

# CutVision

**THE WORLD'S MOST EFFICIENT  
AUTOMATIC CUTTING SYSTEM**



**MODELS IMMEDIATELY IN PRODUCTION**

**EXTREME PRODUCTION FLEXIBILITY**

**MINIMUM MAINTENANCE**

**NO HIDES REPOSITIONING**

**BEST CUTTING QUALITY**

**HIGHEST THROUGHPUT**

**NO DIES**



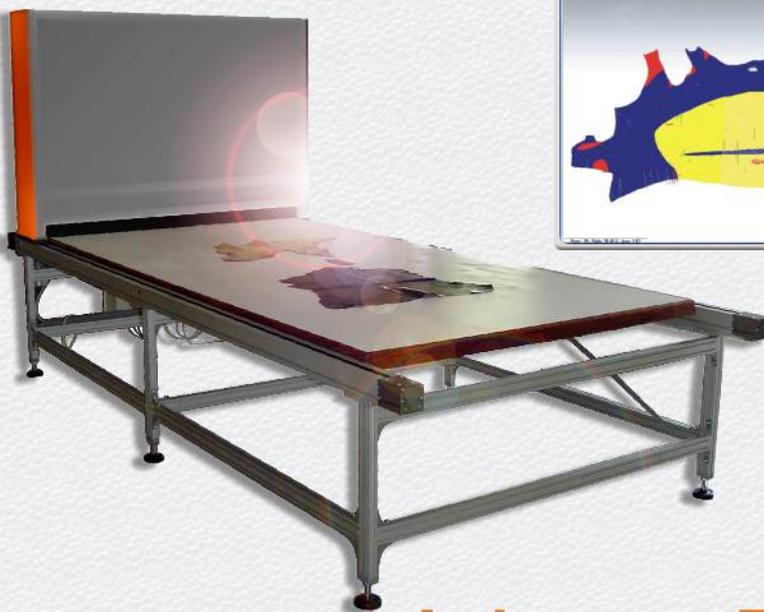
**A COMPLETELY NEW APPROACH  
TO AUTOMATIC LEATHER CUTTING**

We at Taglio understand that leather is an extremely versatile material, for which a single processing solution can not be sufficient. That is why, according to its preferences and requirements, our customers can choose between two options for the Hide Quality Evaluation process.

Either the different quality areas and defects are marked upon the grain side of the hides by hand, followed by the CutVision Scanner hide scanning system, which recognizes automatically these details based on well defined marking codes, or such characteristics are digitalized manually on the CutVision Tracker Station.

### More Speed or more Precision?

#### CutVision • Scanner



#### CutVision Tracker



**It is your Decision!**

#### CutVision • Scanner

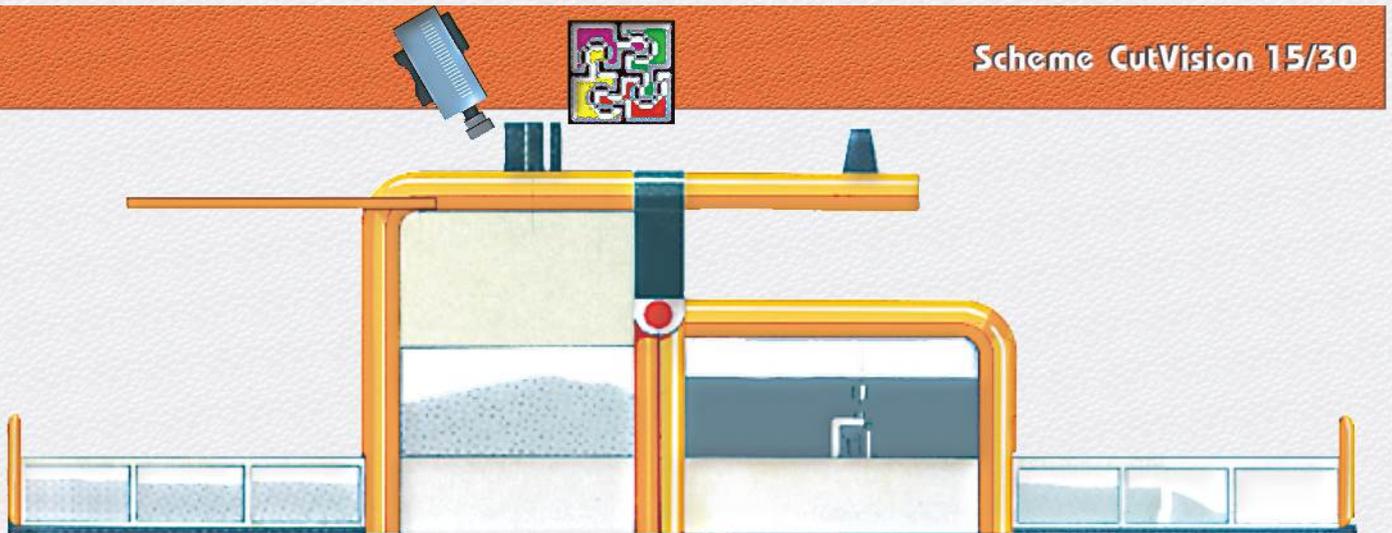
The most innovative solution for hide quality evaluation, offering topmost agility in hide preparation for the CutVision 15/30 System. Once the fully customizable marking procedure is finished, the hides are placed upon the scanning system. This recognizes automatically all hide details with high fidelity within only a few seconds. Due to the coloured image acquisition system, which assures that all kinds of leather colours can be used without major system reconfigurations, only minor correction efforts are required. The whole process takes averaged 60 seconds.

#### CutVision Tracker

Taglio's classic hide evaluation solution, offering highest precision through direct digitization of hide characteristics. This highly ergonomic project assures a real leather feeling for the operator. The table tilts from full horizontal to vertical position, offering a complete spectrum of light reflections upon the grain side, assuring that no detail escapes the beholder's eyes. In average this procedure requires about 240 seconds, on highly defective hides.

The operating configuration CutVision On-Line allows maximum production flexibility. It is particularly efficient at the cutting of hides uniform surface and limited numbers of defects. The hides are put into the Loading Station from where they are transported into the Scan and Nesting Area. Once this process is finished, the hides are inserted into the cutting area, after which the cut pieces and remains are taken out of the working frames in the Unloading Station.

Scheme CutVision 15/30



## Loading

In this station the hides are placed upon the working frame, after the Quality Evaluation process has been finished, informing each hide's barcode.

Working On-Line, the hides do not require a barcode.

## Scanning and Nesting

### On-Line

The hide's contour is scanned and the nesting takes place.

### Off-Line

In this area the hide's contours are scanned and aligned with the previously generated nesting images.

## Cutting

This is the area where the Waterjet Cut takes place, with two bridges cutting simultaneously, optimizing

working cycle times. The average time needed to finish a half hide, with 40-50 pieces, is about 90 seconds. Depending on the inserted models' complexity and size, this number varies +/- 30%. In addition to the cutting heads, bridge can be equipped with laser tools, which can mark sewing lines and any other desired markings.

## Unloading

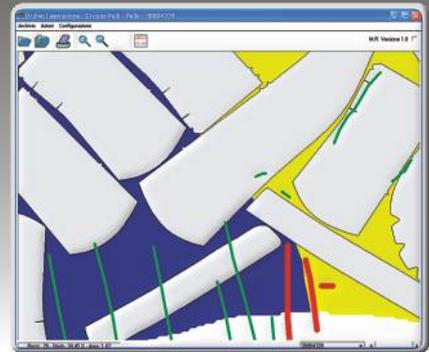
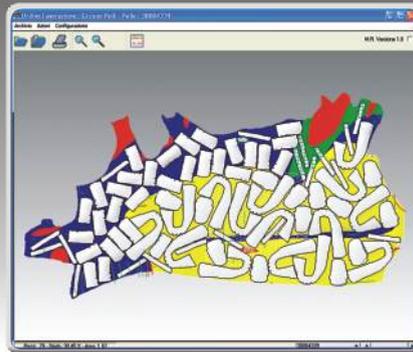
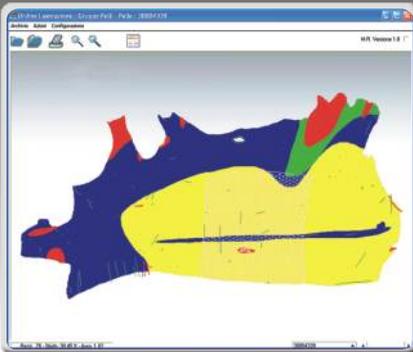
At the Unloading Station, the cut pieces and remains are taken out of the working frame.

## Achieve the real Non-Stop Production

The production time of this configuration depends on the Cutting Station's timing. The whole System should never stand still. Therefore, all preceding and following steps must be accordingly dimensioned.

In the ON-Line working configuration the CutVision nesting algorithm (digital pattern positioning process) generates a topmost efficient pattern placement scheme, which is faster than the time needed to cut the hides!

The CutVision Off-Line configuration achieves maximum results in terms of yield and throughput, and is especially recommended for natural hides with an elevated number of defects. The Nesting Engine finds the best placement scheme on a given number of hides, for an entire production lot. Combined with the CV Gest software package, which takes care of the hide stock and order administration management, a customer does not only achieve highest yields in material, but also a better yield in terms of available hide qualities.



Being a worldwide leading company in software development for high precision modeling, cutting and milling, with our applications widespread over the automobile, aviation and mechanical engineering industries, we offer our customers a unique customization capacity of our software solutions to satisfy any production demands. Specially for the nesting process, this aspect is essential, since there is an almost infinite range of criteria for positioning and grouping of pieces. In this sense, you are not going to achieve to yield you get, but the yield you need.

## Nesting offline



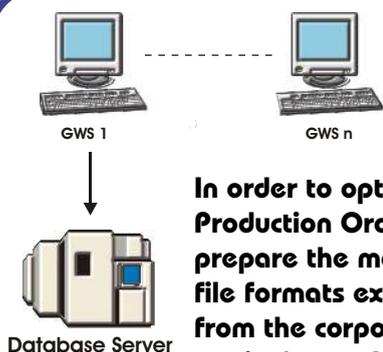
Nest with as many stations as you wish, during a time period you define. Expect outstanding yields, TAGLIO's longtime experience in Nesting software assures you that.

Through the production administration system, once a production order has been issued, it is possible to start the nesting process on a user defined number of in stock hides. This process is executed in a period before the leathers are introduced into the cutting system. Not being dependent on the cutting times, the time period used for the nesting can be far superior to those, in order to achieve the highest yield on each hide.

The nesting can be performed on a large number of working stations simultaneously, thus warranting a continuous high productivity for the cutting system.

During the Off-Line working configuration the working cycle's order of events are the following: The hide is positioned upon the working frame in the Loading Area. Successively, the hide's contour is scanned in the Scanning Station, aligning automatically the optimized Nesting Image with the hide's position. Within in average 15 seconds this process is finished and the hide is ready to be cut.

In this production modus, the system requires two or three operators, according to the patterns' size. One to place the hides upon the working frame and insert the bar code and consequently One or two to remove the cut pieces and the remains.



## Uncompromising System Integration

As a world wide leading company for CAD/CAM Software development for over two decades, TAGLIO assures its customers a full system integration without any compromise.

In order to optimize the working times, it is necessary to dispose of an efficient Production Order Management System. The CutVision Management System's task is to prepare the models for the cutting, importing the designs and converting the various CAD file formats existing on the market. When it receives the corresponding Production Order from the corporate order administration system, it automatically optimizes the working station's supply chain. This way, the system assures that no idle times occur and offers immediate Production Order Insertion.

CutVision is supplied with the CV Gest software package which includes interfaces for all kinds of CAD software and takes care of the file management and order preparation for the cutting station. For the corporate administration system's integration, CVGest provides a large range of data exchange formats.

CutVision Gest is able to operate as a stand alone station, as much as it can be implemented in a network of several working stations, data servers and cutting machines.

CV Gest can also be configured to serve as a warehouse management system, offering a very efficient and accurate hide's store administration.

The automatic nesting program is fully integrated in the system. The Result of more than 10 years of research and development, it stands for an outstanding yield.

MODEL	WORKING FRAME	CUTTING HEADS	LASER HEADS	DIMENSIONS	KW
15/30 2W	1500 x 3000	2	-	4200(W) 14500(L) 4600(H)	50
15/30 2W-2L	1500 x 3000	2	2	4200(W) 14500(L) 4600(H)	50

- Cutting Speed: 200m/min - Acceleration : 2G
- The entire system is supplied with full one year warranty.

## GET A NEW VISION OF AUTOMATIC LEATHER CUTTING GET THE CUTVISION

The CutVision Series is the outstanding result of more than one decade of intense research and development in close cooperation with our customers. Profit from our Know-How and get the most out of your precious materials.

CutVision has been projected for heavy duty work 24 hours a day and seven days a week. All mechanical and electronic components have been carefully selected and dimensioned in order to guarantee an uninterrupted functioning of the system during any production periods.

