

TUMBLER T 310 / T 150

For many clothing and home textiles but also for technical textiles an improvement of the touch and / or a modification of the surface characteristics of the fabric is required. This process requires tumblers. Typical fabric types are terry, velour, plush, velvet but also upholstery textiles or artificial leather.

The fabric enters the tumbler either pre-dewatered (70–80 % water content) or moistened or steamed (max. 35 % water content). Particularly in continuous operation a subsequent finishing on a high-capacity stenter is absolutely required where the final width is set and the fabric is finally dried.

Function of a tumbler

The fabric is blown with a high circulating air flow through wave-shaped tumbler conducts. Beating against the conduct walls moves the fabric three-dimensionally. This makes the fabric surface clearly more voluminous and leads to a fleecy, smooth hand. Particularly in case of terry or plush fabric the pile is homogeneously raised over the complete fabric surface. On the following transport belt the fabric can relax.

The tumbling process is normally used with a maximum of 120 °C to prevent an overheating and yellowing of the fabric. An optional steam injection protects the fabric additionally and improves the residual shrinkage as well as the fabric hand.



Continuous tumbler T310 for the combined use with other machines



Discontinuous tumbler T150

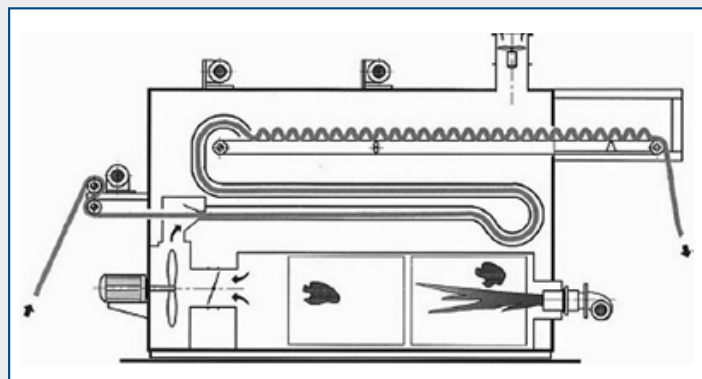
In the frame of a cooperation Thies and Brückner have developed proven technical solutions further and offer now an innovative tumbler and continuous finishing lines with the following advantages:

- optimum fabric characteristics (fleecy touch, standing pile, calm surface appearance)
- reproducible fabric results via PLC controlled parameters such as process time, speeds, temperature, steam injection and circulating air flow
- good accessibility and thus minimum cleaning and maintenance time required

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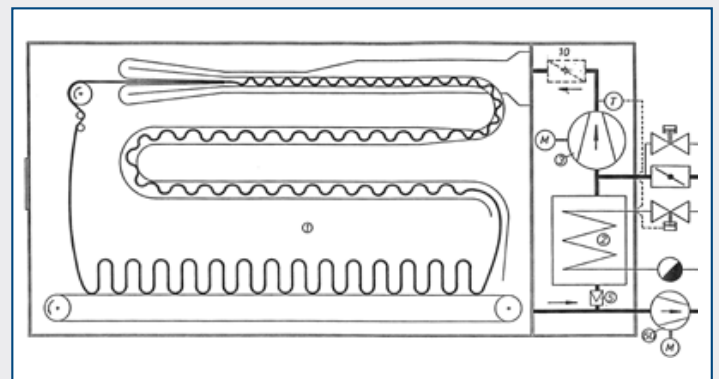
T 310

- continuous operation and thus integration into the complete line concept
- to meet the required production speeds several tumbler units can be connected in line



T 150

- optimum results regarding touch and volume are achieved via adjustable process times (approx. 30 min.)
- short loading and deloading times since the fabric is transported open and in a controlled way through the line



	T 310	T 150
Working width (m)	1.8 / 2.4 / 3.0	1.5 / 2.4 / 3.0
Speed (m/min)	2-20	-
Evaporation capacity (kg/h)	max. 250	-
Filling quantity (kg)	-	150
Tumbling time (min)	-	approx. 30
Fan output (kW)	30 / 44 / 60	22 / 44 / 60
Steam consumption, heating (kg/h)	800 / 1000 / 1400	600 / 1000 / 1250

Finishing line for terry fabric

