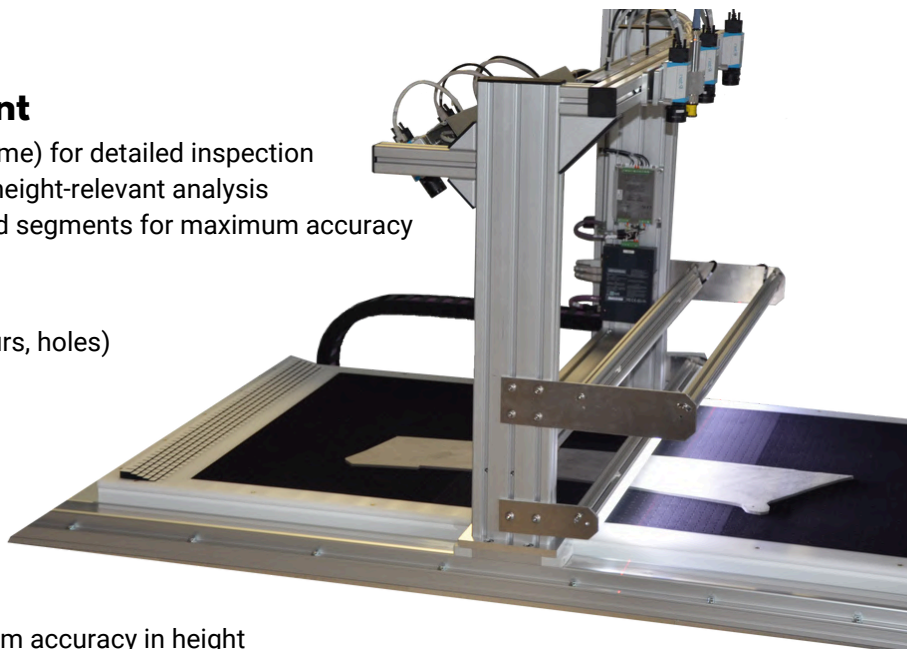
- High-definition cameras (color and/or monochrome) for detailed inspection
- Optionally integrated 3D laser measurement for height-relevant analysis
- Optional vacuum table with individually controlled segments for maximum accuracy

Comprehensive Quality Control

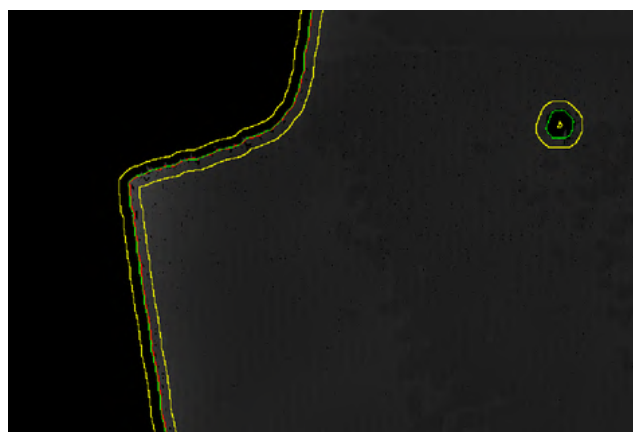
- Dimensional accuracy (internal & external contours, holes)
- Height defects (dents, wrinkles)
- Color & texture inconsistencies
- Nap direction verification
- Detection of stains, dirt, and surface defects

Optimized for Efficiency

- Fast scan speed
- High-resolution imaging: 0.2 mm/pixel and 0.3 mm accuracy in height
- Optimized software with intuitive touch operation



ans Frontside	Scans Backside	Detail View	in	out	Output Job-Queue	Settings
Job	C7 573 Alcantara Soul HR					
Article	889701BAZ004					
Date/Time	2015-11-17/08:41:57					
User-ID	unknown					
Batch Number	3107					
Result	NOK					
Length	726.9 mm (722.9 .. 728.9)					
Width	335.9 mm (330.6 .. 336.6)					
Height	5.6 mm (5.5 .. 6.5)					
Brightness	-1 % (6.1 .. 8.1)					
Color	-1 % (0 .. 5)					
Nap Direction	-1 ° (-1.5 .. 1.5)					
Texture	-1 (0 .. 0)					
Backside Brightness	-1 % (0 .. 0)					
Backside Texture	-1 (1 .. 1)					
Defects	Result					





viSYS-2D

High-Precision 2D Scanning

A scalable 2D scanning system for large-scale applications, ensuring accurate imaging with monochrome and/or color cameras. Integrated with cutting, printing and other machines for automated high-speed processing and minimal material waste.

- Scanning Range: 0.5 m to 6 m
- Resolution: Up to 0.1 mm/px
- Scanning Speed: Up to 100 m/min
- Distortion-free imaging



viSYS-3D

Advanced 3D Scanning

Utilizing laser triangulation, viSYS-3D delivers precise height measurement and detailed 3D surface analysis, even for textured or multi-layered materials.

- Scanning Range: 0.5 m to 6 m
- Resolution: Up to 0.25 mm/px
- Height Accuracy: Up to 0.2 mm
- Laser Wavelength: 660 nm (Class 3R)
- Scanning Speed: Up to 50 m/min

viSYS-XD

Hybrid 2D & 3D Scanning

Combining 2D and 3D scanning, viSYS-XD offers maximum flexibility for diverse materials. Supports custom lighting configurations for optimal scan quality and real-time processing.

- 2D & 3D scanning in one system
- Seamless machine integration



Advanced Illumination Options

Our scanning systems feature customizable lighting solutions, adjustable in color, polarization, and angle. This flexibility ensures optimal illumination for various materials and scanning conditions, enhancing accuracy and detail recognition.

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