



# Weko Cut-*it* 2.0 for Knits and Wovens

weko

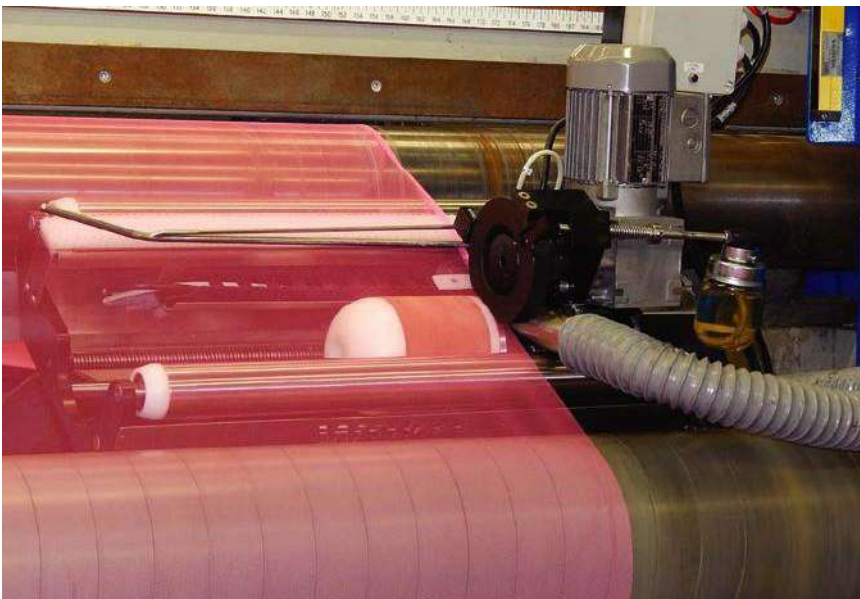


## WEKO Mission in Web-Cutting Technologies

Weko manufactures standard and custom tailored cutting systems for different web applications. Some models are designed for stenters and compactors with rail-pins and railclips. Others for coated fabrics, others work in production environments that process a vast variety of different fabrics – regardless of stenter condition, type of process or type of web.

These models assure positive control over the clipping waste without operator involvement.

The product range includes cutters for edge trimming and cuts that needs to maintain defined widths. It is possible include in ever process where it's necessary, in some process, full width cylinder will be necessary to improve it. These are suitable for materials like textiles, papers, cardboards or thick nonwoven-mats.



### Cutting Method

The scissors-like cutting principle disposes of two low-speed rotating discs. In order to achieve a shearcut operation the eccentrically arranged cutting discs are pressed to one another. The planar discs dispose of right angle cutting edges giving those the best cutting properties while minimizing wear.

### Advantages of the innovative Cutting Method

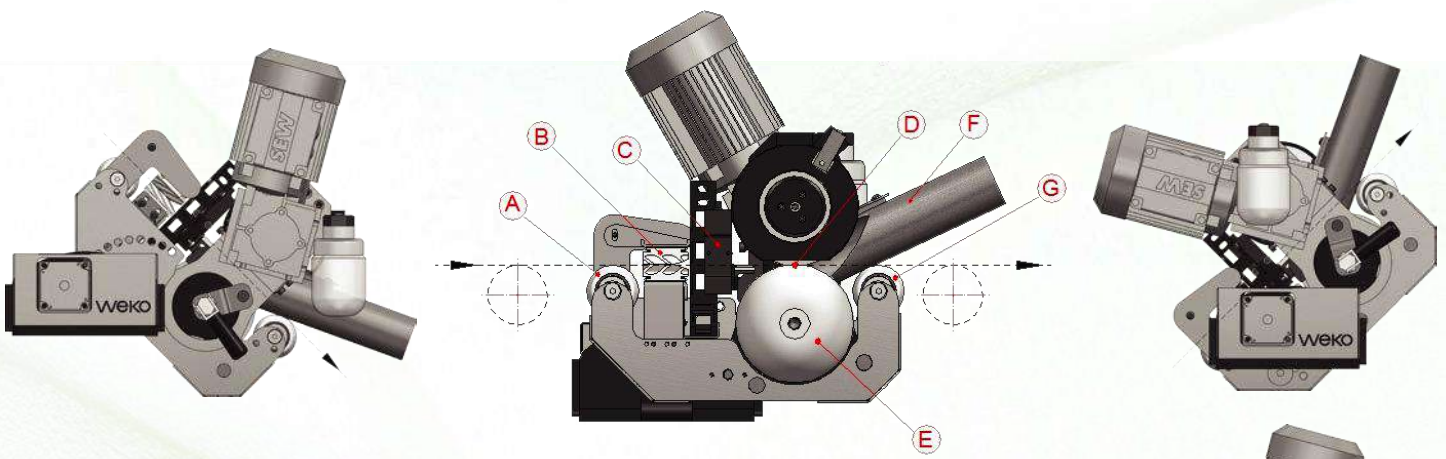
A variety of advantages are combined in the innovative two disc principle:

- Safety of handling. No sharp high-speed cutting blade can harm the machine operator.
- Low heat generation, particularly in the field of partially synthetic fabrics such as polyester or lycra, while dull high-speed rotary blades cause melting of synthetic fibers.
- Guide cylinder for better stabilization of the fabric, installed directly on the system.
- Compact and low design: less fabric stretch.
- Dynamic cylindrical fabric support.
- Cutting head with free selectable traversing path.
- Fixed decurling unit guarantee uniform decurling also when cutting

head moves inward.

- Cutting disc rotation dependent of production speed to maximize live time. \*
- The cut can be made directly on the pin perforation which results in considerably less clipping waste. This ensures maximum use of the fabrics.

\* Optional



- The fabric is transported into the cutting unit through the stabilizing cylinder (A).

- The fixed de-curling unit (B) flattens the edges in order to guarantee uniform de-curling also when the cutting head moves inward.

- The fabric passes through the sensor (C) that reads its edge and automatically adjusts the cutting width.

- This cutter (D) consists of a rotary shear cut system with twin discs.

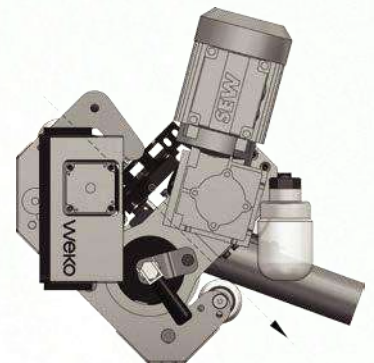
- To guarantee the perfect cut, the fabric be stabilized on a dynamic cylindrical support (E), on the cutting point. No gap between the dynamic support and cutting disc enables a cleaner cut even when cutting the discs are thinner because of regrinding.

- The clipping waste (F) is removed by a Aspiration system who consists of two blowers and his control.

- The fabric leaves the cutter through another stabilization cylinder (G), to follow your path without overstretch.

- The cutting system Cut-it 2.0 can be installed in any position to guarantee the perfect fabric line in all processes and machines.

- His low design favors the installation even in a small space and low passing of fabrics such as for example compactors.

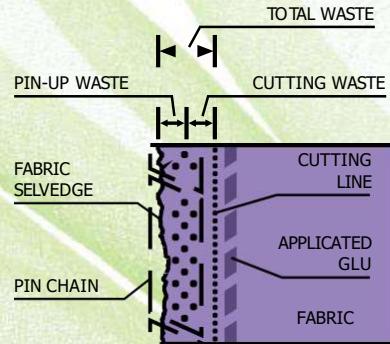


# How to calculate the return of investment?

Annual savings of fabric due to the reduction of waste.

Waste calculation table (in 1.000 m<sup>2</sup>).

A									
1,0	8	12	16	19	<b>23</b>	27	31	35	39
2,0	16	23	31	39	<b>47</b>	54	62	70	78
3,0	23	35	47	58	<b>70</b>	62	93	105	117
4,0	31	47	62	78	<b>93</b>	109	124	140	156
<b>5,0</b>	<b>39</b>	<b>58</b>	<b>78</b>	<b>97</b>	<b>117</b>	136	156	175	195
6,0	47	70	93	117	140	163	187	210	233
7,0	54	82	109	136	163	191	218	245	272
8,0	62	93	124	156	187	218	249	280	311
9,0	70	105	140	175	210	245	280	315	350
10,0	78	117	156	195	233	272	311	350	389



\*based in 22,5 h/day, 6 days/week, 48 weeks/year = 6 480 hours/year  
 A = mm ( material saved per fabric side)  
 V = Process speed in m/min

## Example:

A - mm (material saved per fabric side)

B - Process speed: 30 m/min

C - Total saved fabric per year\* (in 1 000 m<sup>2</sup>)

$$A = \frac{5\text{mm} \times 2 \text{ fabric selvedge} \times 30\text{m/min} \times 60\text{min} \times 6 \text{ 480}^* \text{ hours/year}}{1 \text{ 000}}$$

$$A = \text{Material saved} = 116 \text{ 640 m}^2$$

