



# Long runtimes in tissue machines QualiFlex QSoft

QualiFlex QSoft press sleeves were specially developed for use in tissue shoe presses. The optimized high-tech polyurethane has outstanding properties such as abrasion, heat and chemical resistance. These properties allow for consistent dewatering over the entire running time, resulting in stable machine operation and operating efficiency.

## Proven field results

QualiFlex QSoft has already shown benefits in the field with exceptionally long run times on some very demanding tissue positions. QualiFlex QSoft provides stable performance and constant dewatering until the scheduled end of the run. In addition, QualiFlex QSoft has outstanding chemical and heat resistance. Field results are showing that the high-tech polyurethane material is giving an improvement of 10%–20% in abrasion, allowing for longer running times.

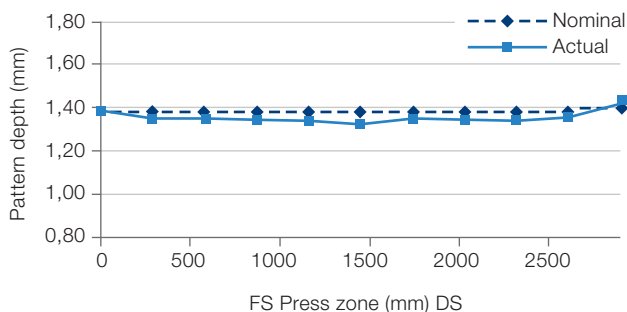
### Specially developed for tissue machines

Tissue shoe presses are subject to strong mechanical stress, which presents a special challenge for press sleeves. First, they are constantly stretched and deformed by the pressure of the Yankee. At the same time, the polyurethane material is subjected to extreme mechanical stress due to the high speeds of tissue machines and small diameters of the shoe press. Furthermore some tissue machines have a pressure profile change (tilt) that leads to an extreme pressure peak.

In addition to the mechanical stresses mentioned above, there are also the temperature differences between the relatively cool paper sheet and the hot area outside the sheet. High temperatures can make polyurethane brittle or soften the material. This will result in a reduction in abrasion resistance and can cause deformation of the grooves. Which will compromise production efficiency. When the void volume of the sleeve is reduced by wear or deformation of the grooves, it will lead to profile issues and increased energy consumption to dry the sheet.

For all these reasons, it is critical that a resistant polyurethane be used. QualiFlex QSoft has been specially developed for this extreme application.

#### Minimal abrasion (less than 5%) after 143 days of running on a European tissue machine



### The right surface for all cases

For optimum dewatering, grooved surfaces have proven successful on many tissue machines. QualiFlex QSoft is offered with a wide range of different groove designs and groove types specially designed to meet your requirements. In addition to the grooves, you can also choose from other surface structures.

Thanks to QSoft's innovative polyurethane, the groove geometry remains stable over the running time. The grooves do not collapse and the void volume remains constant and provides consistent drainage capacity.

### High-tech components

The dimensionally stable structure of QualiFlex has proven itself over decades. Every new development is laboratory tested and subjected to numerous evaluations on special test rigs. QualiFlex is tested under the most extreme conditions; speeds of 2500 m/min and line forces of up to 2000 kN/m.

#### Your benefits

- + Excellent dewatering performance
- + Stable grooves
- + Surface stability
- + Longer runtimes
- + Abrasion and wear resistance

#### Maximum runtimes with QSoft – Up to 33% longer than the competition



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