

— Evolving network-connectible paper cutting machine —



# SC

100Z 115Z  
137Z

# SERIES

*Paper Cutting Machine*



# Advanced functions and safety performance SC Series paper cutting machine Has been released.

The accurate and long-life eRC Series paper cutting machine has further evolved, being released as SC Series.

More new functions have been added in pursuit of increased helpfulness and safety.

Ease of maintenance and efficiency are also enhanced. Install now and enjoy complete network connectivity that fulfils requirements of future needs. The technology and idea of ITOTEC which is well acquainted with the job site of paper cutting are packed in this new model.

The touch panel is easy to observe and large

The size has increased from 8.4" to 10".

A safety beam guard is installed outside at both ends

The sensor reaction area has been widened for safer maintenance services, knife replacement and so on. The location of the device can be changed to inside, similarly to the earlier model.

A waste removal window is installed

Paper waste having dropped inside the paper cutting machine can be removed quickly.

Resin at the backgauge comb teeth (Option)

Damage in the surface plate is suppressed.

The phototube-assisted clamp ascent safety function is activated during pedal operation

Protection is provided to avoid accidents caused by unintended clamp descent. (Selection can be made between activation ON/OFF).

The pedal high-pressure function is installed as a standard feature

ON/OFF selection can be made.



Connect a USB memory or the like to input or output data

A USB port is installed next to the monitor. With additional optional equipment, loaded PDF files such as the instruction manual can be displayed on the monitor.



A manual knife lifter is prepared (Option)

A knife replacement fixture with a cover is also attached

Knife removal/installation can be made smoothly.



LED cut line (Option)

Visible high-luminance LED lamp.

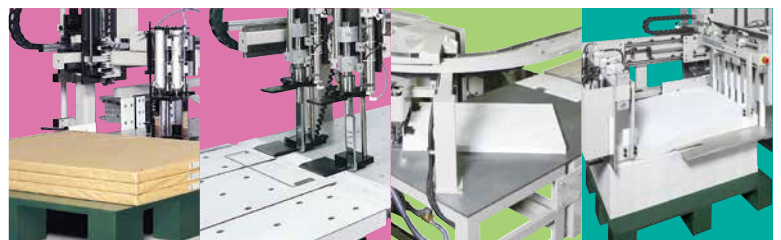
Superior basic performance is inherited

Optional units for maximum efficiency



Accuracy lasts long due to the reliable bidirectional pull drive.

The bidirectional pull drive of the SC Series paper cutting machine is ITOTEC's traditional swing drive method with which each of the left and right worm gears moves the knife. Excellent precision and reliability are obtained together with the unique swing angle at which the knife is pulled while it is pushed.



Paper feeding, paper ejection and power saving are considered totally.

ITOTEC meets requirements of needs for efficiency at various angles around the SC Series paper cutting machine. We will propose the best system with abundant experience and realization capability while listening to customer's requests. Our specialized planners will help realize special machine motions and special layouts. Feel free to consult us.

The operation button is provided with a key top, improving the durability

The size is increased, improving the ease of pressing.

The knife speed and maximum backgauge advance speed are improved

In an operation time comparison experiment, the cutting speed was higher than the earlier model, demonstrating a time reduction effect. (Measurement was made between SC-115Z and eRC-115DX. The paper setting time is not included.)

Comparison of operation time

Details of paper cutting

Press sheet size - Kiku size. Finish size - A4. Eight pages per press sheet. Margin : 5mm each. Push-out : twice (at backgauge retraction). Total cutting frequency : 12 times.

SC-115Z : about 58 sec.

Earlier model : about 66 sec.



The dent at the bottom of the main body is eliminated, increasing stability

Max. cutting width : 1168mm

**SC-115Z**

The photo shows optional specification.

Front removal/installation of the false clamp has become possible (Option)

The false clamp can be removed or installed at the front and the attachment for keeping the detached false clamp is installed in front of the main body.



Attachment for keeping the detached false clamp.

The cover of the internal access window is changed to the gate type

Can be opened or closed with a single hand. Maintenance services and knife adjustment can be done smoothly because there is no need to place the detached lid as it was done before. A phototube sensor provides interlock during work with the cover open. (In case of standard outer phototube specification)



The maximum clamp pressure is increased

The cutting accuracy of boards and vinyl materials is improved.

— Evolving network-connectible paper cutting machine — New model

**SC 100Z 115Z 137Z**  
**SERIES Paper Cutting Machine**



The SC Series paper cutting machine can provide for compatibility with CIP4 (option).

Max. cutting width : 1030mm



**SC-100Z**

Max. cutting width : 1370mm



**SC-137Z**

The photos of SC-100Z and SC-137Z show optional specifications.

Optional "SCISSOR HANDS" provides capability of using CIP4/JDF data

Anyone is a skilled operator at once

**SCISSOR HANDS**

(Option)



**Cutting × Magic?**

It's not magic.

It's a superior capability of SCISSOR HANDS AI.



Novel efficiency. Linkage with artificial intelligence (AI) produces new-dimension work.

If SCISSOR HANDS (option) is installed, the "SCISSOR HANDS AI" cloud server can be accessed where the best cutting procedure is created instantly with JDF data. Remarkable performance of the latest AI can be fully enjoyed.

Do not hesitate to contact ITOTEC's salesperson in charge for inquiries about functions, installation and so on of SCISSOR HANDS.

The correct direction of paper rotation and setting position are displayed.



Visit to play a movie.

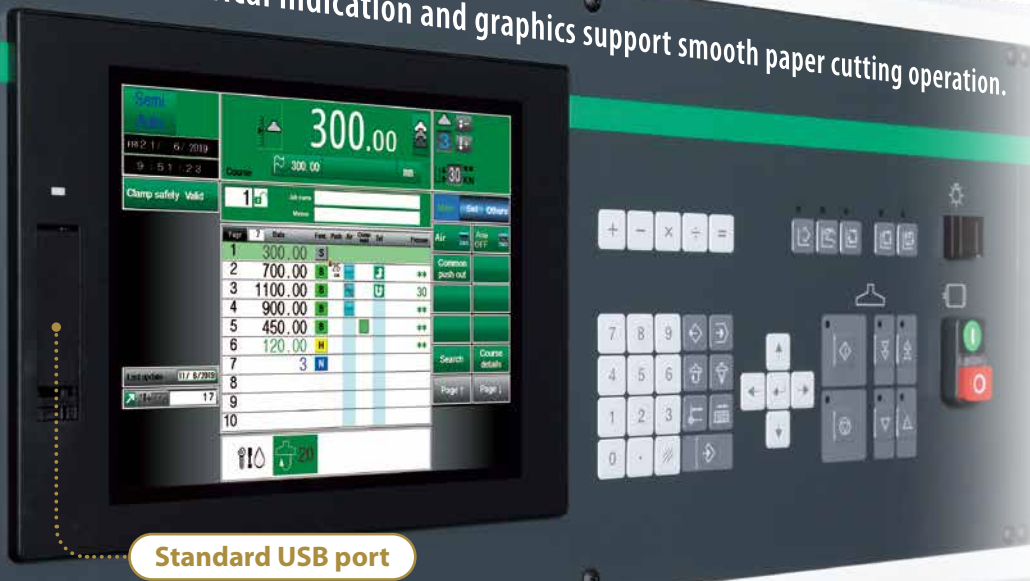


ITOTEC is the exclusive agent of SCISSOR HANDS in Japan. SCISSOR HANDS is a registered trade mark of OPEN SOFT.

# Large screen. Substantial helpful functions.

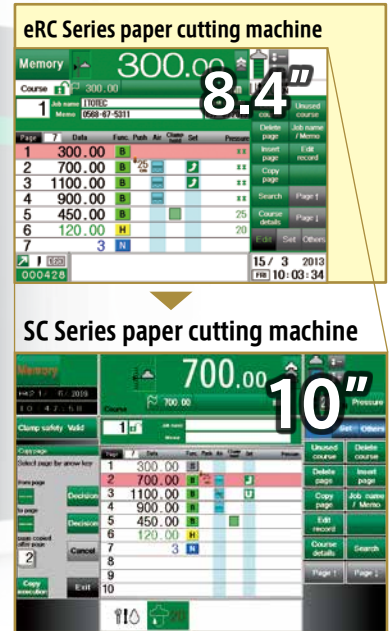
The control panel located at the core of the SC Series paper cutting machine is programmed with functions needed to operate the paper cutting machine only. It starts immediately after power-on because of absence of unnecessary loads, so that work can be started immediately.

Visible numerical indication and graphics support smooth paper cutting operation.



Standard USB port

## Screen size comparison



## Size agreement detection function

Size agreement detection action setting (in automatic mode)

- Always can be cut.
- Paper can be cut in the setting range. Range setting:  $\pm 1.00$  mm (0.10...5.00)
- You can cut only in case of exact match. (Cutting is possible in the correction range on the page where correction is set.)

**Can cut**

**ON** Cutting permission (per cutting)

- Cannot cut (size disagreed)
- Can cut (in size setting range)
- Can cut (size agreed)
- Can cut (size disagreed)

Exit

With this function, paper cutting is disabled if the stored data does not agree with the backgauge size. The setting can be changed according to the work so that cutting is performed within a preset range or cutting is performed only upon complete match.

## Setting direction window

Memo	Func.	Push	Air	Clamp hold	Set	Pressure	Air	Aria OFF
0.00	B						Common push out	
0.00	B							
0.00	B							
0.00	B							

The work setting procedure and direction of paper rotation are displayed clearly in animation.

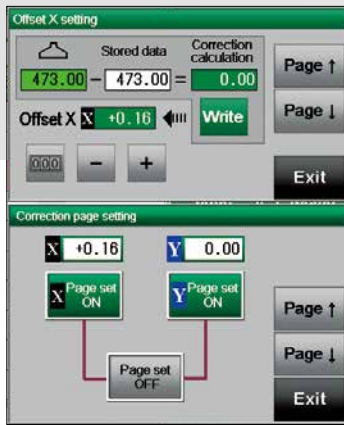
## Course list view and detail settings

Course	Job name	Memo
1		
2		
3		
4	ITOTEC	AI
5	ITOTEC manual	

Top : course list view. Bottom : course details screen.

Information about the vacant or occupied course is displayed on the number panel with 100 courses at a time. The course can be moved or copied on the number panel. Write down the job name or memo of each course to perform an AND search and look at the details of the job on course details view.

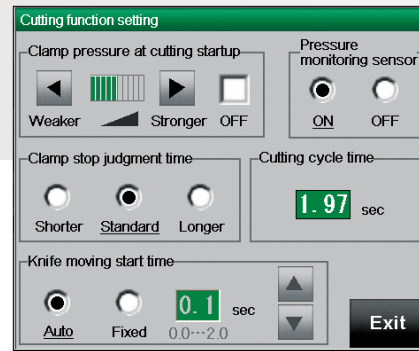
## Print deviation correction function



With this function, deviation of the press sheet from the stored cutting data is corrected. Even if the actual press sheet is dislocated, cut according to register marks. Deviation from the stored data is automatically calculated and the offset is stored.

There is no need to enter the offset again.

## Automatic knife timing variation function



The paper pressed under the clamp is automatically judged. Even if the stacked paper is high or if paper is pressed with pedal operation, the knife is driven immediately. The time needed for a cutting cycle can be reduced.



## Bright and visible TFT 10" color LCD touch panel

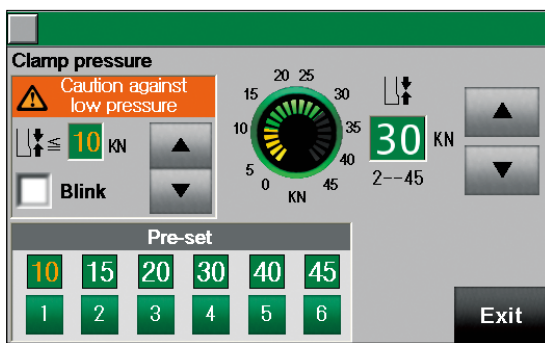
Because 10 pages are displayed at a time (center hold type scroll), course contents can be checked easily, contributing to reduction of entry errors. The language selection function changes the language among Japanese, English, Chinese (simplified or traditional), Thai, Dutch, Spanish and German. Operation can be conducted in your familiar language.

## Popup window function



An auxiliary window is stored outside the screen. The screen can be called up instantly when necessary while it is hidden during operation on the regular screen.

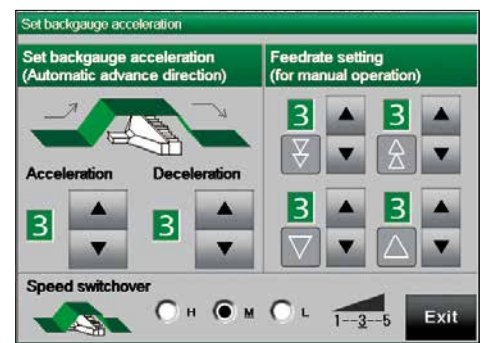
## Clamp pressure setting



The clamp pressure setting can be entered on the display. The pressure is entered numerically in the range from 2KN to 45KN in 1KN increments, so that variation in the pressure setting is eliminated.

The pressure can be preset in each course or each page in addition to presetting in 5KN increments. The pressure can be defined optimally according to the characteristic of the cut item or cutting position, eliminating waste paper caused by the pressure error. Complete cutting operation is supported.

## Backgauge acceleration control



A series of backgauge motions are controlled. Best for prevention of workpiece collapse. The general speed, start-up, deceleration and stop can be minutely adjusted.

## Alarm record function

Date	Message	
20/06/19 09:38	019 Backgauge home position unusual	56
18/06/19 13:49	019 Backgauge home position unusual	55
17/06/19 09:44	001 Main motor thermal relay trip	2
17/06/19 09:44	004 Knife lifter motor thermal relay trip	15
17/06/19 09:36	019 Backgauge home position unusual	54

Description of the failure in the alarm view is stored with the date, time and message. This memory is helpful during maintenance work.

## Message window/alarm function



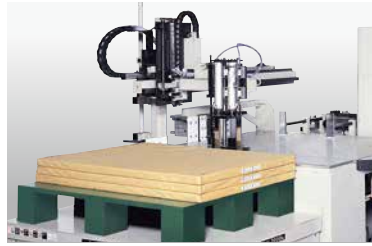
The replacement timing of the knife or oil is indicated with an icon. The current state of the paper cutting machine is visible.

# Reliable energy-saving performance!

The paper feeder/discharge unit helps configure a cutting system that matches the job field.

**Paper feeding unit** Can be installed on either the left or right side of the paper cutting machine.

**Front loading system 1.4** **Front loading**  
**RFL 1.4** Left Right



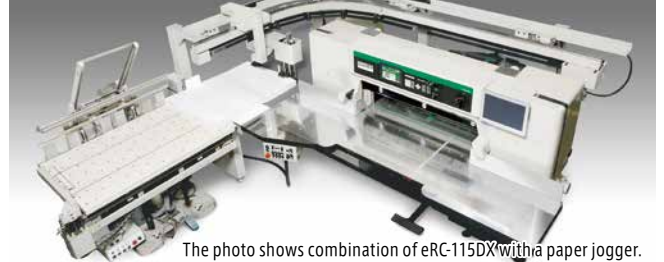
**Side loading system 1.2** **Side loading**  
**RSL 1.2** Left Right



**Side loading system 3.1** **Feed paper from the front and send it to the rear**

**RSL 3.1** Left Right

The maximum paper feeding height is 165mm. The paper handling capacity is similar to that of the paper cutting machine.



The photo shows combination of eRC-115DX with a paper jogger.

**Paper discharging unit** Can be installed on either the left or right side of the paper cutting machine.

**Unloader 5.0** **Front discharging**  
**RU 5.0** Left Right

Can be installed to any paper cutting machine. No pit work is necessary.

The cut paper is neatly and quickly stacked on the pallet.

Records of error messages are recorded.

Pallet-on-floor design eliminating pit work.

The safety sensors are self-diagnosed during startup.

Information is displayed during maintenance services.

Slide-down method effective for time reduction in each cycle.



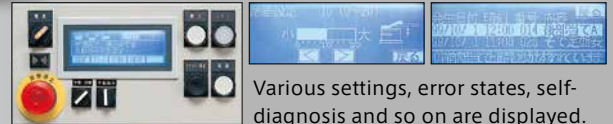
The photo shows optional specification.



ENERGY SAVING

**Gentle movement gives no damage to paper**

The slide table starts to move slowly, accelerating gradually while it is pulled away. Paper is stacked while paper dislocation is suppressed.



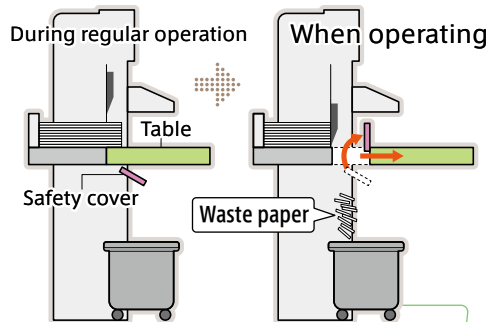
Various settings, error states, self-diagnosis and so on are displayed.

**This is helpful!** Enhance efficiency further with helpful optional units.

## RoboTRIM

Allows enabling or disabling the motion on each page.

**Waste paper drops under the table in interlock with the cutting switch.**



**Automatic waste disposal**

1. When the cutting switch is pressed, the table slides toward you.
2. The safety cover rises in interlock and the knife lowers.
3. After waste paper has dropped, the table returns to the regular state.

Because a series of motions are quick and smooth, the operator's working rhythm is not disturbed.

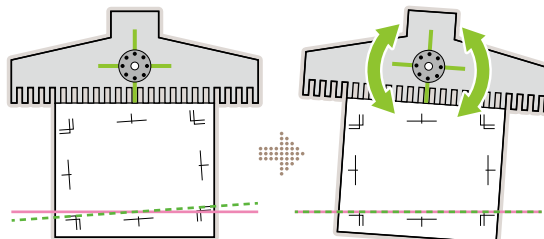
## RoboSWIVEL

A new function realized only by ITOTEC, which is familiar with the job field of paper cutting.

**Cumbersome register mark deviation is smoothly corrected.**



**Accurate swiveling mechanism**



Register marks are not parallel to the paper edge

The backgauge turns to align the register marks with the cut line.

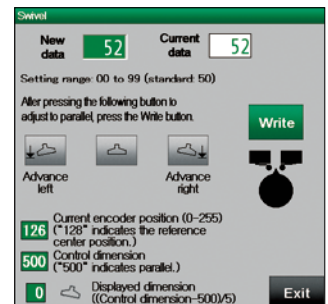
**Enhanced efficiency!**



**Add a damper to automatically transfer waste paper to the dust box.**

With an optional damper, the waste paper is automatically transferred to the dust box, eliminating interruption of work needed to discharge waste.

**Understandable number entry**



Enter the setting at the touch panel of the monitor of the paper cutting machine. Because the value can be stored, efficiency of repetition is also enhanced.

## Specifications of SC Series paper cutting machine [Standard type]

The colored items indicate performance better than that of the earlier model.



Specifications of machine	SC-100Z	SC-115Z	SC-137Z
Knife driving method	Double pull drive		
Cutting width	1030mm	1168mm	1370mm
Cutting depth	1000mm	1160mm	1320mm
Clamp opening	165mm		
Min. cutting size (with false clamp)	85mm		105mm * 85mm in case of front removal/ installation
Min. cutting size (without false clamp)	27mm		
Front table length	700mm		
Table height	875mm		
Overall width of machine	2650mm	2779mm	2995mm
Machine height	1660mm		
Overall length of machine	2437mm	2602mm	2752mm
Knife speed	<b>Improved cutting speed</b> 50 cycles/min. (eRC : 42 cycles/min.)		
Knife size	1270 × 150 × 12.7mm	1410 × 150 × 13.7mm	1610 × 150 × 13.7mm
Max. backgauge advance speed	<b>Improved cutting speed</b> 300mm/sec. (eRC : 225mm/sec.)		
Min. clamp pressure	2kN		
Max. clamp pressure	<b>Improved cutting accuracy</b> 45kN (eRC : 40kN)		
Main motor	3.7kW		
Feed motor	0.75kW		
Blower motor	0.4kW		0.75kW
Total electric capacity	4.85kW		5.2kW
Mass	3700kg	4100kg	4500kg

Specifications of monitor	SC-100Z	SC-115Z	SC-137Z
Display type	TFT color LCD touch panel		
Display size	<b>Improved visibility and operability</b> 10" (eRC : 8.4")		
External communications	<b>Ready to use data</b> Front USB port (eRC : none)		
Memory	500 courses 25000 pages (50 pages/course)		
Operation mode	Memory mode, manual mode, semi-automatic mode, fully automatic mode		
Language	<b>Improved operability</b> Japanese, English, Chinese (simplified, traditional), Thai, Dutch, Spanish, German		
Keyboard	50-syllable layout, JIS layout (QWERTY layout) selection		
Input unit	mm, cm, inch, shaku		
Input value	0.01mm		
Max. setting	9999.99mm (However, in limited range)		
Min. setting	0.01mm (However, in limited range)		

### Additional function and optional equipment

Function and ease of maintenance, and additional ease of knife height adjustment and safety of knife replacement are improved.

Additional standard function	Pedal high-pressure function (with interlock of phototube safety device) * Selection can be made between use and no use. / waste removal window / knife height adjustment window interlock (in case of standard both phototube outside specification)
Optional equipment	Front false clamp removal/installation / manual knife lifter (with knife replacement fixture attached with cover) / resin backgauge comb edge / LED cut line / computer instruction manual view (can be added easily upon insertion of an SD card) / large torque specification

### Increased cutting speed

The improved knife speed and maximum backgauge advance speed linked with time reduction support work efficiency.

The cutting speed was better than the earlier model, showing a time reduction effect, in a comparison experiment.

Operating time of machine (comparison with earlier model)	<b>SC Series paper cutting machine : about 58 sec.</b> Earlier model : about 66 sec.
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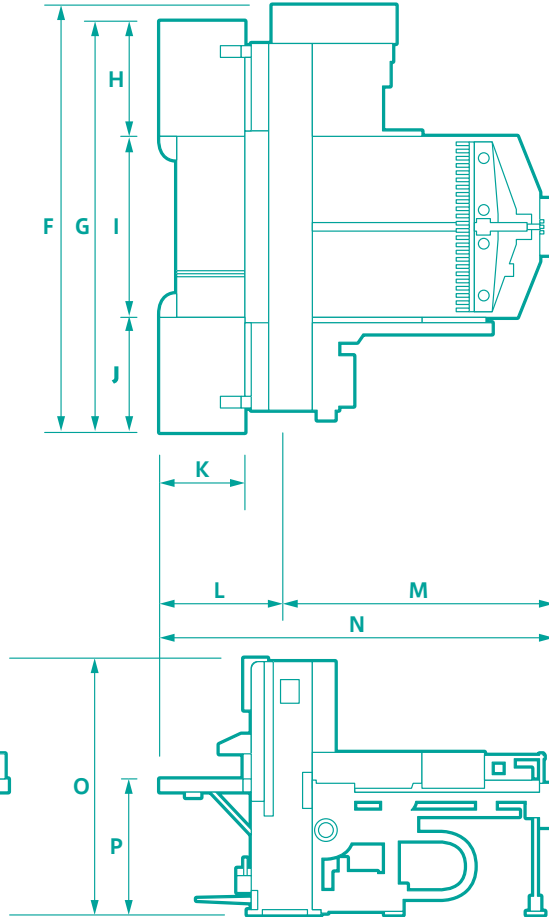
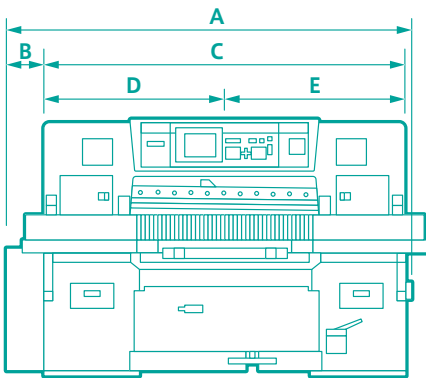
#### Details of paper cutting

Press sheet size	kiku size
Finish size	A4, eight pages per press sheet, margin : 5mm each
Push-out	twice (at backgauge retraction)
Total cutting cycles	12 times

Measurement was made between SC-115Z and eRC-115DX. The paper setting time is not included.

# Dimensioned drawing of SC Series paper cutting machine

	SC-100Z	SC-115Z	SC-137Z
A	2591mm	2686mm	2936mm
B		255mm	
C	2285mm	2380mm	2630mm
D	1130mm	1190mm	1305mm
E	1155mm	1190mm	1325mm
F	2650mm	2779mm	2995mm
G	2530mm	2668mm	2870mm
H		750mm	
I	1030mm	1168mm	1370mm
J		750mm	
K	550mm		807mm
L		807mm	
M	1630mm	1795mm	1945mm
N	2437mm	2602mm	2752mm
O		1660mm	
P		875mm	



To next 100 years



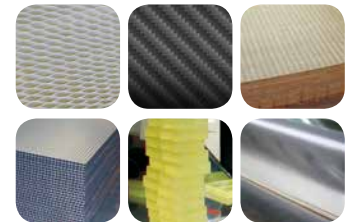
ITOTEC celebrated its 100th anniversary on February 13, 2019.

Look at latest information, operation movie, helpful information related to paper cutting and so on.

[www.itotec.co.jp](http://www.itotec.co.jp)



Cutting machine.com  
[www.dansaiki.com](http://www.dansaiki.com)



Cutting examples of various materials other than paper are described.

■ Description given in this catalog and specified specifications are subject to change without prior notice. ■ The color shown in the printout may be different from the actual one. ■ The monitor screen shows a combined image. ■ No part of this catalog may be transcribed or duplicated in any form without prior written consent of us.

Feel free to contact us for information about our products, consultation about installation, questions about the paper cutting machine and so on.



The SC Series paper cutting machine can provide for compatibility with CIP4 (option).



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