

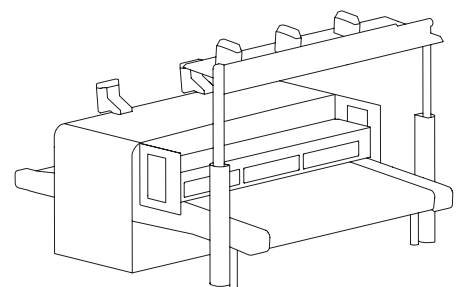
THE HIGHEST PRODUCTIVITY EVER, 24/7



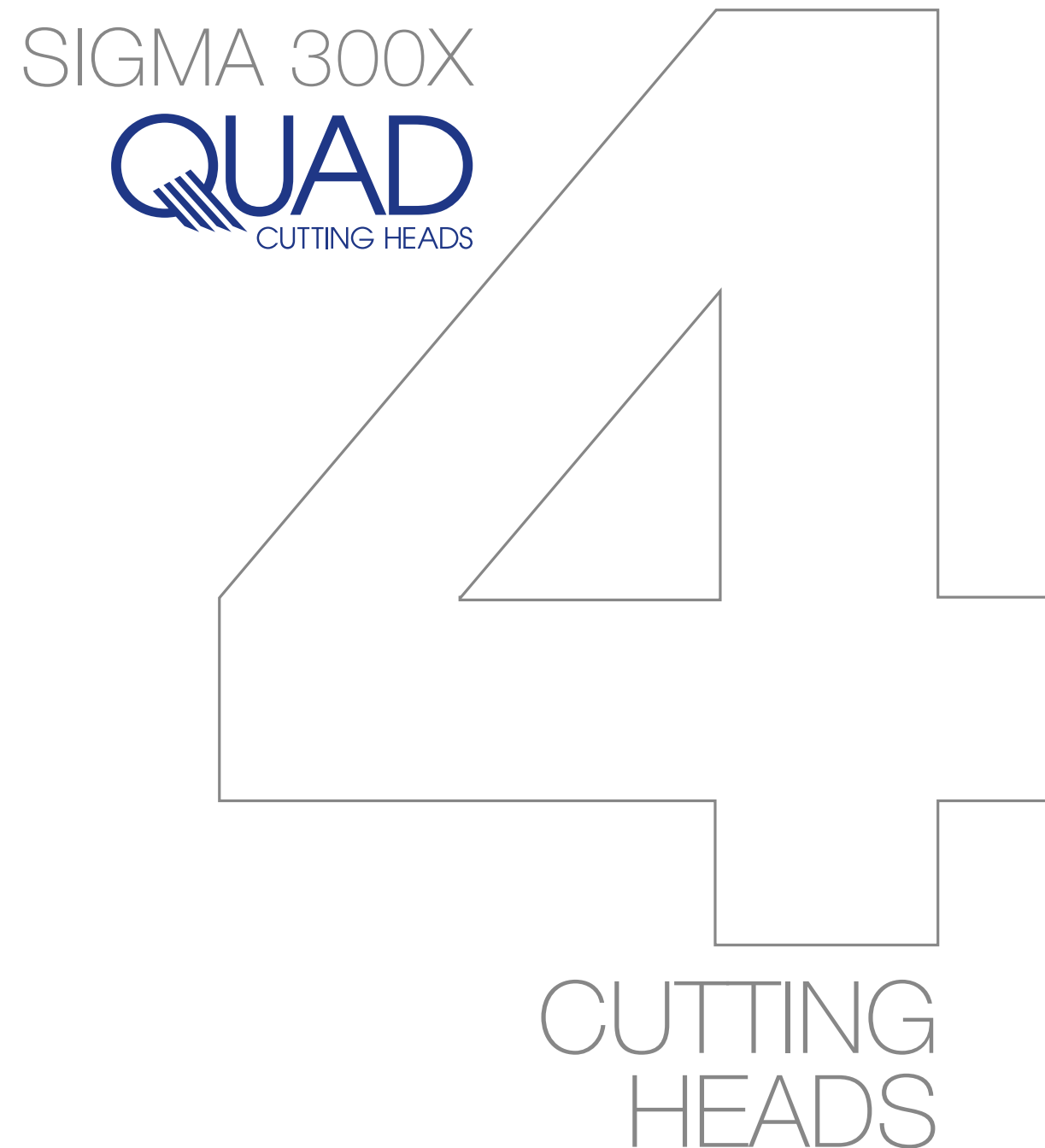
SIGMA 300X

QUAD
CUTTING HEADS

MAXIMUM
PRODUCTIVITY,
FLEXIBILITY AND
RELIABILITY



TESEO
OPTIMIZE YOUR BUSINESS



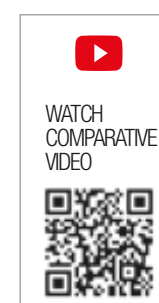
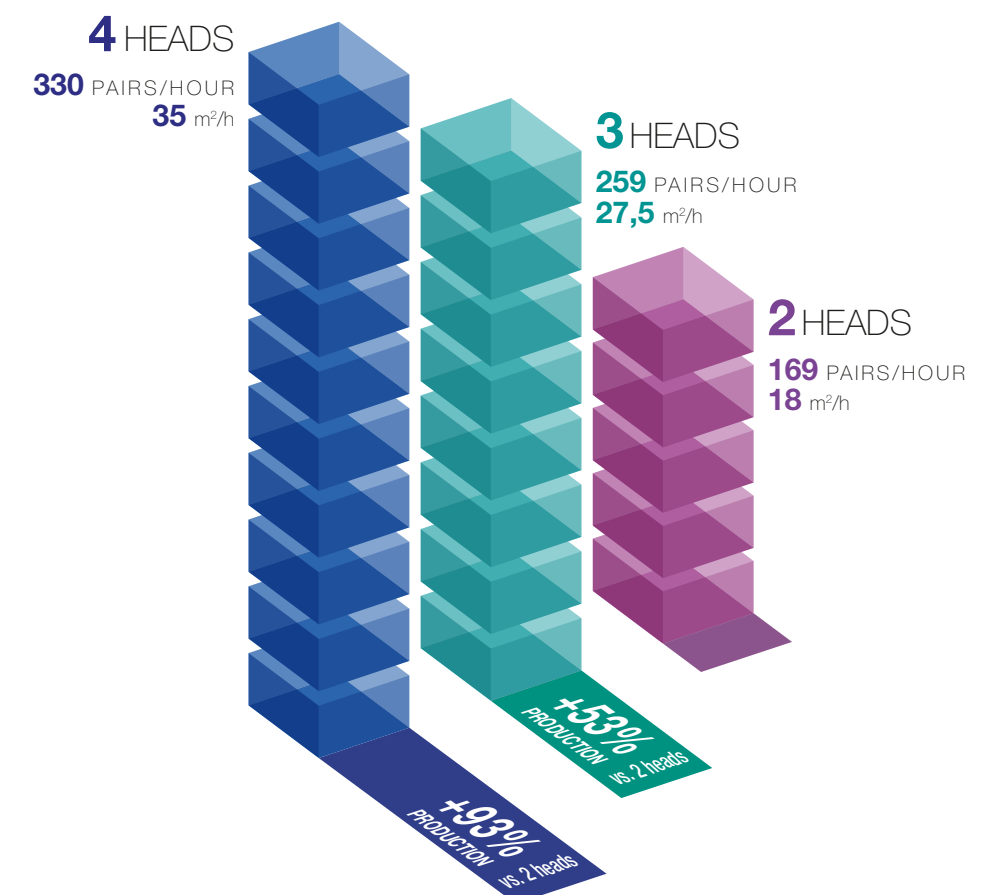
SIGMA 300X QUAD CUTTING HEADS

THE **HIGHEST** PRODUCTIVITY EVER

The secret is not just adding cutting heads but be able to make them work synergistically. In 2006 TESEO introduces the first machine with **3** cutting heads which, thanks to an innovative software, manages the individual units in a continuous manner and without interference even in the same area of the leather, increasing the productivity of **90%** compared to the same machine equipped with only **2** cutting heads.

The third head marked a turning point: in this decade, it has evolved and improved thanks to the experience gained with over **4.000** systems installed within the largest companies in the world, in various sectors such as footwear and leather goods, automotive and furniture.

4 CUTTING HEADS
A valuable know-how that now, thanks to the new technology developed in **2016**, the miniaturized components and the innovative materials, make, for the first time on the market, the adoption of the fourth cutting head possible. An exclusive to meet the growing production needs and contextual to the required flexibility that the fragmentation of modern markets imposes.

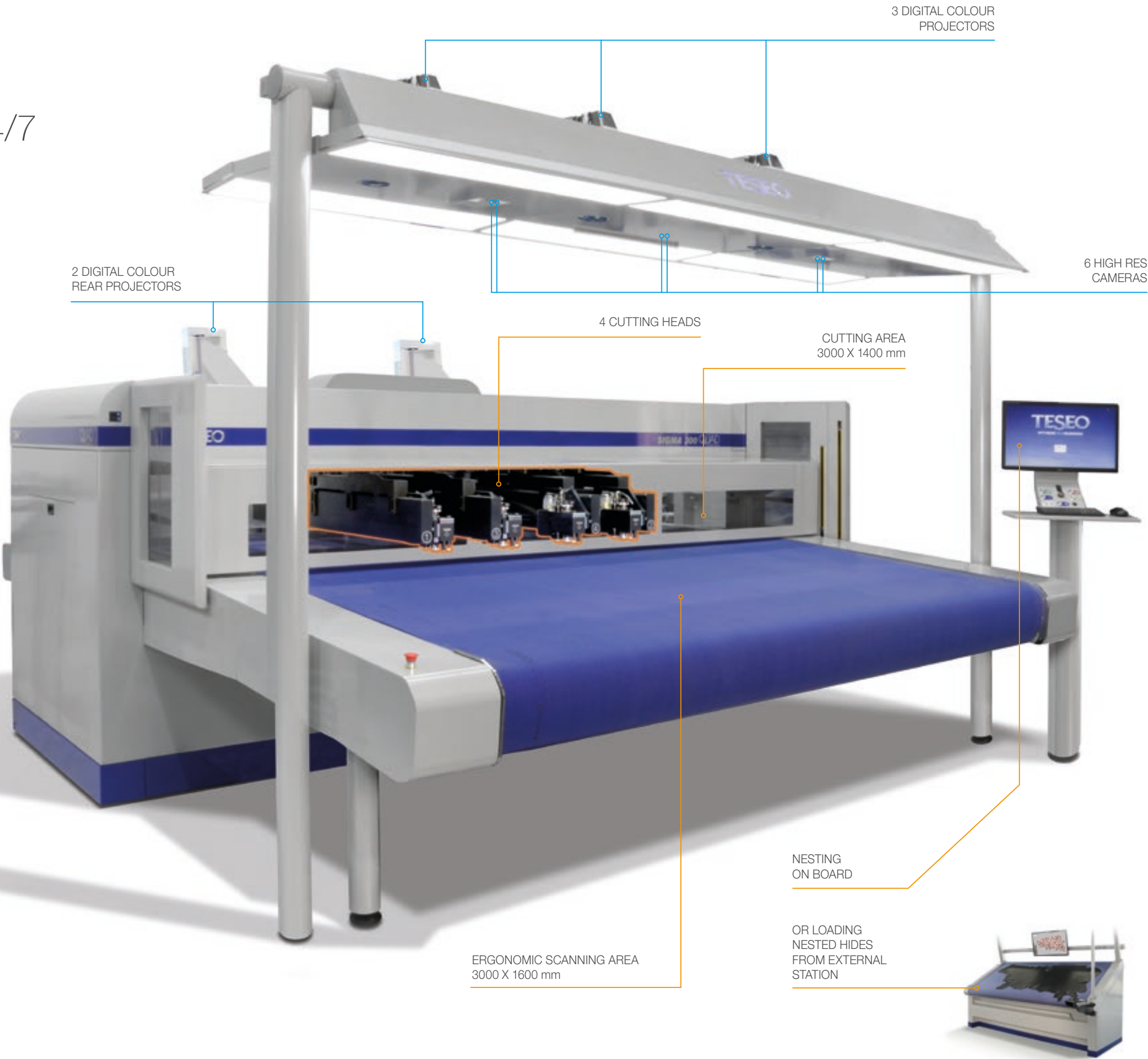
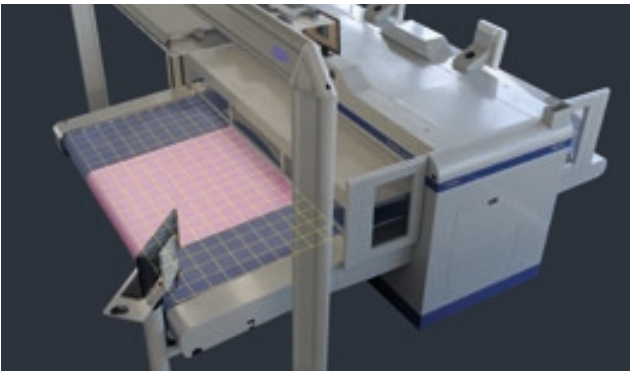
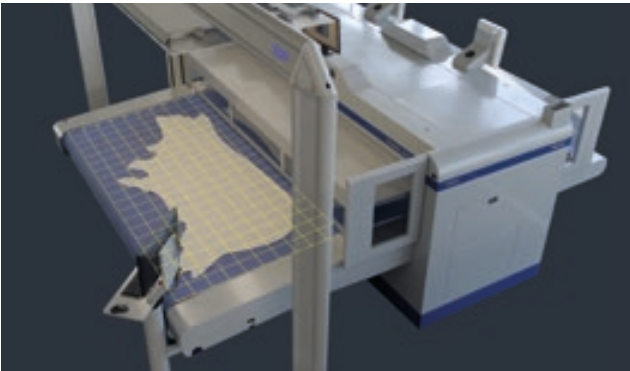
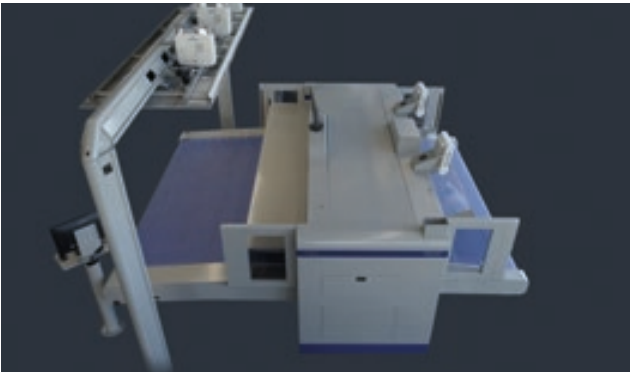


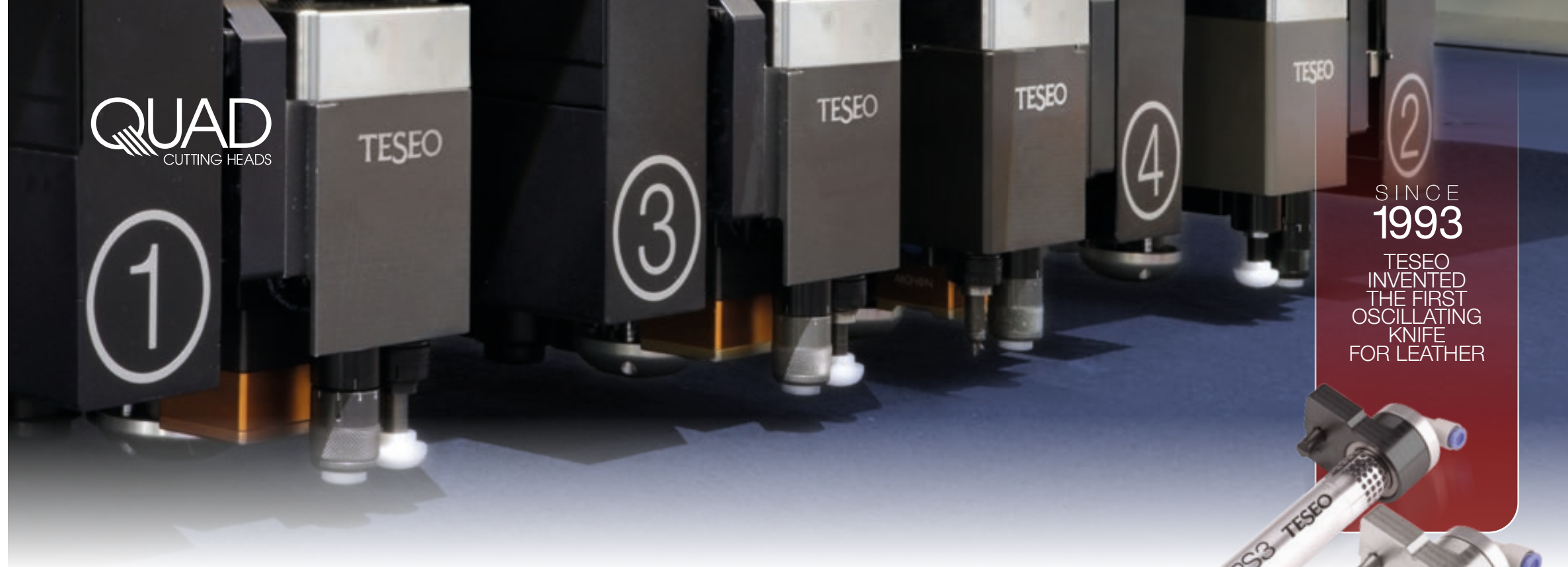
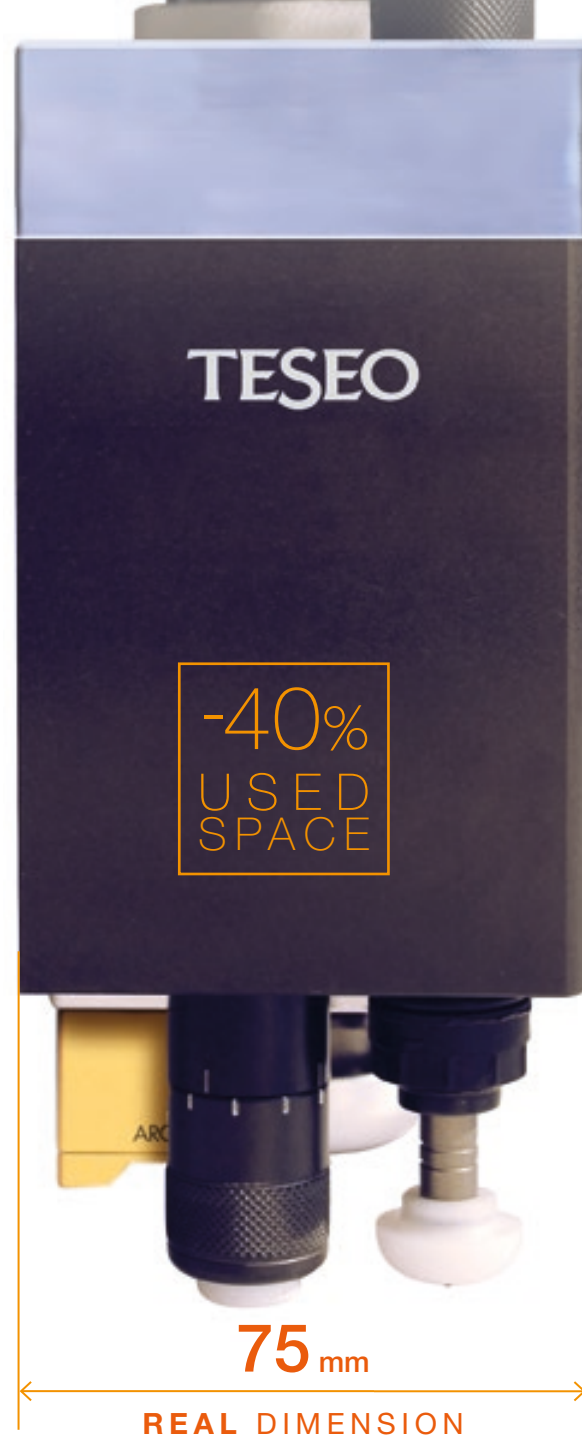
SIGMA 300X QUAD

CUTTING HEADS

MAXIMUM PRODUCTIVITY, FLEXIBILITY AND RELIABILITY 24/7

Cutting system with a working area moving on rollers for continuous automatic cutting of leather and materials in rolls (synthetic and fabrics).





ULTRA COMPACT CUTTING HEADS

We concentrated the reknown reliability and performances in just **75 mm**.

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, with **5** or **7** tools, that occupies less space (-40%).

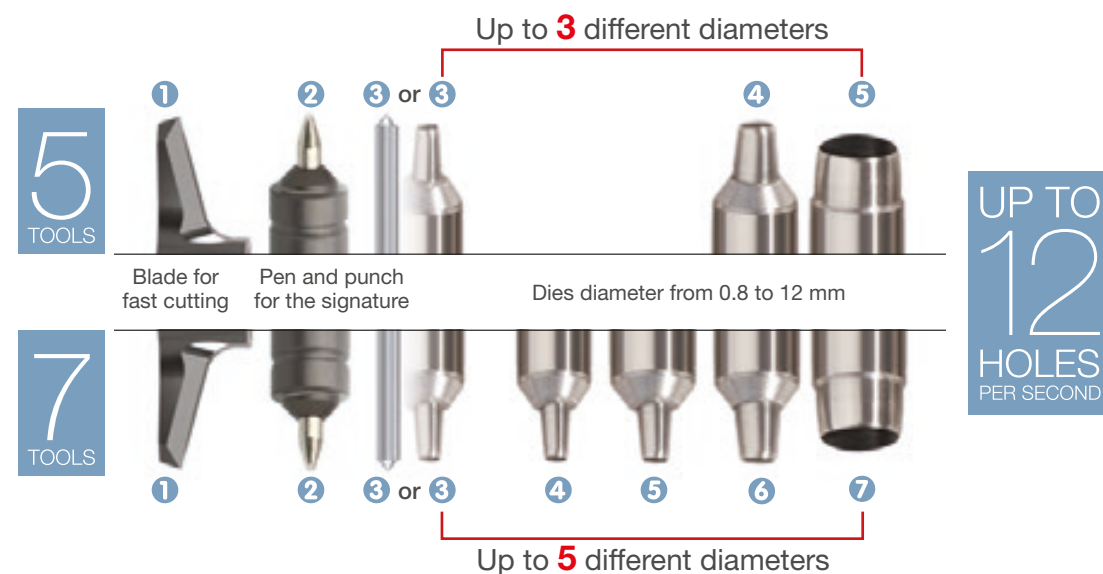
But not only: the small size and the increased mechanical stiffness, allow this technological jewel a greater dynamism and an improved reliability.

FAST AND ACCURATE CUTTING ON ALL MATERIALS

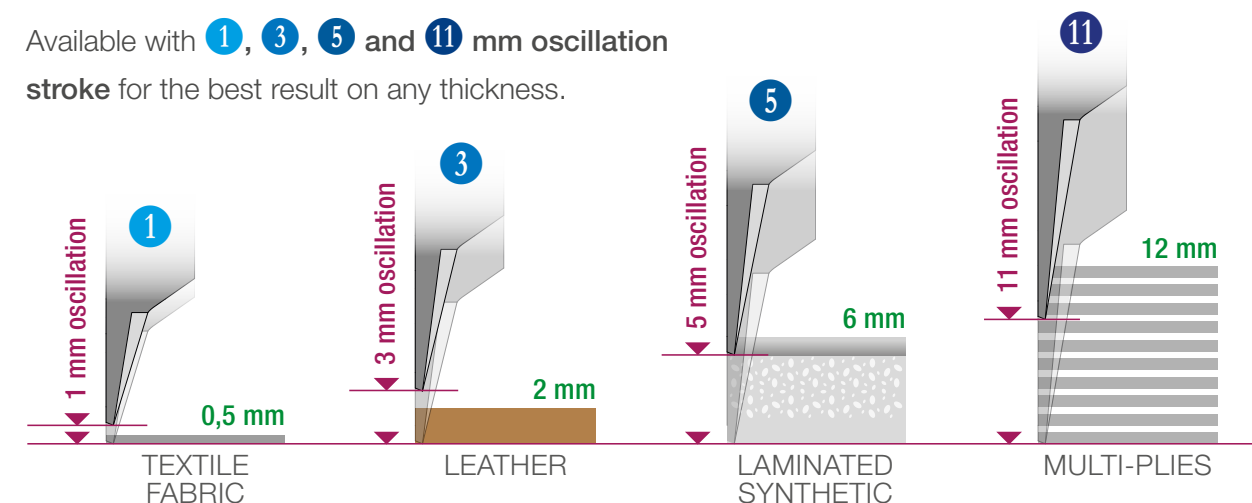
- Exclusive pneumatic oscillating knife with high oscillation frequency (up to **50.000 RPM**).
- Low consumption of compressed air of only **95 l/min** (other systems have 270 l/min).
- Time saving



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



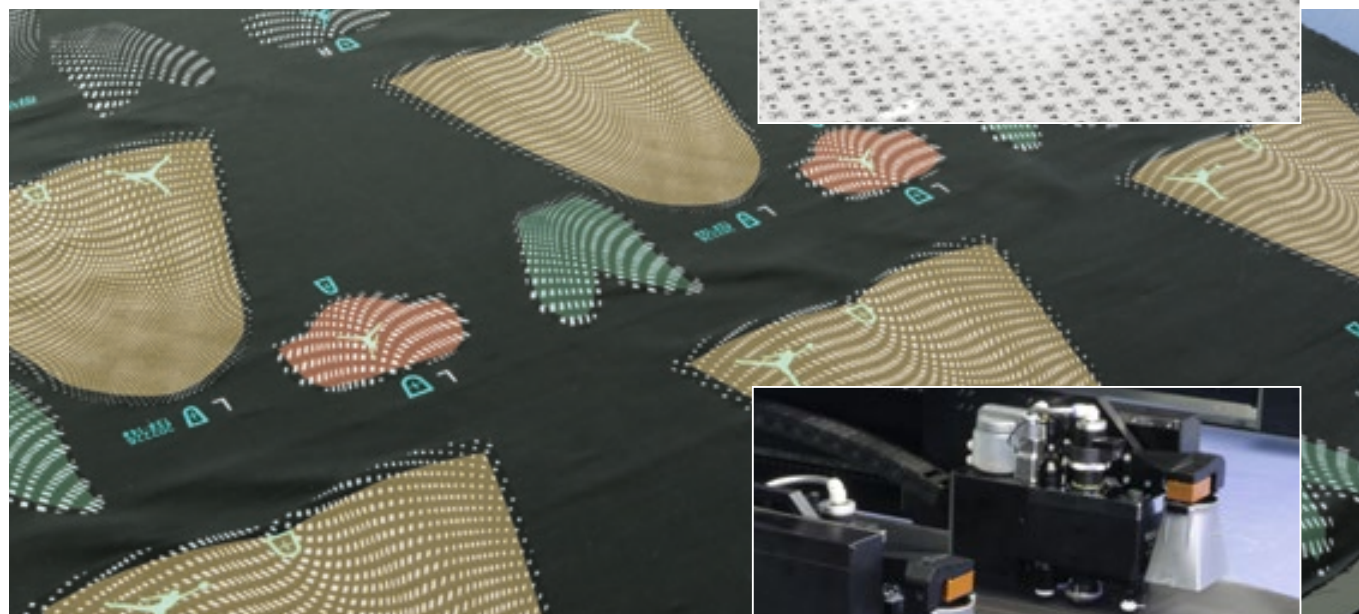
- Available with **1, 3, 5 and 11 mm oscillation stroke** for the best result on any thickness.





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.

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.



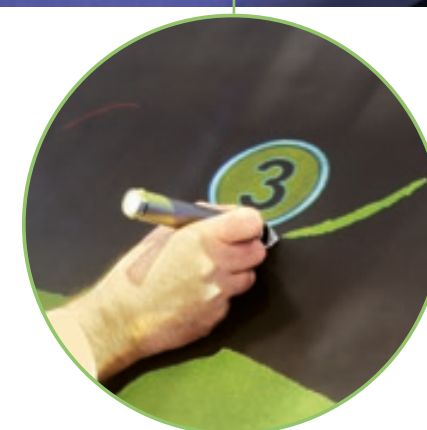
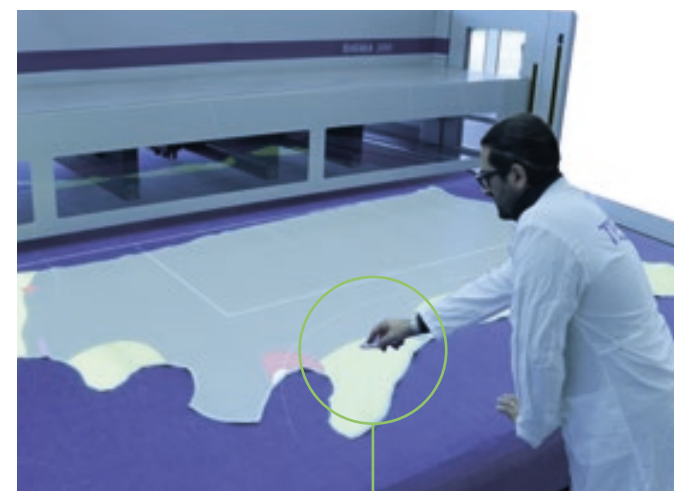
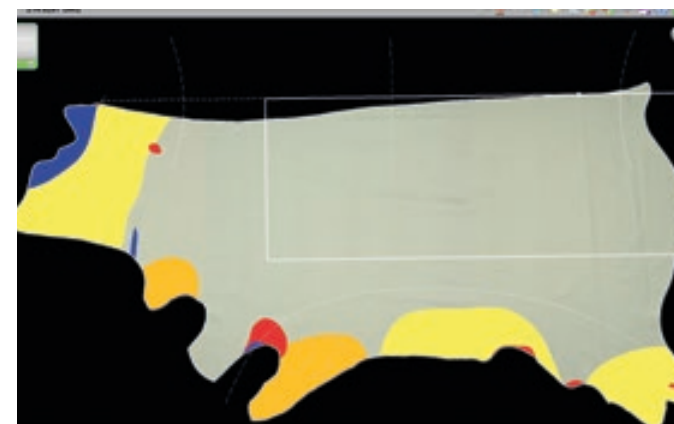
ARGHON recognizes the effective execution of cut and punches for an **automatic quality control**.



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

SCANNING AND QUALITY CONTROL

The **MHS** system allows to capture the image of the hide and its defects, thanks to the **high resolution cameras**.



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

The mark of the quality areas, the direction lines of the leather and every reference traces are shown instantly on the hide, where it will be directly cut.

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



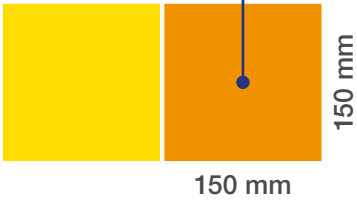
WIRELESS OPTICAL POINTER

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

VACUUM SYSTEM THE POWER IS IN THE AIR

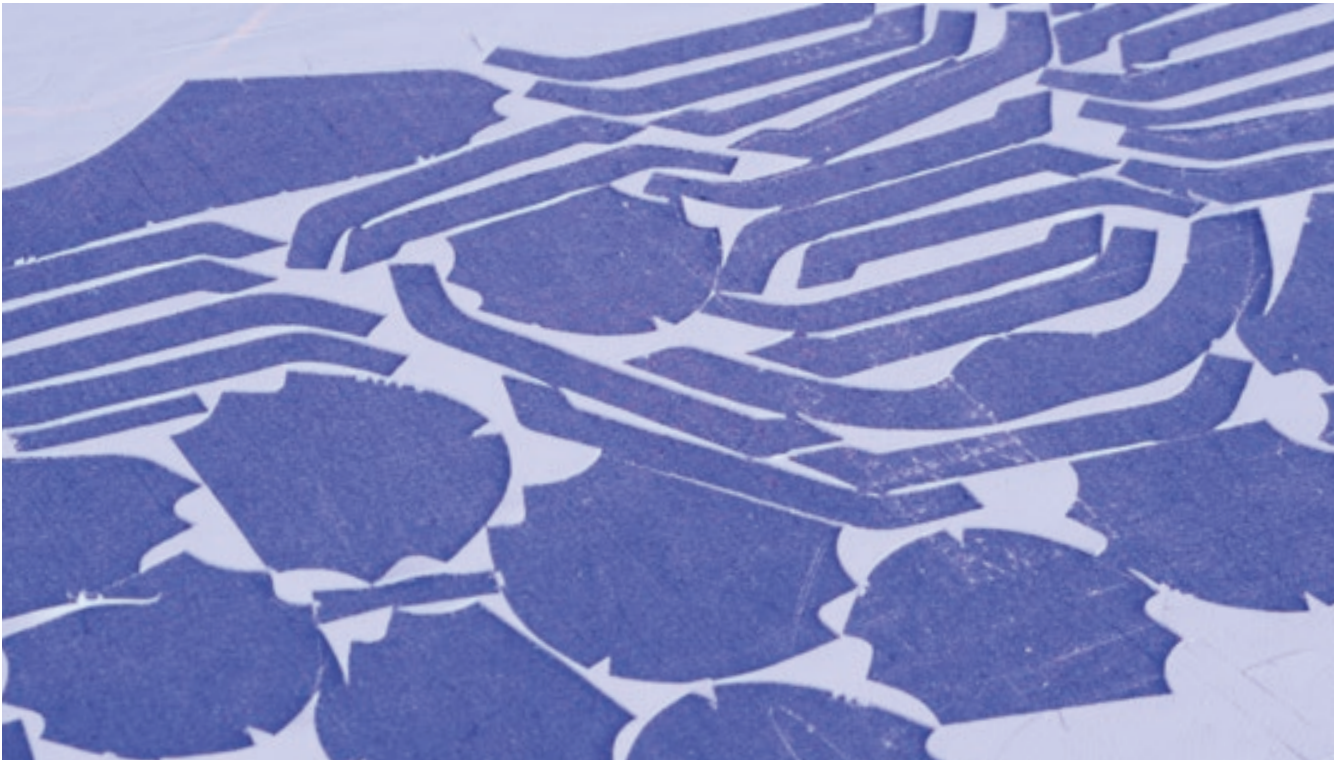
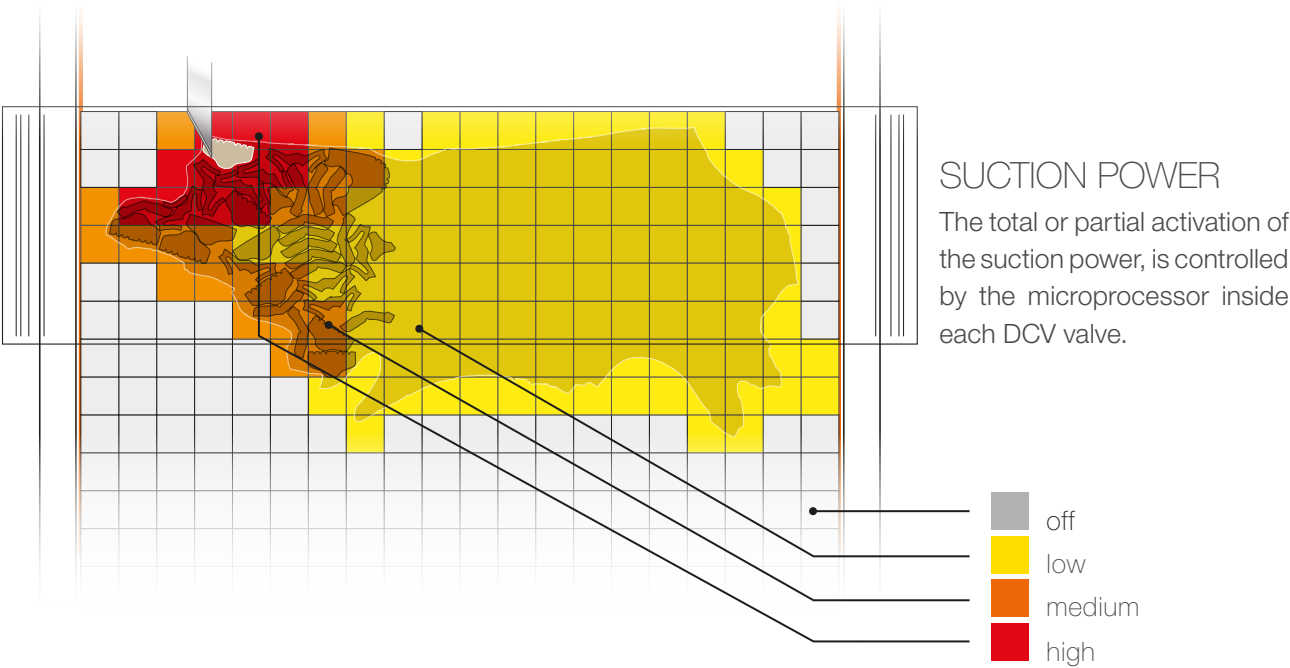
The vacuum surfaces consist of **independent and dynamic small sectors (200)** of 150x150 mm. They are led by a software that recognizes the shape of the material and the position of the cutting head. The system automatically activates, with different power, only those areas interested by the cutting 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

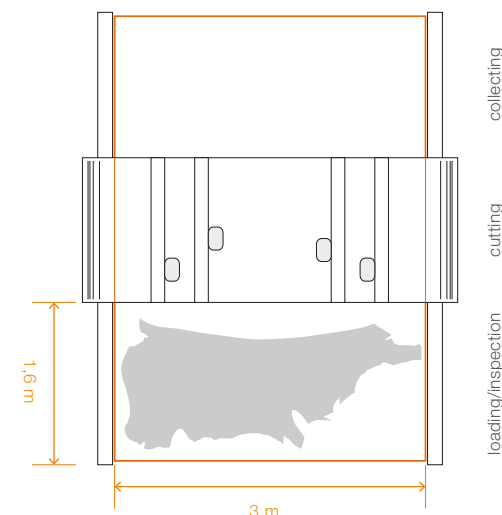
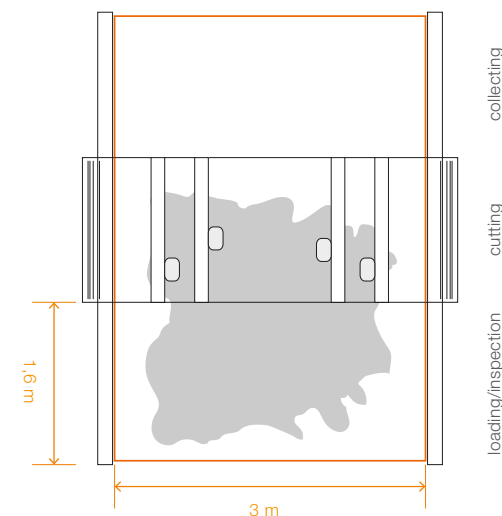
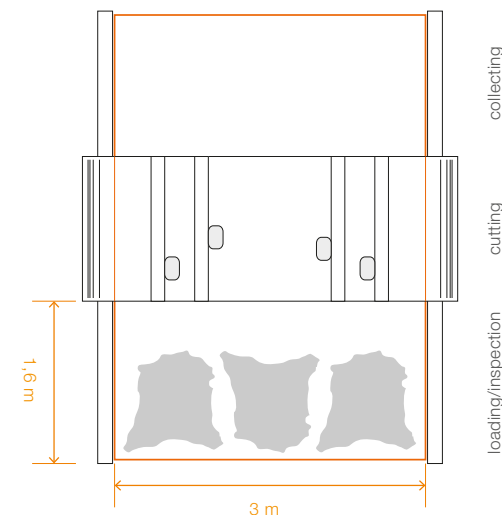
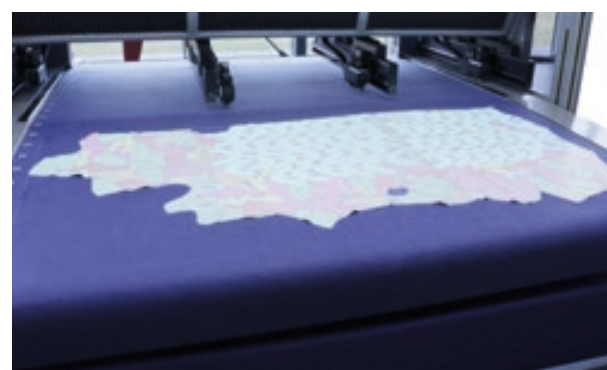
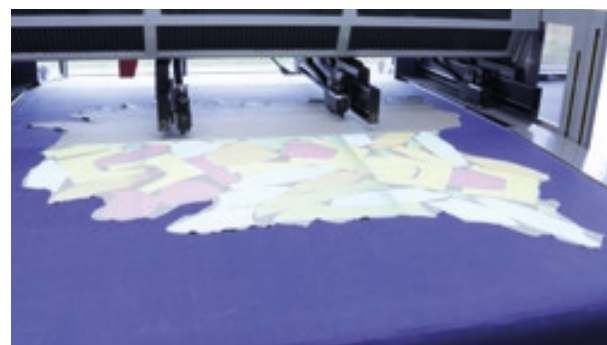


- **NO PAPER OR FILM NEEDED**
 - **ZERO BUFFER**
 - **LEATHER SAVING**
- The vacuum, concentrated only in the cutting zone, allows the maximum of the performance **without having to use plastic or paper film** to keep the pieces blocked. The ability to cut up to the edges and to Ø mm between one piece and another, allows a further **considerable saving of material**.

ENGINEERED FOR LEATHER CUTTING

FROM THE CUT COMPONENTS TO THE SIZE, UP TO THE ERGONOMIC INCLINED SURFACES FOR LOADING AND DISCHARGE: ALL IN SIGMA IS DESIGNED TO EASILY WORK THE HIDE IN ALL ITS FORMS AND DIMENSIONS

The need to cut even **3** mt wide hides, or more hides at the same time, has led us to design and build appropriate size machines, even if it means going beyond the technical limitations of building materials: surfaces and conveyor that allow a fast and easy processing.

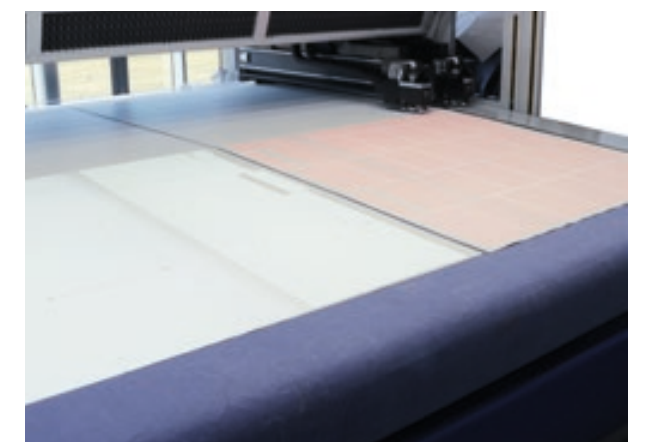
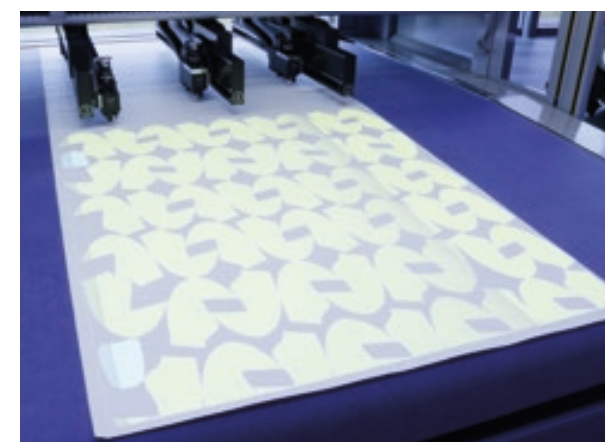
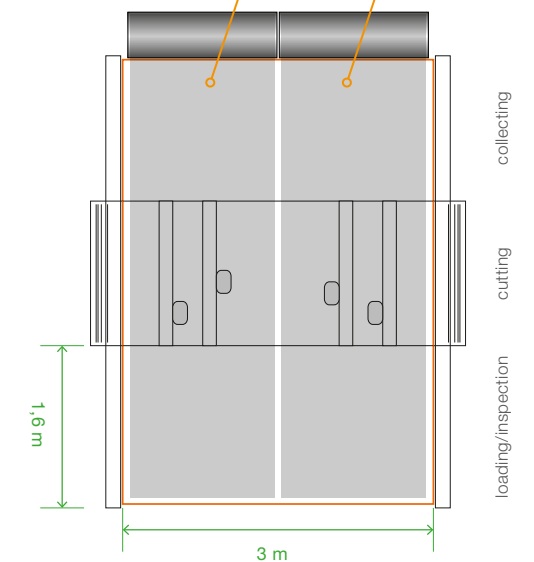
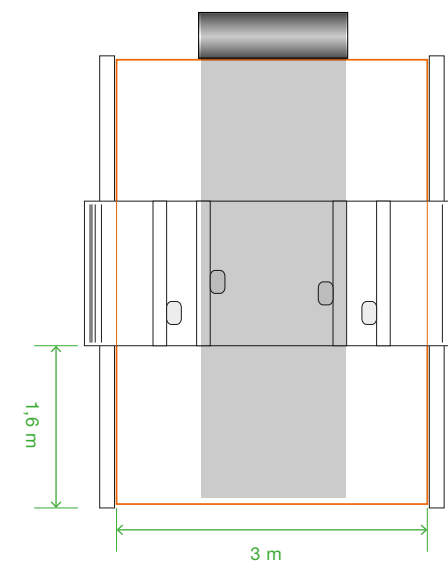


CUTTING OF MATERIALS IN ROLLS, FABRICS AND SYNTHETICS

The work surface with moving belt on conveyor makes it ideal for the cutting of materials in rolls. The material moves on automatically and continuously; auto-nesting to maximize material consumption. The width of the work surface (3000 mm) allows to simultaneously cut **2 parallel rolls** for an even higher production.

With 4 cutting heads available, you can cut with 2 heads on each roll.

It's like having 2 cutting machines.

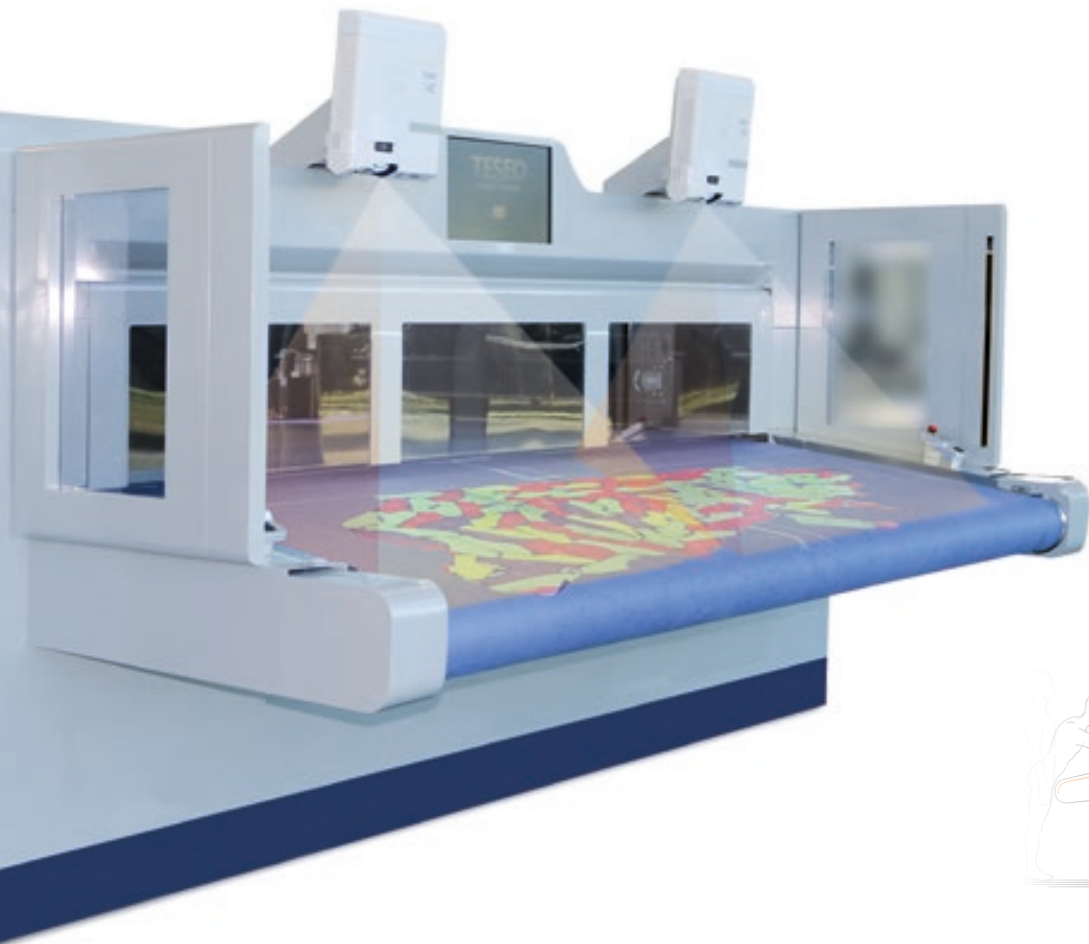


UP TO 10 LAYERS

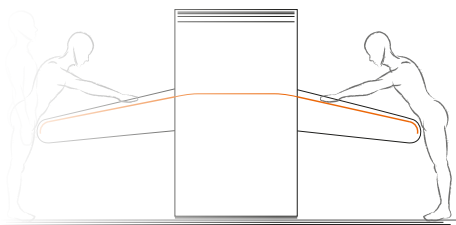
Maximum precision and cutting efficiency for materials from 2 to 10 layers.

ASSISTED COLLECTING OF THE CUT PARTS

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.



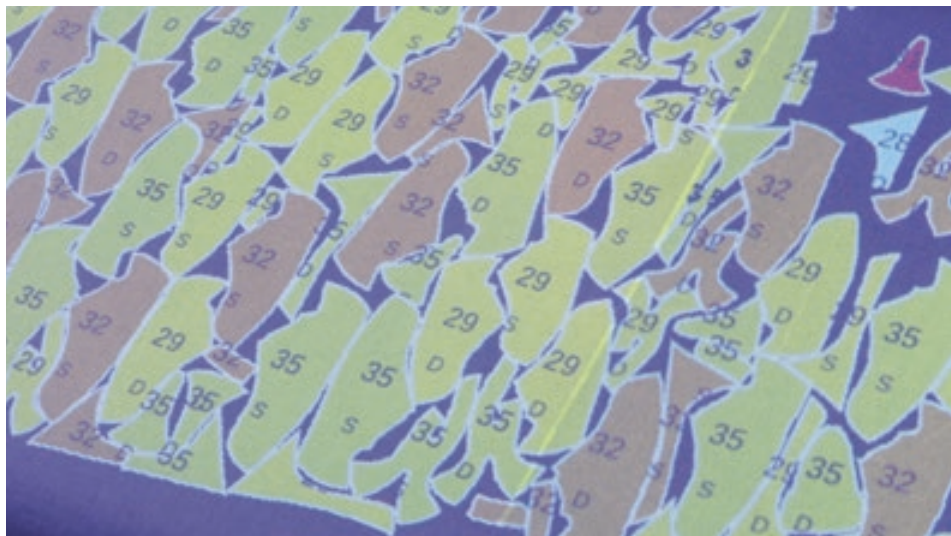
ERGONOMIC



Large in size but accessible,
 on a human scale

- 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.



LESS NOISE MORE COMFORT



SIGMA 300 X is equipped with a **special cover protection that reduce the dB emission** of the machines. It guarantee a friendly and healthy working environment for the operators.

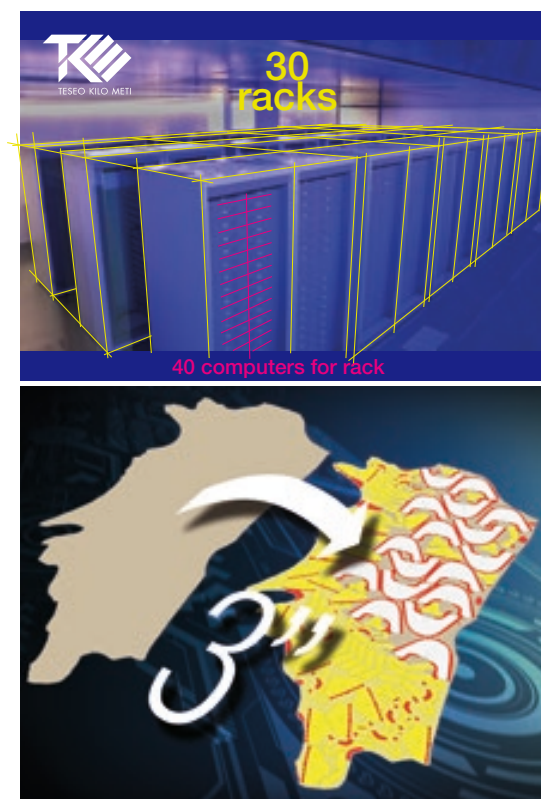
Automatic opening and closing of the protection cover



THE MOST EFFICIENT NESTING IN THE WORLD



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

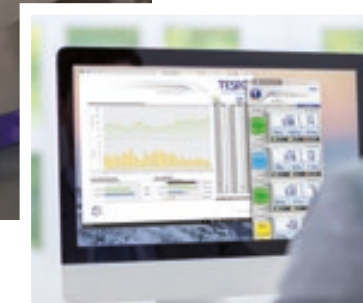


AUTOMATIC LEATHER NESTING WITH TESEO CLOUD SYSTEM

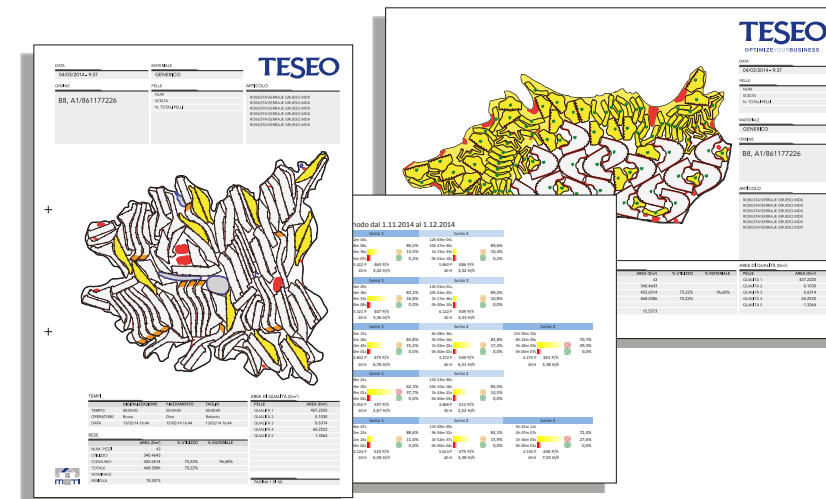
With the **NEMESI** service TESEO gives the possibility to use greater computing power, with 64 dedicated computer working simultaneously, instead of the power of a single PC. The customer connects to **TKM**, a network of 1000 online computers in our **HQ**, to obtain a better yield (up to 3%), a **more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



MONITORING THE PRODUCTION HAS NEVER BEEN THAT EASY



RTM (Real Time Monitor) is an application that, through the intelligent selection of data, allows you to **monitor in real time** the progress of the production on any device you have: computer, smartphone or tablet of any brand and with any 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.

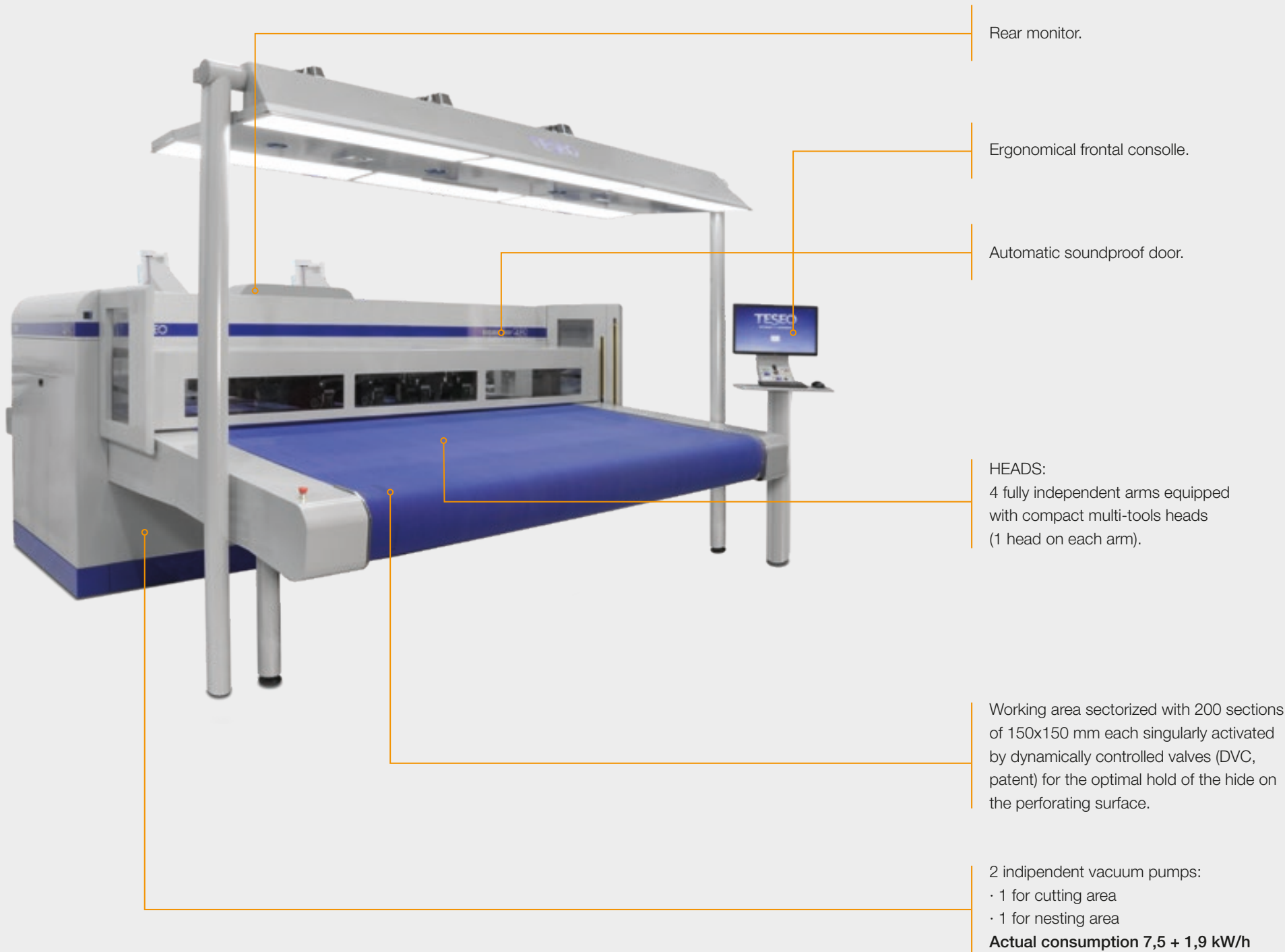


SUPPORT ONE TO ONE DIRECTLY ON YOUR SYSTEM



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 a possible doubt.



MODEL	SIGMA 300X
HEADS	4 (2 or 3 optional)
CUTTING AREA	3000 x 1400 mm
SCANNING AREA	3000 x 1600 mm
WORKING AREA	3000 x 3000 mm
HIGH RESOLUTION CAMERAS	3 + 3
PROJECTORS	3 + 2
DIMENSIONS	3950 x 5030 x 3280 mm
WEIGHT	3500 Kg

The technical data shown are indicative. TESEO reserves the right to modify them, without notice, at any time.

Rear monitor.

Ergonomical frontal console.

Automatic soundproof door.

HEADS:
4 fully independent arms equipped
with compact multi-tools heads
(1 head on each arm).

Working area sectorized with 200 sections
of 150x150 mm each singularly activated
by dynamically controlled valves (DVC,
patent) for the optimal hold of the hide on
the perforating surface.

2 independent vacuum pumps:
· 1 for cutting area
· 1 for nesting area
Actual consumption 7,5 + 1,9 kW/h



SIGMA 300X MEETS THE **INDUSTRY 4.0** REQUIREMENTS

Every company that operates today faces a common challenge:
the need for connectedness and access to real-time insights across processes, partners, products, and people.

Industry 4.0 represents a unique opportunity for an efficient and agile reorganization of production activities focusing on interconnectivity, automation, machine learning and real-time data.

It's about revolutionizing the way your entire business operates and grows. It's about choosing the best technology to **upgrade your business**.

That's where TESEO comes into play.

SIGMA 300X meets the Industry 4.0 requirements for a SMART factory

SMART PRODUCTION:
SIGMA 300X is designed for integration with ERP, planning, design and product development systems. Process data collection, real-time reporting and statistical analysis.

SMART SERVICE:
Remote interaction via NESSO® software to collect operational data and to provide remote support and maintenance through augmented reality technologies (i.e. NESSO® Visual).

SMART ENERGY:
Energy consumption 40% lower than other solutions on the market.
High performance as well as security and improved energy saving.



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.



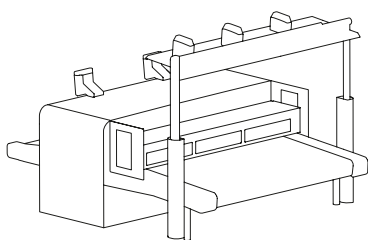
ISO 14001:2015

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.



GUARANTEED
AND CERTIFIED
QUALITY

2 YEARS
WARRANTY

TESEO
OPTIMIZEYOURBUSINESS