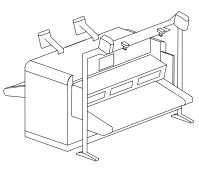
## HIGH FLEXIBILITY AND PRODUCTIVITY FOR LEATHER



SIGMA 260



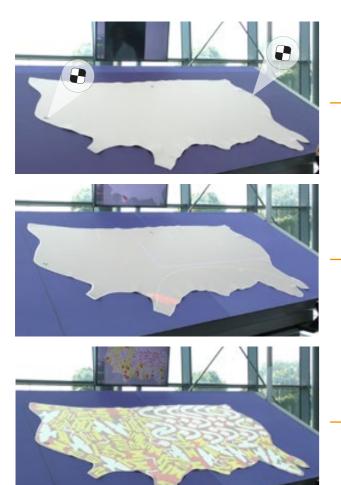


SIGMA 260 DUNLORTRI CUTTING HEADS

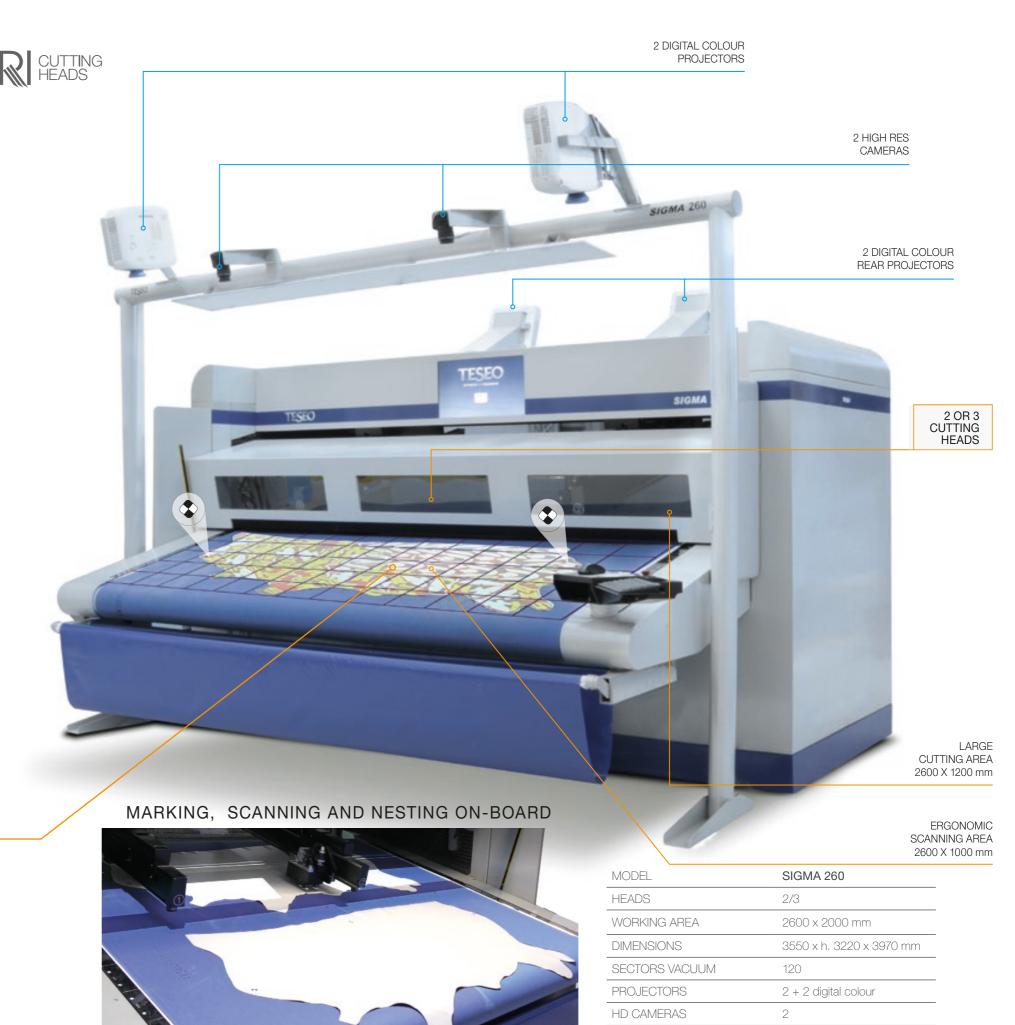
HIGH PRODUCTIVITY AUTOMATIC CUTTING

Automatic and ergonomic cutting system with 3 cutting heads, suitable for high productivity on leather and roll materials.

## INSPECTION AND NESTING OFF-LINE







WEIGHT

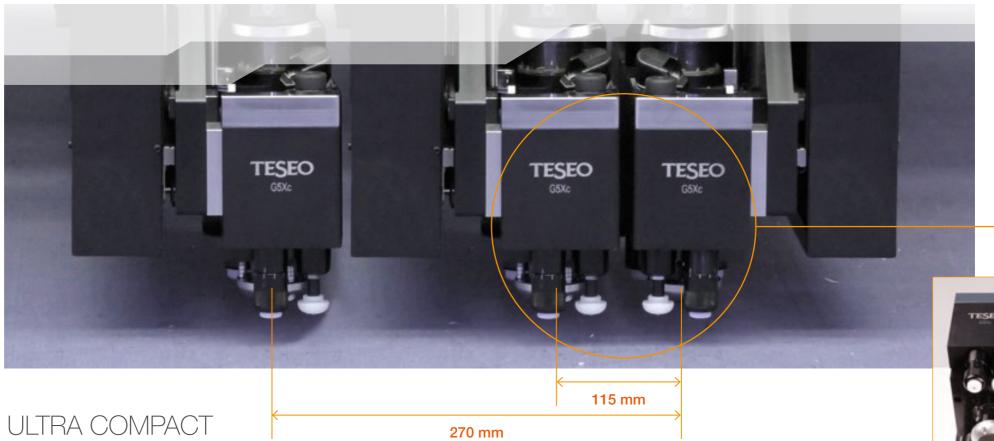
MOB 300

2500 kg

The technical data shown are indicative. TESEO reserves the right to

modify them, without notice, at any time.





ULTRA COMPACT CUTTING HEADS

We concentrated the reknown reliability and performances in just **7.5** cm.

The willingness to adopt the fourth cutting head has stimulated the search for solutions designed to save space, so that the different heads could better interact. The result is an exceptional head, that occupies less space (-40%).

But not only: the small size and the increased mechanical stiffness, allow this technological jewel a greater dynamism and an improved reliability.

2400 mm

The compactness of TESEO arms and heads makes SIGMA 260 extremely efficient, even on 2400 mm hides.

115 mm

ARGHON is a dual optical sensor camera with powerful micro computer. It processes 100 scans per second with 0,02 mm resolution.





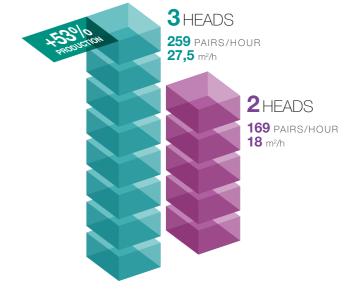
Thanks to the **3D** vision, ARGHON is constantly capable of measuring the wear of the cutting carpet and the hide thickness, detecting variations in height.



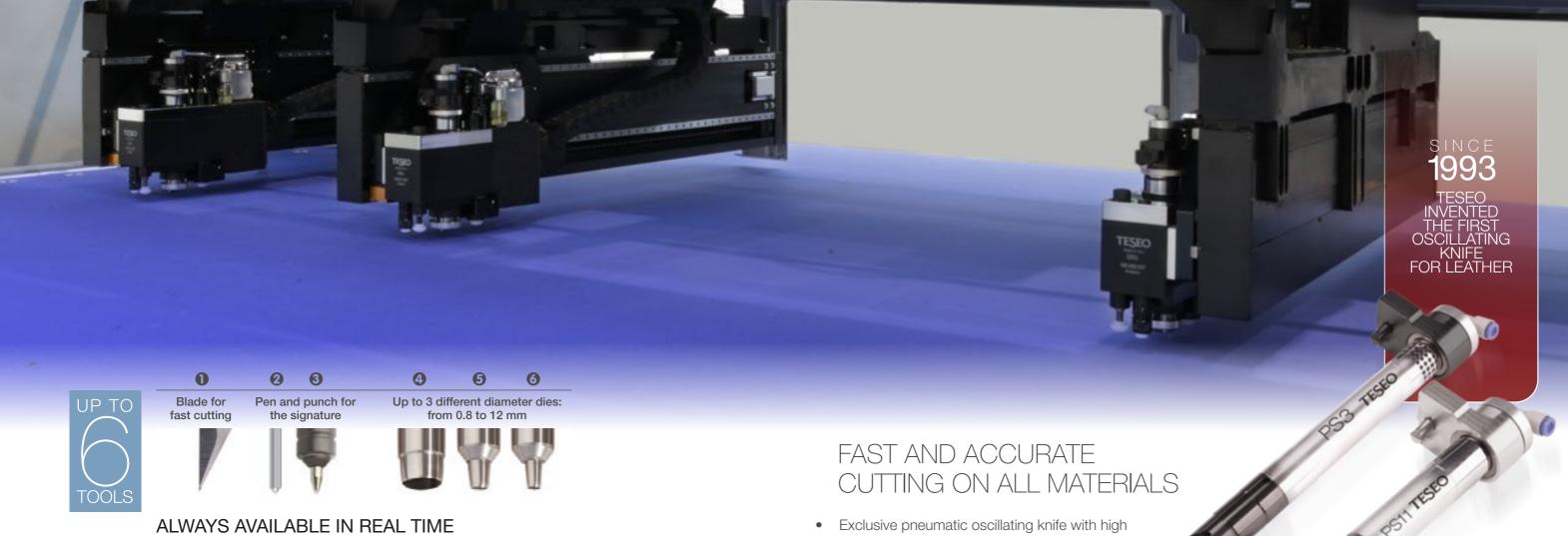
ARGHON recognizes the effective execution of cut and punches for an automatic quality control.



ARGHON recognizes details size less than **0.1 mm**. It enables a better recognition of **ROT** (Reference Optical Tag) for automatic hide re-positioning.



 $\left\{\begin{array}{c} 1 \\ 1 \end{array}\right\}$ 



The cutting head tool-stand are independent and **always available** (installed in parallel under the cutting head). The choice of the punches to use involves only its activation via software **without waiting**. The tools can be deactivated individually in case of a fault, **without harmful machine downtimes**.

### FAST, LIGHTWEIGHT AND QUIET

**FAULT** 

**TOLERANCE** 

The TESEO cutting heads are equipped with **single spindles (TESEO patent)** dedicated to punches. Manufactured with extremely fixed and light materials (only **148 gr)**, they are easy to handle as well as reliable. The reduced weight allows a **faster punching and a lower energy consumption.** 



## PUNCHING WITH SUCTION

Active suction in every cutting head: the shavings go to the specific tank to keep clean the cutting area every time, also with very thick materials.

- Exclusive pneumatic oscillating knife with high oscillation frequency (up to 50.000 RPM).
- Low consumption of compressed air of only **95 I/min** (other systems have 270 I/min).

Time saving





Changing blade or oscillating knife in less than **45 seconds**.

CONSUMPTION



**SHERLOCK** IS A PRECISION OPTICAL RECOGNITION SYSTEM DEVELOPED BY TESEO.

Installed directly on the cutting heads, it is able to recognize any kind of pattern of the material that needs to be cut: logos, textures, designs or lines.



Sherlock will automatically adapt in real-time the theoretical nesting to the actual pattern of the material, piece by piece.

High production with absolute accuracy.

Inspection on each piece with alignment and rotation in real time.

# SCANNING AND QUALITY CONTROL

MHS SOFTWARE ALLOWS TO CAPTURE THE IMAGE OF THE HIDE AND ITS DEFECTS, THANKS TO THE HIGH RESOLUTION CAMERAS.





The scan takes only **3 seconds**, it covers the whole working area and it is steady to ensure a perfect quality of the picture, highlighting even the smallest detail of the leather texture (resolution 0.25 mm).



This ensures the highest accuracy of nesting and the absolute control in each stage.



The exclusive **WOP** system allows to mark virtually the defects and the different quality areas, without leaving any trace on the leather.

8 | 9

## VACUUM SYSTEM THE POWER IS IN THE AIR

The vacuum surfaces consist of **independent and dynamic small sectors.** They are led by a software that recognizes the shape of the material and the position of the cutting head. The system automatically activates, with different power, only those areas interested by the cutting operations.

With this **patent TESEO** focuses the suction only where it is really needed, for the highest accuracy and speed.



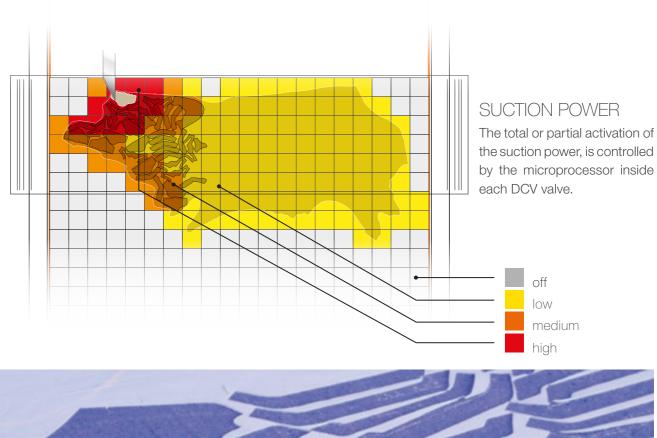


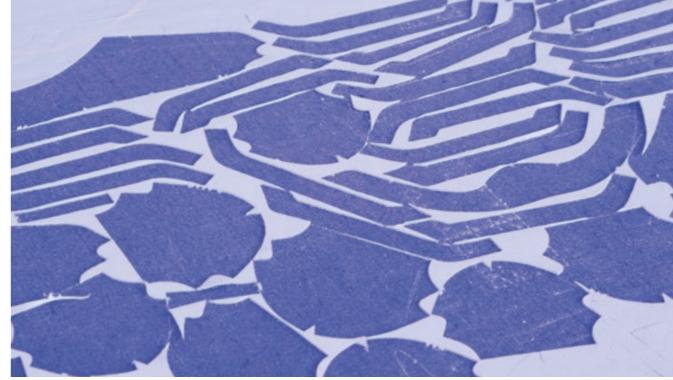


### INTELLIGENT

The vacuum system activates only the necessary sectors and requires a low consumption vacuum pump (less than 15 Kw), saving up to 40% of energy compared to all the other solutions.

# ONLY IN TESEO CONVEYOR SYSTEMS THE VACUUM ALWAYS FOLLOWS THE CUTTING HEAD





- NO PAPER OR FILM NEEDED
- ZERO BUFFER
- LEATHER SAVING

The vacuum, concentrated only in the cutting zone, allows the maximum of the performance without having to use plastic or paper film to keep the pieces blocked. The ability to cut up to the edges and to  $\emptyset$  mm between one piece and another, allows a further considerable saving of material.

10 | 11

# ASSISTED COLLECTION WITH AUGMENTED REALITY

High brightness color projecting system directly on the hide to make the activity of nesting and in the collecting of the cut parts faster and easier.



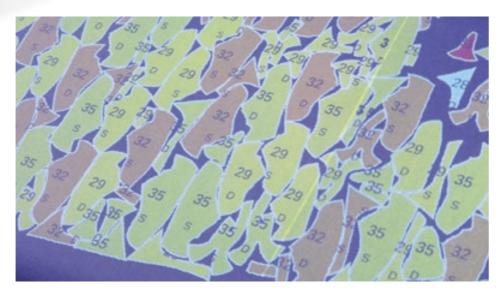
size 28

size 31

size 32

size 35

COLLECTING the cut parts is easier and faster when you can separate different items or different sizes by their colour, you also avoid errors assembling the product.





SIGMA 260 is equipped with a special cover protection that reduce the dB emission of the machines. It guarantees a friendly and healthy working environment for the operators.



Automatic

13

opening and closing of



12 |

### THE MOST EFFICENT NESTING IN THE WORLD

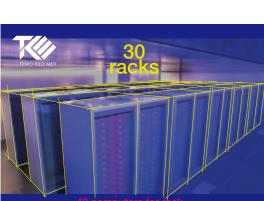




### MONITORING THE PRODUCTION HAS NEVER BEEN THAT EASY

As pioneer and inventor of the first automatic nesting for leather, since 1996 Teseo's algorithm is the most sophisticated and efficient on the market. Compared to the other nesting systems, it can guarantee up to +6% in the saving of leather.









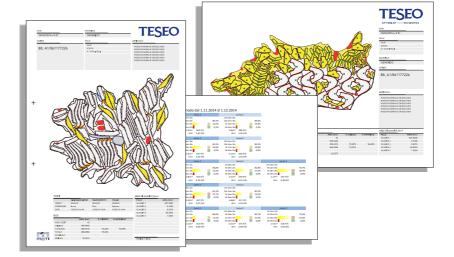
### AUTOMATIC LEATHER **NESTING WITH TESEO CLOUD SYSTEM**

With the **NEMESI** service TESEO gives the possibility to use greater computing power, with 64 dedicated computer working simultaneously, instead of the power of a single PC. The customer connects to TKM, a network of 1000 online computers in our HQ, to obtain a better yield (up to 3%), a more efficient and faster nesting, so you can nest a full hide in less than 3 secs (instead of 60 secs).





operating system.



Detailed and customizable statistics reports, with graphic layouts, can be produced and printed after any cutting job is completed.

OEE reports to keep a constant and efficacious productivity of the cutting equipments.



## SUPPORT ONE TO ONE DIRECTLY ON YOUR SYSTEM



We are constantly at our customers' side in more than 67 countries with 10 different languages.

Through our branches all over the world, NESSO grants a REMOTE technical support in real time, avoiding any production stop. A solution to any problem or just a fast reply to every question.





#### ISO 9001:2015

Certifies the Quality of the company in each of its process, in order to increase the efficacy and efficiency, to ensure a Quality product and obtain the highest level of Customer satisfaction.



#### ISO **14001**:2015

Obtaining Environmental certification means the commitment to limit environmental impact and reduce emissions, encouraging recycling and all the good environmental practices for a sustainable development.



### ISO 45001:2018

A company certified according to this international standard adopts an organizational model that ensure Safety and Health at work, allowing employees to operate in the best conditions.

