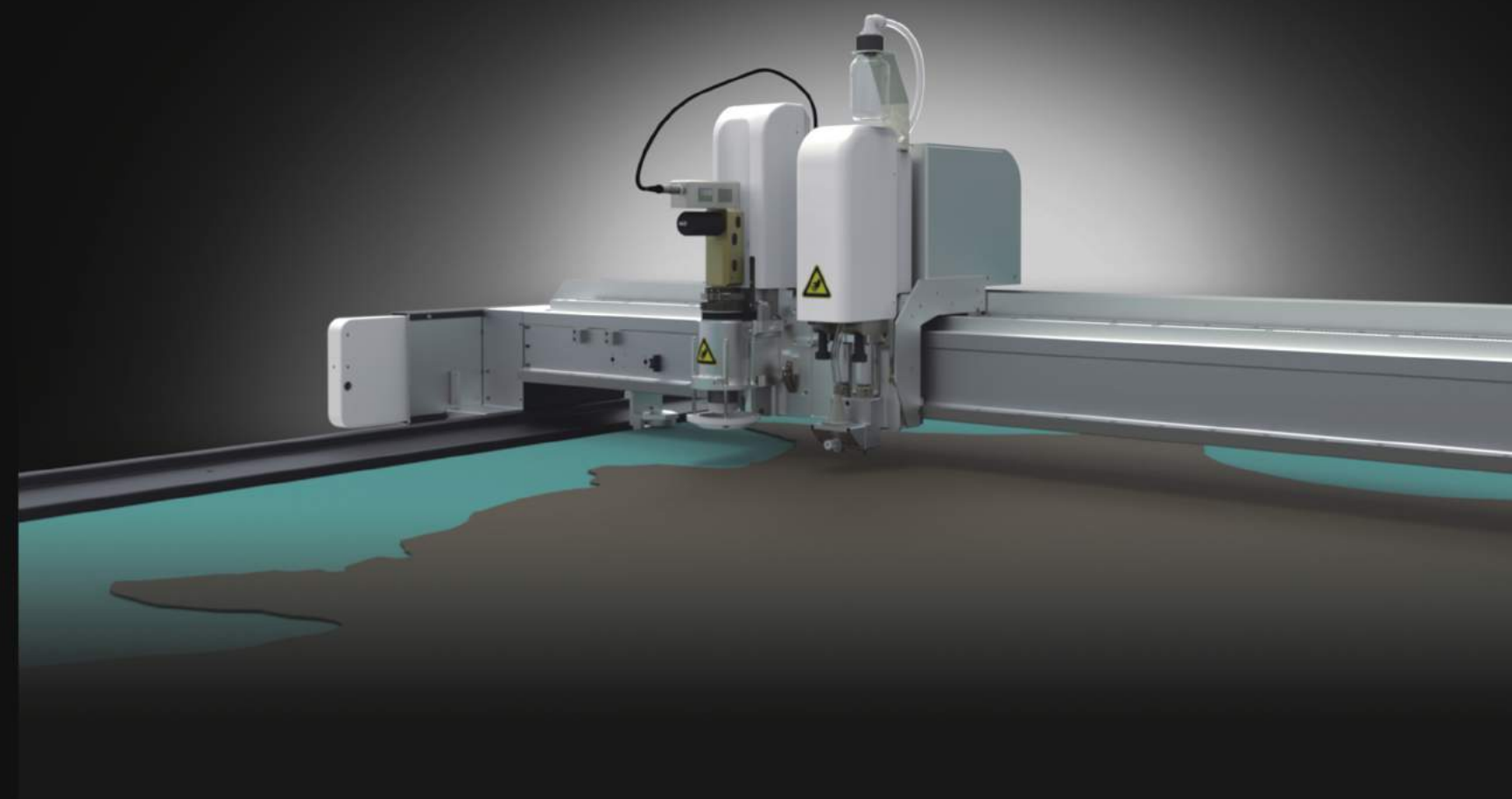




## LCPS LEATHER CUTTING PRODUCTION LINE



### IECHO Science Technology Co., LTD

No.1 Building, The Software Park  
No.1 Wei Ye Road, Binjiang District  
Hangzhou City 310053, Zhejiang Province, P.R. China  
Phone: +86-571-8660 9560 Fax: +86-571-8669 8923  
Website: [www.iechosoft.com](http://www.iechosoft.com) Email: [david@iechosoft.com](mailto:david@iechosoft.com)



### DBK d.o.o.

Samostanska ulica 3  
2360 RADLJE OB DRAVI  
tel: +386 41 409 268  
email: [info@dbk.si](mailto:info@dbk.si)  
[www.dbk.si](http://www.dbk.si)

# LCPS LEATHER CUTTING PRODUCTION LINE

LCPS leather cutting system adopts the most advanced high-definition full-color leather contour acquisition system, with high-precision scanning camera to extract leather irregular contour shape, area, defects and other information. Automatic nesting system maximizes leather utilization, unique three-segment work flow can greatly reduce labor intensity, promote productivity, boost comprehensive performance. Productivity can be increased by 20% when compared with traditional leather cutting equipment.



## LCPS FUNCTIONS

-  IECHO CUT SERVER Control Center
-  IECHO Super Automatic Nesting System
-  IECHO Modular Customization Solution
-  IECHO Regional Adsorption System
-  IECHO Automatic Outline Recognition System
-  IECHO Automatic Knife Initialization System
-  IECHO Automatic Feeding System
-  IECHO Motion Control System

# SYSTEM FEATURES

## Q1 THE ADVANCED HIGH-DEFINITION FULL COLOR LEATHER CONTOUR ACQUISITION SYSTEM

With high precision and high speed scanning system, it only takes 45s to extract the information of a piece 55 feet leather, including leather contour, circumference, area and defects. Automatic image processing system will amend and integrate the scanning result, to maintain the original condition, then create the nesting tasks automatically. With stable moving light box, IECHO high precision system can minimize the effect of outside light source. It can even extract leather scanning data under quite weak or strong light condition.

## Q2 POWERFUL ORDER MANAGEMENT

The whole set of order management system covers all the production lines. It can customize the best work-flow for enterprises according to their production modes. During the production, orders can be flexibly be modified, deleted and added. More than 5 groups of real-time monitoring module are used for the whole production line. Operators can freely edit every link in the chain, to maximize the production efficiency.

## Q3 PRODUCTION LINE WORK-FLOW

Compared with the traditional production model, this unique three-stage production work-flow can maximize the production efficiency, including leather checking, contour extract, irregular nesting, cutting and pattern collecting.

## Q4 AUTOMATIC OPERATION

After assigning the production orders, works only need to feed the leather to the work-flow, then operate it through Control Center software till job finish. With such a system, it can minimize the labor intensity and reduce dependence on the professional staff.

Time Axis	0m	5m	10m	15m	20m	25m	30m	33m
Time Qty	5minutes	5minutes	5minutes	5minutes	5minutes	5minutes	5minutes	3minutes
First leather	Loading, scanning, nesting	cutting	collecting					
Second		Loading, scanning, nesting	cutting	collecting				
Third			Loading, scanning, nesting	cutting	collecting			
Fourth				Loading, scanning, nesting	cutting	collecting		
Fifth					Loading, scanning, nesting	cutting	collecting	

**Maximize cutting time**

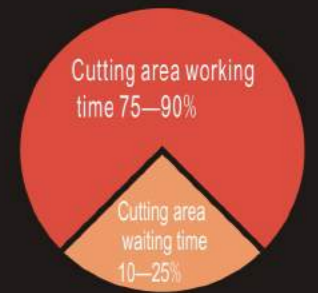
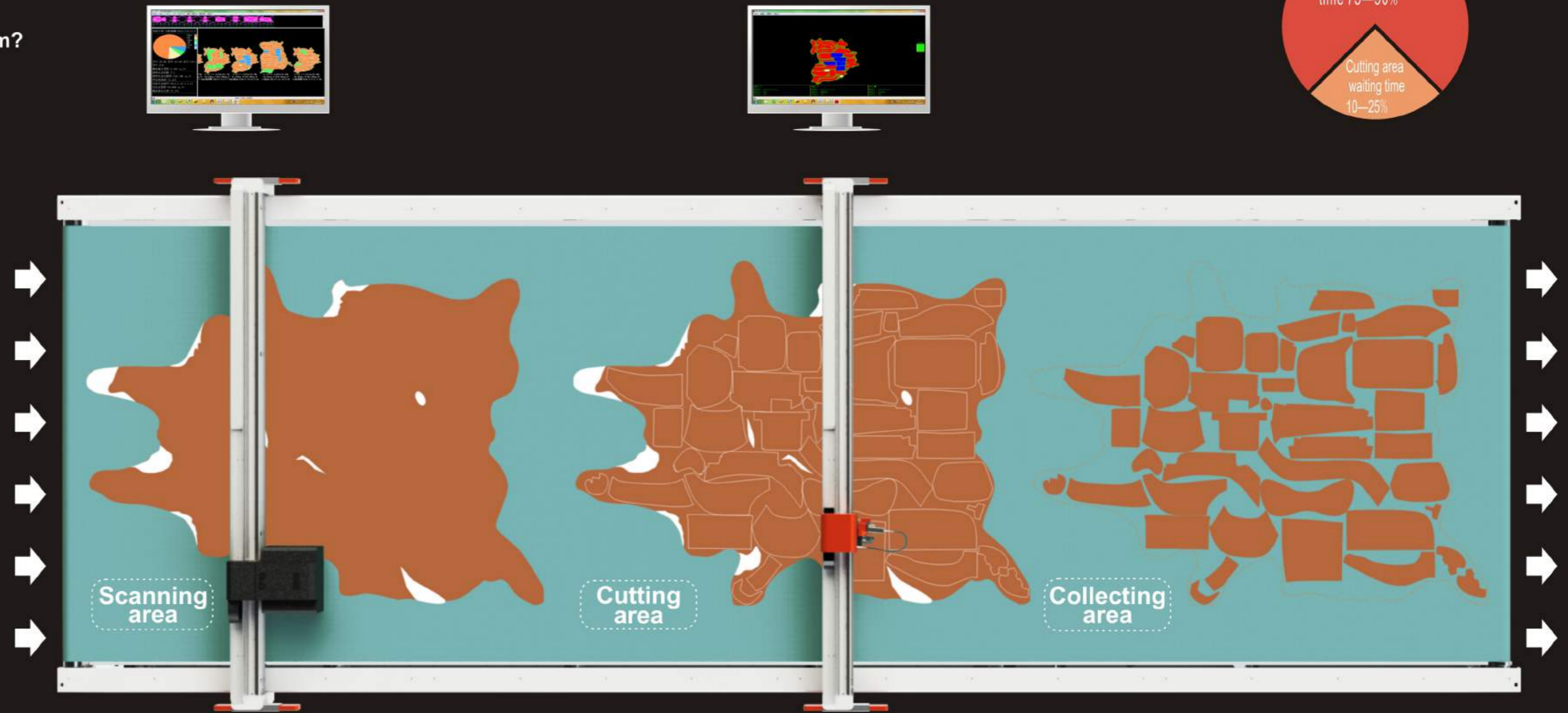
in unit time, LCPS cutting line can be processed without gaps, which can improve the effectiveness to 75—90%

Note: The actual cutting time varies with data and industries.

## LCPS leather cutting production line efficiency analysis

Why IECHO are the global leading leather cutting system?

	Traditional leather cutting machine with static table	LCP leather cutting production line
<b>Loading</b>	When spreading materials on tradition machine, big friction between felt and leather, makes it hard to spread leather well on the table.	While on LCP leather cutter, worker only need put a small part of the leather at the beginning of the table, the conveyor felt will load and feed forward the leather to scanning area automatically. It needs 2 staff for leather of 55 feet or bigger size, one for machine operation, the other as assistant. It needs only one staff for 10 feet leather or smaller.
<b>Nesting</b>	1. Manual nesting: Use projector to project cutting patterns on leather, do nesting by hand. It takes a long time. 2. Auto nesting: Scanning with camera fixed over the table. Precision is poor and it is strict for light source.	Automatic scanning and auto nesting, without manual operation.
<b>Cutting</b>	One cutting machine can only do singly operation. It can not cut during nesting or scanning, which greatly reduced efficiency.	Cutting and scanning can be processed at the same time. Leather will be feed to cutting area after nesting.
<b>Collecting</b>	The work platform is taken up by pattern collecting, next leather can only be processed when last job finished.	Collecting table is the last part of work flow, It can do cutting and scanning for different leathers independently.
Traditional leather cutting machine with static table can only do different processes one by one, while LCP can do scanning&nesting, cutting and collecting at the same time, which greatly improved cutting efficiency.		



**LEATHER CUTTING PRODUCTION LINE**

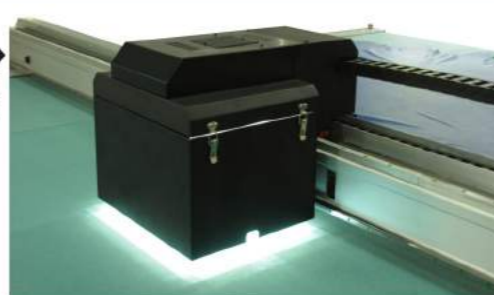
check leather manually



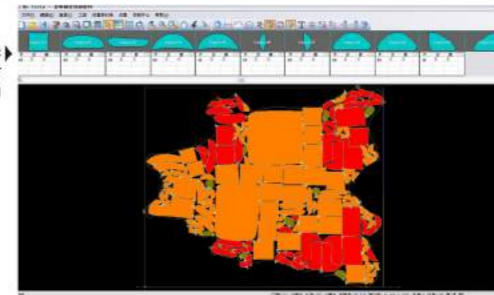
Mark defect spots



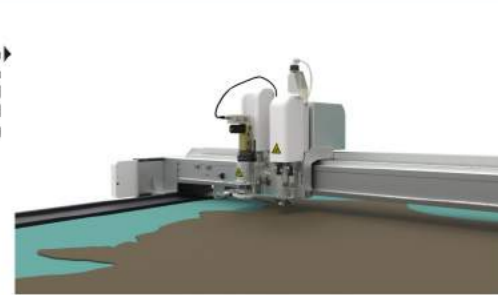
Scan the leather outlines automatically



Automatic irregular nesting



High precision and speed cutting



# GLOBAL LEADER OF LEATHER CUTTING SOLUTION

## Quality Advantage

### Perfect cutting results

- Aluminum vacuum table, Imported breathable conveyor felt, Second generation Electric Oscillating Tool(EOT), Independently developed motion control system, all enables it cut leathers fast and accurately, to avoid materials moving during cut.

## 02 IECHO automatic outline recognition system

Record the data of leather shape, area and defects etc.



## 03 IECHO second-generation EOT

High frequent electric oscillating tool, to realize perfect material edge cutting.



## 01 IECHO super nesting system

IECHO super nesting system can maximum leather utilization, avoid unnecessary waste.

## 04 IECHO Motion Control System

Independently developed motion control system, CUTTERSERVER Control Center to make cutting process smoothly, efficiently and conveniently.

## 05 Infrared safety device

Safety protection device with high sensitive infrared sensor, can ensure the safety of person and machine.

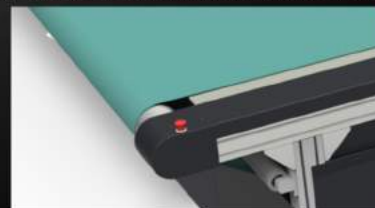


## 06 Vacuum table suction zone digital control system

Choose the optimized suction zone according to the size of materials.

## 07 High quality imported felt with good color contrast

Materials can be fixed well with strong felt friction, improving cutting accuracy. Good felt color contrast enhances the leather contour recognition speed and precision.



## Software Advantage

### IECHO intelligent digital leather management system

- IECHO high-precision scanning system can recognize and record each leather shape, size, defect information.
- IECHO leather production management system can allocation patterns to different leather pieces according order models.

## Efficiency advantage

### Reduce production costs and improve productivity

- IECHO super nesting system can maximum leather utilization, avoid unnecessary waste.
- "zero" distance cutting, to further improve the utilization
- Intelligent System reduces the rely on operator professionalism.

**LEATHER**  
CUTTING PRODUCTION LINE

