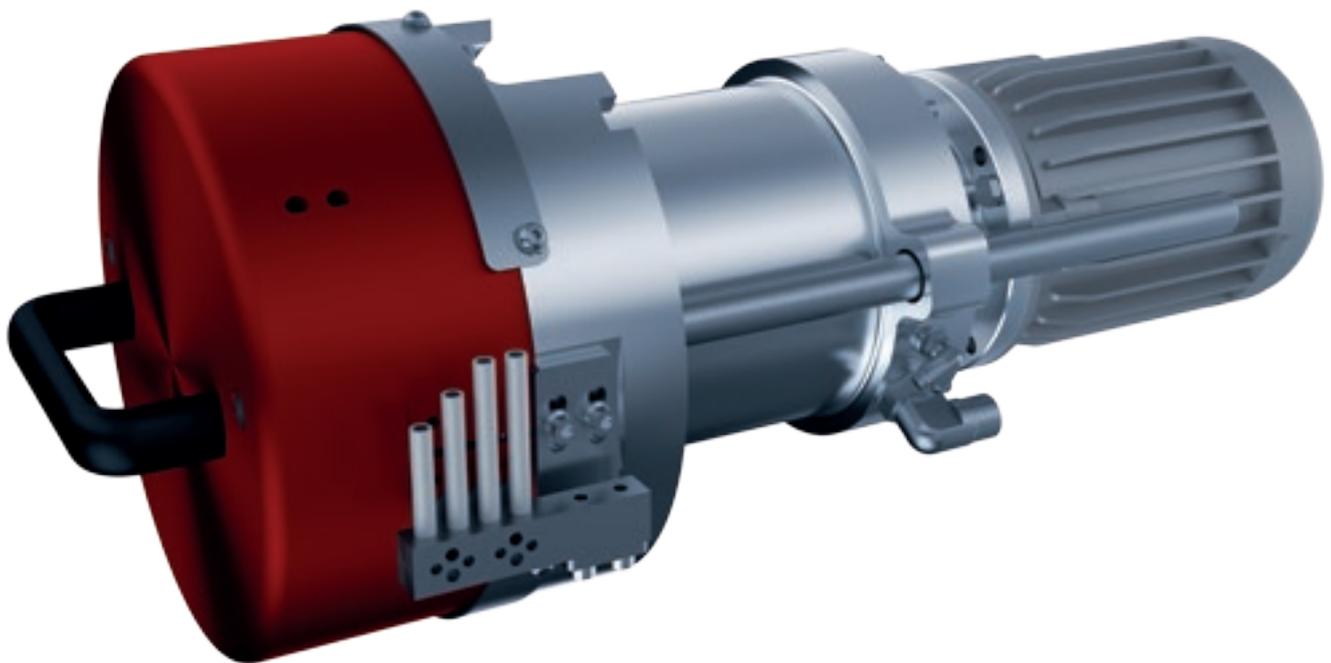


**oerlikon**  
neumag

## **S+ RoTac<sup>3</sup>**

The Future of BCF Technology



# S+ RoTac<sup>3</sup>

## Energy-efficient tangling

Tangling BCF yarns generally has the purpose of preventing loop formations during tufting and weaving. Furthermore, tangle knots ensure a uniform appearance of the finished carpet, especially with tricolor yarn.

Higher and higher process speeds place increasing demands on the tangling. The consequences are even higher air pressures and the requirement of double tanglings resulting in increasing compressed air costs.

The rotating tangle unit RoTac<sup>3</sup> means an energy-efficient, very uniform tangling at high speeds. The compressed air consumption in the RoTac<sup>3</sup> can, according to the type of yarn, be reduced by up to 50%.

### Application

<b>Machine type</b>	Oerlikon Neumag BCF plant S+ Monocolor and tricolor
<b>Polymers</b>	PET, PP, PA6 and PTT
<b>Titer (dtex)</b>	PET mono: 600 – 4,000 PET trico: 1,100 – 3,600 PP mono/trico: 600 – 4,000 PA6 mono/trico: 900 – 3,300
<b>Speed</b>	Up to 3,200 m/min winder speed
<b>Typical pressure range</b>	5 – 9 bar



## Up to 50 % less compressed air through pulsating air flow

With the RoTac<sup>3</sup> the tangle knots are generated by a discontinuous compressed air impulse. In comparison to conventional tangle units with a continuous air flow, the compressed air consumption is reduced by up to 50% depending on the type of yarn.

The core element of the RoTac<sup>3</sup> is a rotating nozzle jacket which has a certain number of holes with a corresponding spacing according to the required number of knots. If a hole is positioned over the compressed air opening, an air blast is released and tangles the yarn. Therefore, compressed air is only consumed if a tangle knot is to be formed, thus considerably reducing the necessary volume flow and in turn the energy consumption.

## Uniform tangle knots also at high production speeds

With the RoTac<sup>3</sup>, tangle knots with defined spacings and tenacities can also be produced at high production speeds. Frequent tangle dropouts belong to the past. For the further processing, this means yarns with better qualities.

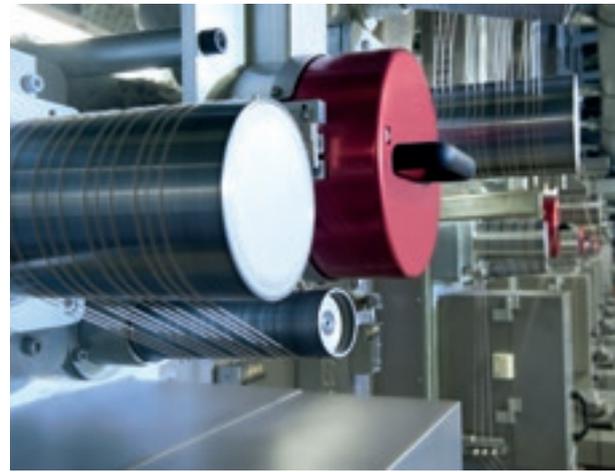
## High process stability through a gentle yarn guidance

The yarn friction is minimized by a gentle yarn guidance in and out of the tangle unit. This not only results in less dust development and a reduction of yarn breaks, but also in a higher process stability. This is of great benefit with fine titers and brittle polymers.

## RoTac<sup>3</sup> is e-save labeled

A high energy consumption not only causes high costs, it also puts the environment at risk with a lasting effect. With the RoTac<sup>3</sup>, a BCF tangle unit has been developed which achieves both: cost optimization and environmental protection.

**By releasing the compressed air as a discontinuous pulse instead of a constant, streaming air flow, the energy consumption for compressed air is reduced by up to 50 %.**



**e-save**  
comprehensive efficiency

**Oerlikon Neumag**

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