

## Better Yarn. Higher Performance. Less Energy.

COMPACTapron: a compacting device with no equal

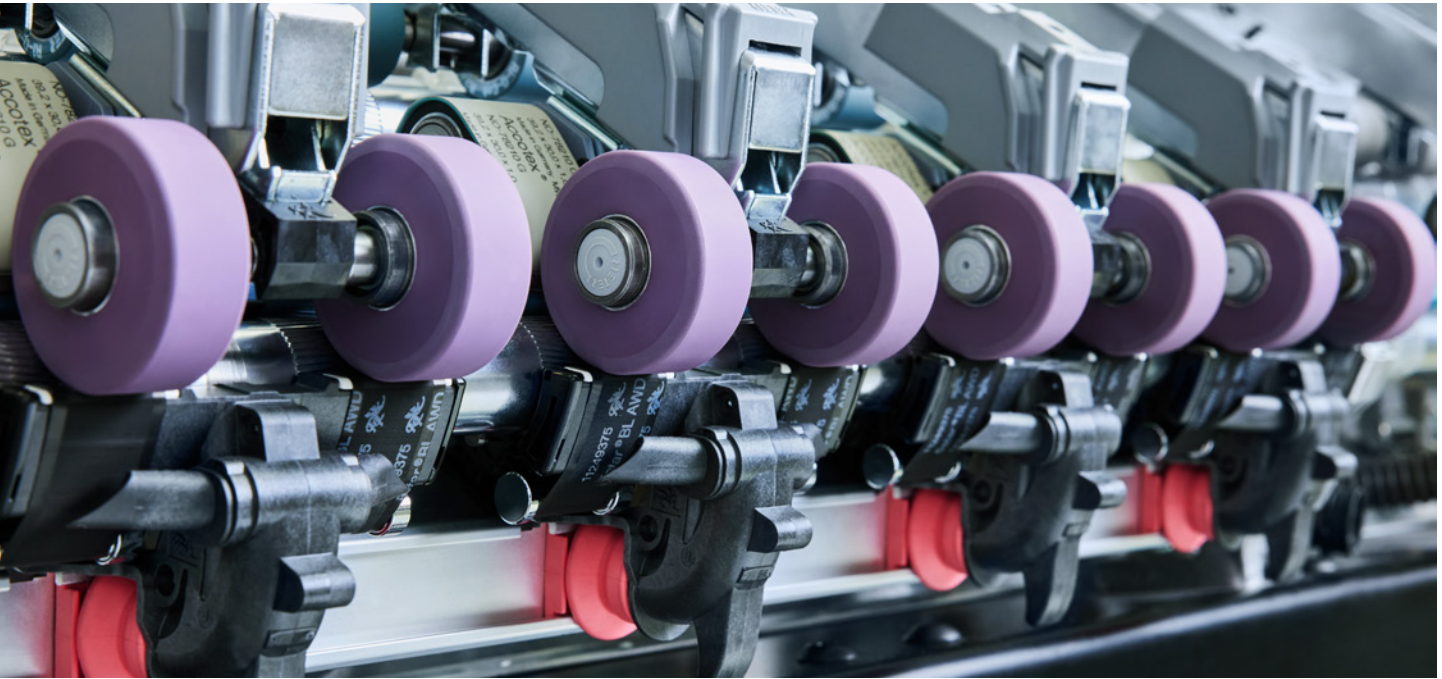


Fig. 1: COMPACTapron achieves higher tenacity values with an additional 0.5 to 1 cN/tex.

**In times of increasing demand for sustainability, the need to achieve better results more efficiently is huge. With unbeatable tenacity values, low conversion cost and energy requirements, COMPACTapron is sure to give mill owners a competitive edge.**

COMPACTapron (Fig. 1) is the latest compacting device by Suessen. It offers outstanding yarn tenacity values with an additional 0.5 to 1 cN/tex compared to other compacting systems. COMPACTapron reduces conversion cost by 10%, contributes to 60% energy saving for compacting and enables longer cleaning and grinding cycles.

### Tried-and-true favorite product to be

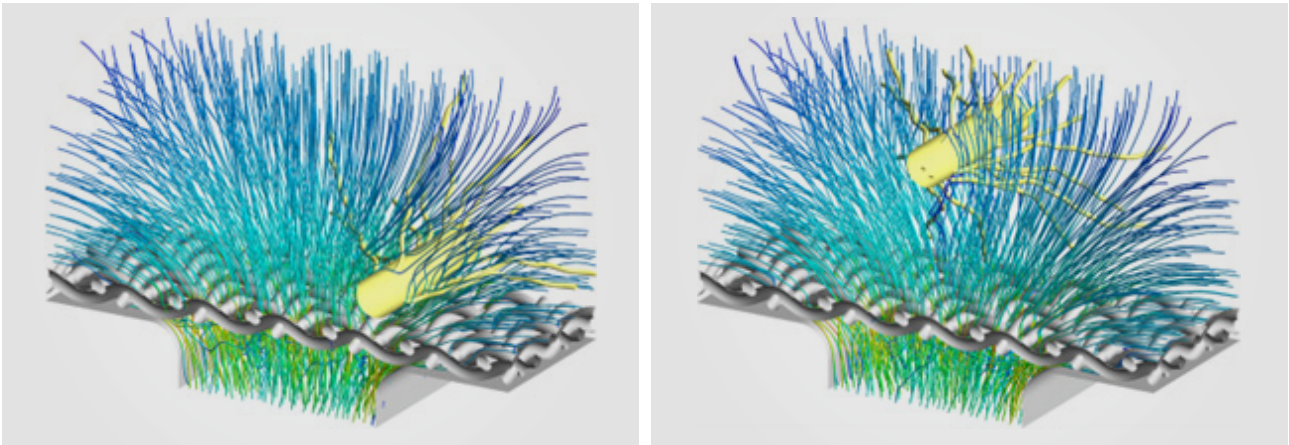
In November 2022, Mahima Fibres equipped some of its machines with Suessen COMPACTapron, with the ambition to produce better yarn. The compacting device delivered results beyond expectations and the order was quickly extended to cover a total of 57 spinning machines. Rohit Doshi, one of the owners of Mahima Fibres (Fig. 2), referred to the new system as “revolutionary” for its higher output of an additional 1.2 m/min while achieving better yarn values. COMPACTapron proved to be a great solution for both woven and knitted fabrics.



Fig. 2: Wolfgang Hiller, Sales Engineer at Suessen and Rohit Doshi, Director at Mahima Fibres Private Limited

### The 3D benefit

Unlike other compacting systems, COMPACTapron features 3D technology (Fig. 3) so that all fibers are freely guided through the compacting air flow. Coupled with innovative lattice aprons, the 3D compacting device leads to unprecedented yarn values with high tenacity and low IPIs.



**Fig. 3:** While other compacting systems only allow 2D, COMPACTapron uses 3D technology to transport fibers in the condensing zone over the suction slot in a distinctive distance to the lattice apron so that all fibers are entirely compacted.

Mahima Fibres confirms that COMPACTapron helped the company reach unmatched yarn tenacity with low IPIs. The tenacity could be raised by 1 cN/tex while the IPIs were reduced by 30%. The company also noticed longer cleaning and grinding cycles and reduced yarn breaks compared to their own existing compact devices. A 15-day field test showed an improvement of 38% of the running end breaks level.

#### Less is more

Developed to give customers a competitive edge, COMPACTapron benefits from a slimmer design significantly reducing spare parts costs: only the lattice aprons and cots must be changed. The lifetime of both cots and lattice aprons depends on the raw material, the climate, soilings and the application. Theoretically, lifetime similar to the lattice aprons used with EliTe can be expected.



**Fig. 4:** The air barrier flow (blue) buffering the compacting air (yellow)

COMPACTapron only has one large cot with extended grinding cycles which contributes to almost no lapping. Stripped-down to the essentials, the device is very clean – there is not much room where fluff can accumulate. Even the suction tubes are integrated in the units where they provide an air flow (Fig. 4) for the compacting air and soils coming with it.

As EliTe before, COMPACTapron is going to shake up the compacting landscape and is predicted to be spinning mills' number one and most compelling compacting system.