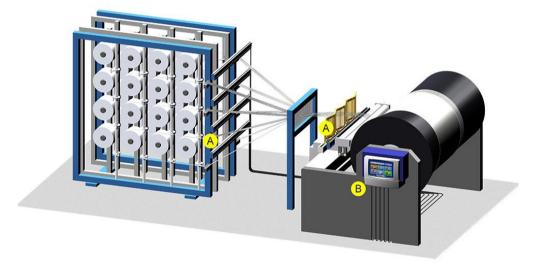


## Successful neutralization of synthetic fibres and hoses (creel)

Synthetic, textile or plastic fibers are applied for a wide variety of products. This process includes the production and transport of long strings of material. A good example in the automotive industry are car tires, which are made of extruded rubber strings which are processed over special creel machines.

Due to a strong electrostatic charge plastic threads, textiles or even plastic hoses can repel, attract or inflate each other during the production process and possibly even adhere to machine parts. This can cause major problems when laying down textiles, neatly winding threads and hoses or generally during the further production process.

With warper creels or beam machines it becomes clearly noticeable that the filaments are electrostatic charged during unwinding. The result is a very unclean winding pattern, where the filaments tend to stick to parts of the machine. The electrostatic charge increases even more when passing through the creel.

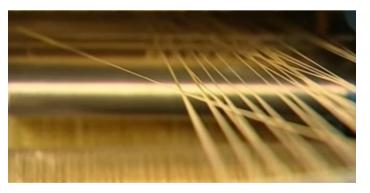


Note: Drawings and pictures do not show the application one to one, but clarify the situation and approach reality

At Simco we also see this charging of the nonwoven wires in the production of car tires, which has similar effects as in the warp creel / beam machine. When the steel wires incorporated in tires are replaced by plastic wires, the wires become highly charged, which can lead to strong electrical discharges (i.e.sparks) in the further production process.

The filaments exiting the extrusion nozzle repel each other because they are electrostatically charged. This makes further processing (stretching, twisting or winding) more difficult.

Through the sensible installation of static eliminator bars such as the <u>Performax IQ</u> <u>Easy</u> in the correct positions, these problems can be completely eliminated, even at very high material speeds.



In connection with the <u>Simco-Ion Manager IQ System</u>, all connected static devices can be monitored on efficiency and pollution. If you have similar problems, please do not hesitate to contact us.

Would you simply like to know more about the effects of static electricity? Please visit <u>www.simco-ion.co.uk</u> or subscribe to the <u>Simco Europe YouTube channel</u>