

# Dipl.-Ing. Albert Classen

Vermittlung und Verkauf von Textilmaschinen und textilen Erzeugnissen, Ersatzteil- und Zubehörservice

New and second hand textile machines, spare parts and consulting



## LC 04 DS-E electrical heating system or LC 04 DS-D steam heated execution



View from front side



View from exit side

- adjustable, high performance crusher with highest efficiency
- solid and strong – to create long crush effects. Different number and sizes of tubes to adapt to the fabric to be finished for best results and best reproducibility
- 02 with two sizes of tubes or 04 with four different sizes of tubes
- DS – for double rope execution
- E stands for electrical heating and D stands for steam heated machine



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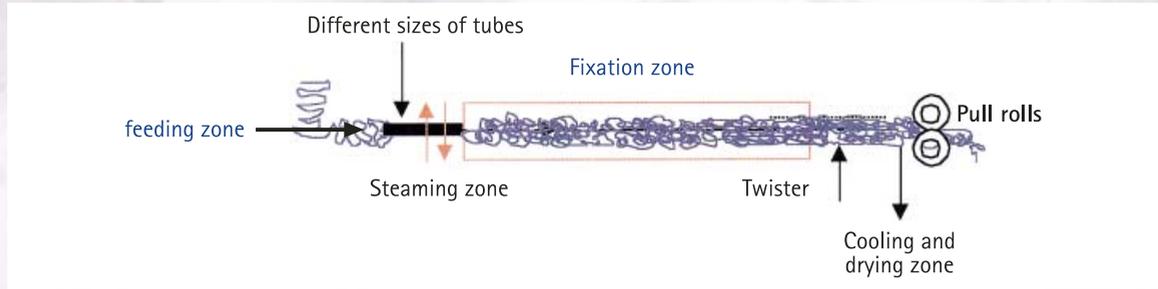
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## ■ Different effects of Long Crush on different articles for garments and decorations



## ■ Heating tank

In compressed condition the material is plastically deformed by steam injection and heating. Both the temperature and the amount of steam are adjustable, depending on the material and the desired result. With the steam heated execution we can reach appr.175°C, with the electrical heating we can easily reach 220–230 °C, this is sometimes better – for a better fixation and also higher production speed. Also the electrically heated machine is independent of other power supplies. Most of the fabrics run at 165°C to receive a good fixation. Test will be run with new qualities to find the right parameters. Some colours are sensitive to high temperature. Check dyeing recipes in order to use dyes solid to contact heat. If you produce different colours start with the light colours.

## ■ Crushing Process

Crushing process has to be performed according to the material and the density of the effect required. With our machine the fabric receives a very regular and intensive crush effect. The fabric is almost dry and cold, leaving the tube. This is a big advantage for the final finishing of the fabric. Due to the twister, our effect is not only straight but also varies in long direction, so that rolling processes of this fabric do not cause any problems. The flat woven articles are normally sent to a transfer calander, to fix the crush. On the transfer calander the finishing will be fixed in the way the customer desires. Therefore the inlet frame of the transfer calander must have two additional options:

1. One opening device by driven rollers together with a width control so that the fabric will be stretched to the final width.
2. One overfeed system that allows to feed more fabric.

With these two options the fabric can be finished with more or less visible crush effects. If the customer needs less effect the fabric will be stretched more in weft direction with device No1. No 2 will give more tension to the fabric in warp direction.

## ■ Technical Specifications

<b>Dimensions:</b>	L x W x H 5500 x 1000 x 2500 mm , (base frame, without infeed)
<b>Weight:</b>	approx. 950 kg
<b>Connections:</b>	Pneumatic: 6 bar, connection G 1/2" Steam pipe: 8 bar, connection G 1/2", +/- 100 kg/h if the machine is steam heated Direct steam: approx. 4 bar and 10 kg / h Electricity: 7 kW; 220/380V, 3 phases, 50 Hz if the machine is steam heated and 25 kW, 220/380V, 3 phases, 50 Hz if machine has electrical heating Condensate: approx. 50 l/h if the machine is steam heated
<b>Speed:</b>	up to 600–800 m/h, depending on material thickness , composition and weight of the fabric
<b>Materials:</b>	should contain up 65 % synthetic fibres
<b>Exhaust:</b>	Depending on material type and coating
	Capacity: 400 m³/h
	Air speed: 40 m/sec
	Connection: diameter 90 mm

Material data of components under pressure: Material in accordance with DIN; tube: Stainless steel  
Machine manufactured exclusively for CLASSEN-TM by Holthausen Maschinenbau GmbH, CE-conform