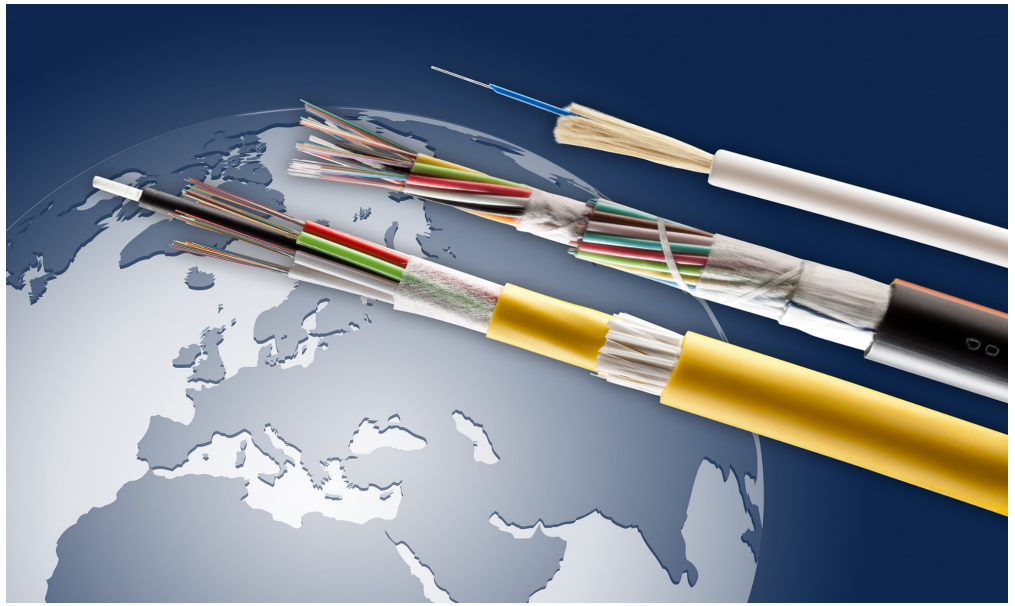
Ultradur® B6550 LNX

A New Solution for High Speed Extrusion of Microtubes for FOC Cables



IWCS THE International Cable · Connectivity Symposium

New Product Showcase

October 2, 2019

Prepared by: Caleb Spotts, Alexandra Jasman

BASF Product Portfolio for Fiber Optic Cable Jacketing

Ultradur B6550 L

- Modified with a lubricant to provide excellent feeding behavior on all kind of extruders

Ultradur® B 6550 LN

- Modified with a lubricant and a nucleating agent.
- Excellent feeding behavior and faster speed of crystallization. Higher crystallinity will cause higher stiffness and a more opaque color of the tubes.

NEW

Ultradur® B 6550 LNX

- Specifically for thin FOC buffer tubes = microtubes ≤ 1.4 mm

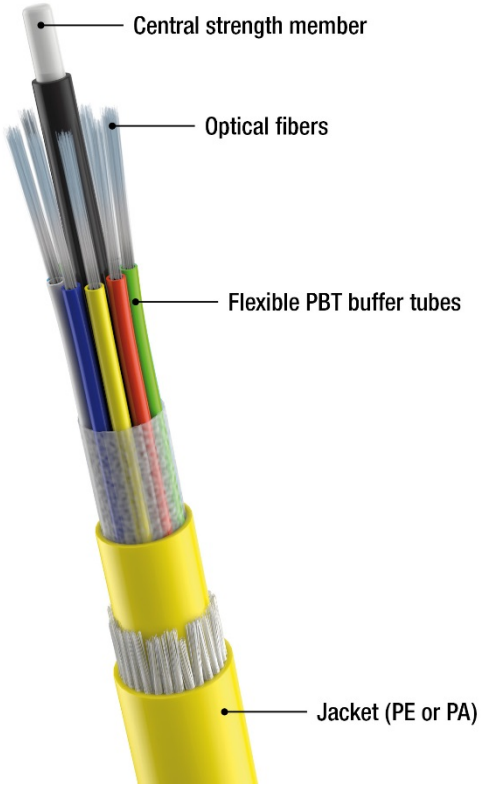
Developmental

Ultradur® B 6550 LNX with addition of Flame Retardant

- Successful trials completed for dry FOC tubes

Ultradur® B 6550 LNX

- Specifically developed for FOC microtubes of ≤ 1.4 mm
- Improved mechanical properties at low thicknesses
- High molecular weight and high viscosity
- Excellent feeding behavior and processability with high melt stability
- Excellent chemical resistance
- Low coefficient of thermal expansion and
- Very low water absorption → Very good dimensional stability
- High stiffness and hardness



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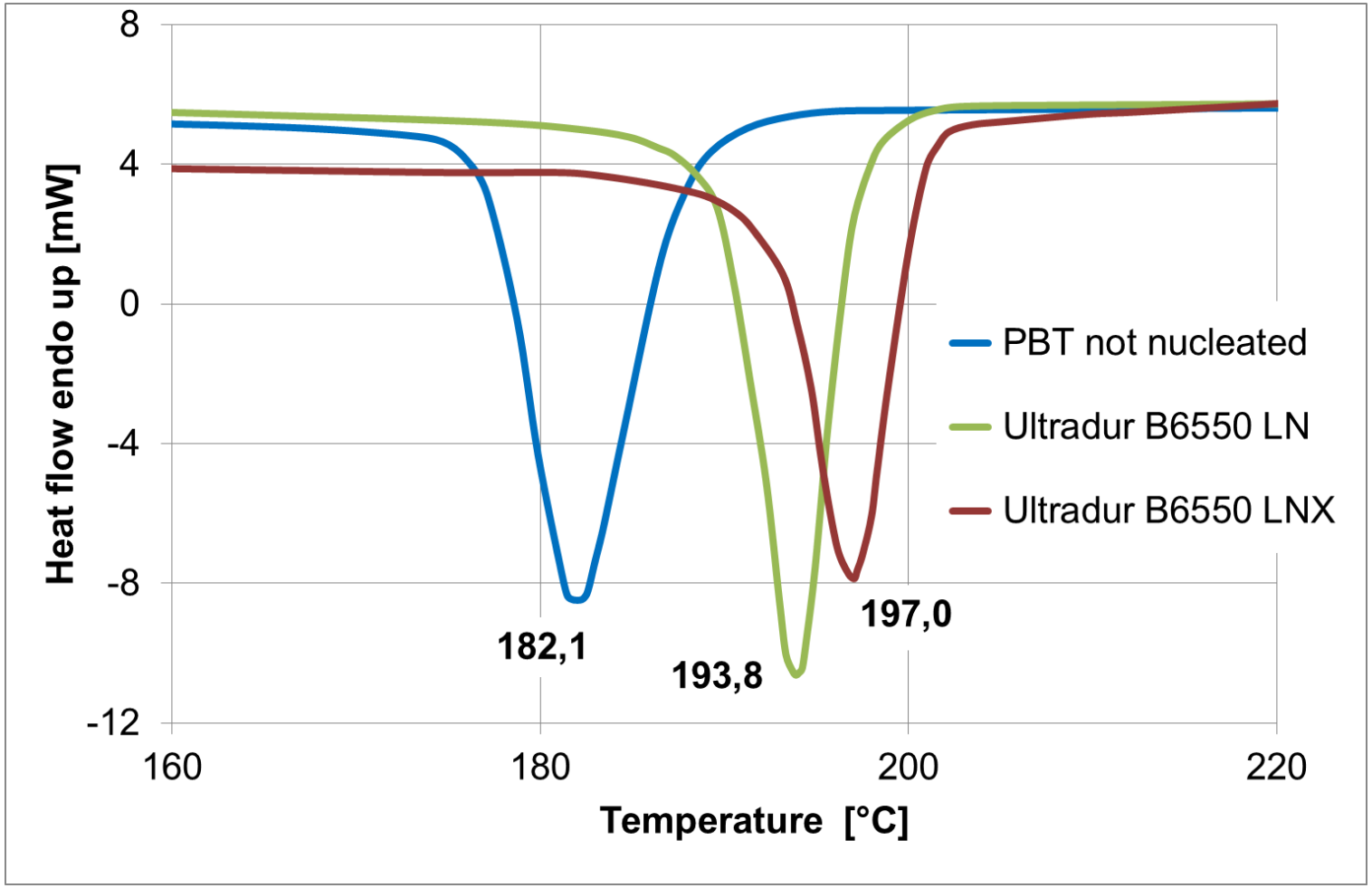
Ultrdaur B 6550 LNX
Changed crystallization kinetics



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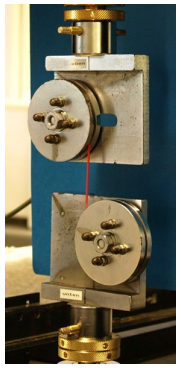
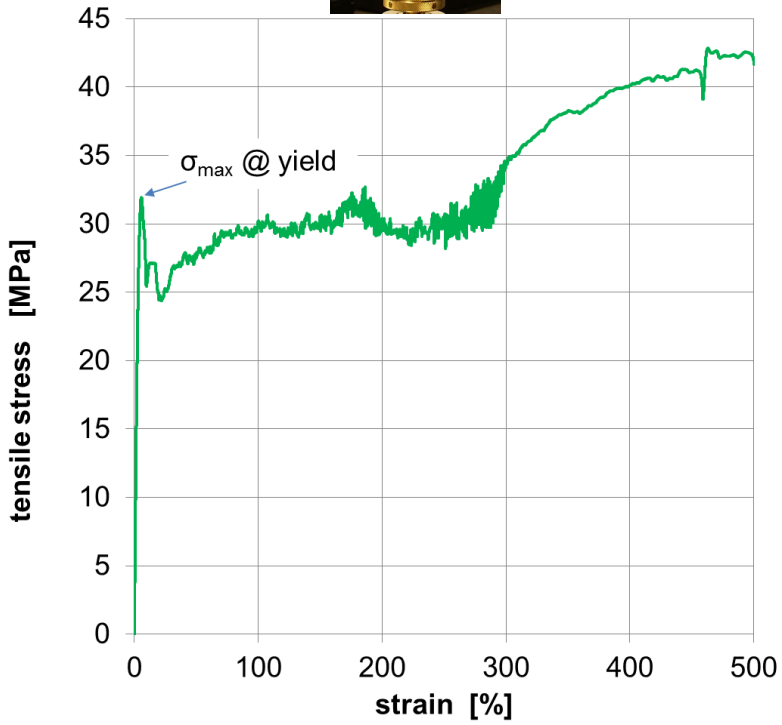
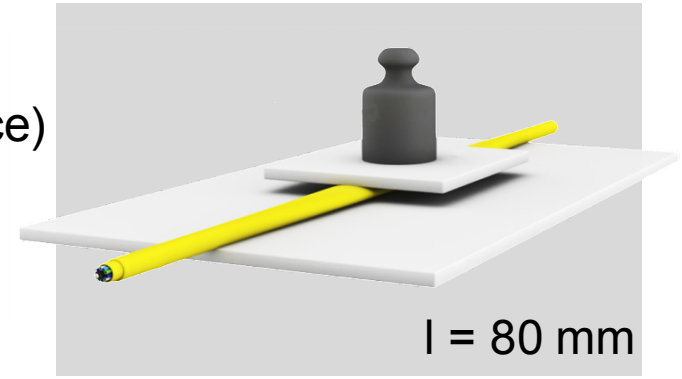
Ultradur B 6550 LNX
Mechanical tests and related properties

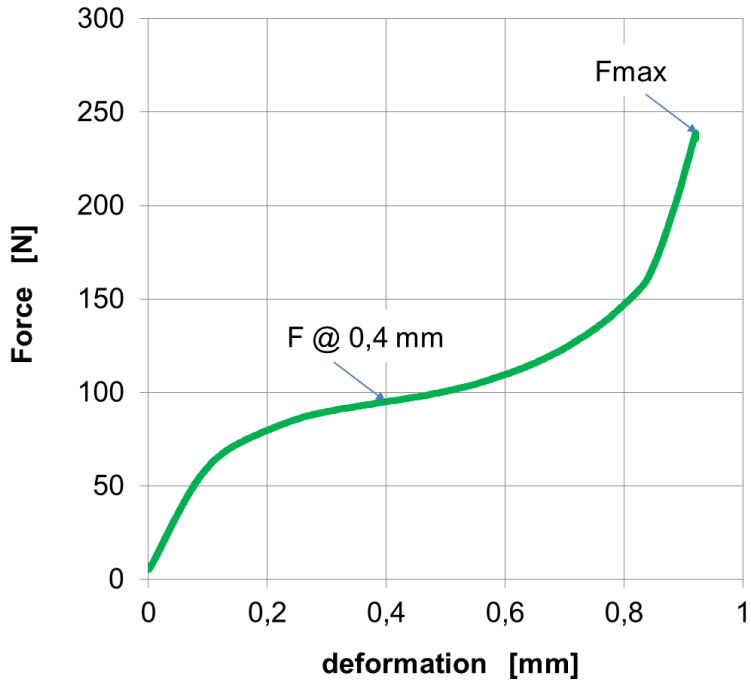
Tensile test



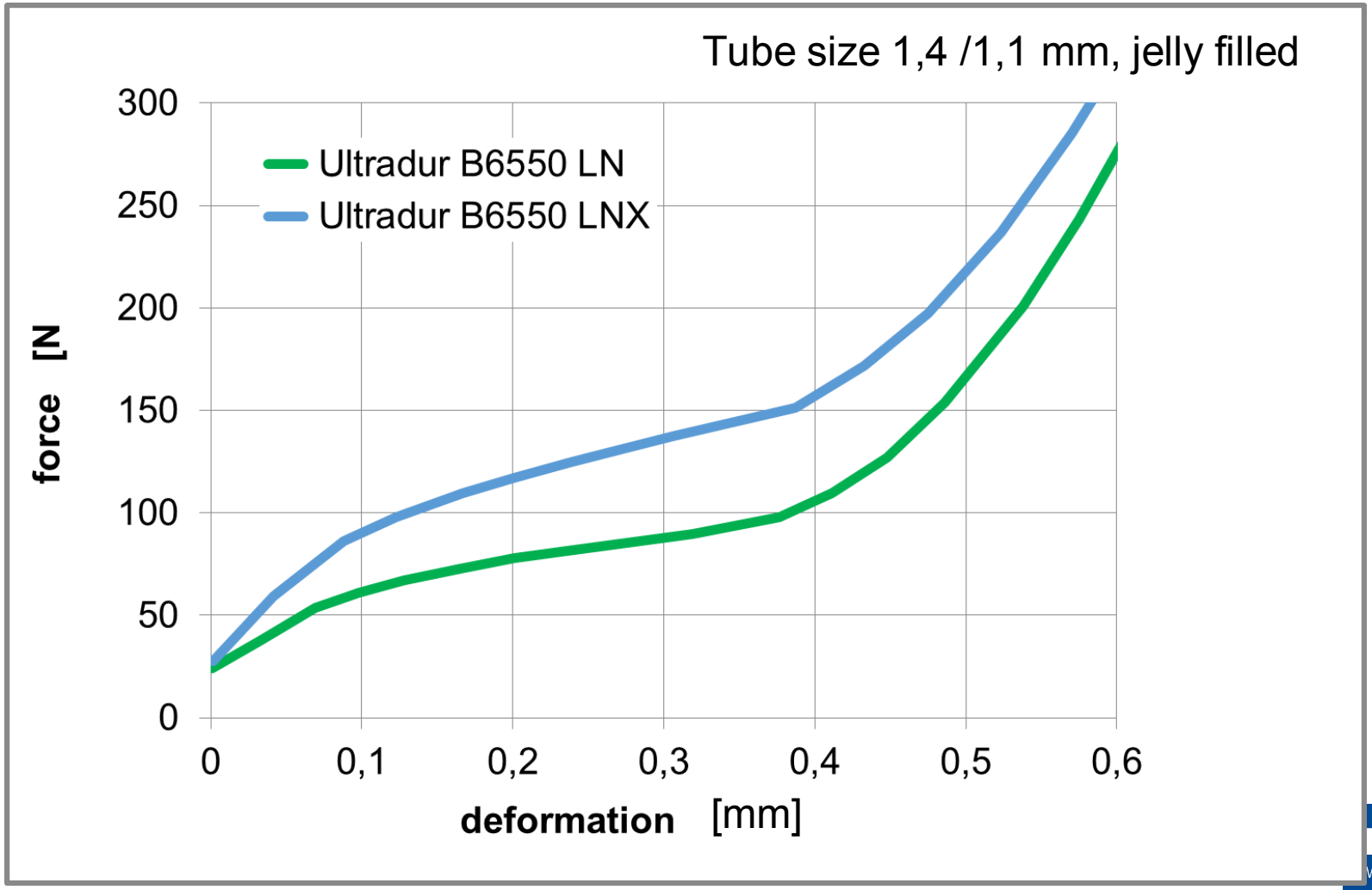


Pressure test
(crush resistance)





Ultradur B 6550 LNX
Pressure test



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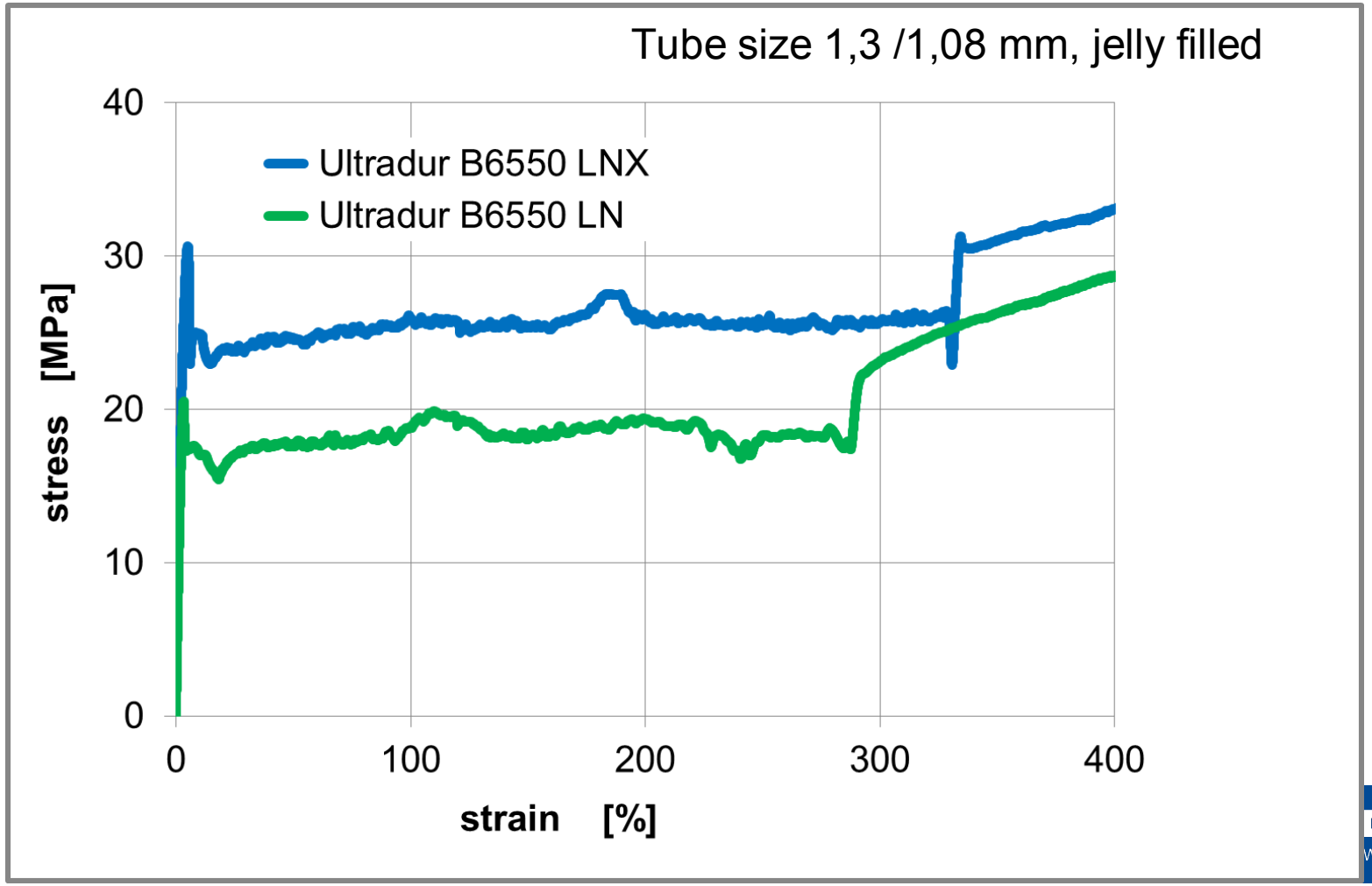
Ultradur B 6550 LNX
Tensile test



Ultradur B 6550 LNX
Results on microtubes 1,4 / 1,1 mm

Ultradur B 6550		LN	LNX
Tensile strength @ yield	[MPa]	25	31
Elongation @ break	[%]	>400	>400
Crush resistance	[N/dm]	115	165

Superior mechanical and processing performance proven by trials at

- Machine suppliers Maillefer and Rosendahl Nextrom
- Some European customers

Disclaimer

The information and data given here are based on our current knowledge and experience. This does not relieve the purchaser of our products from incoming inspection. The information and data do not describe the suitability of the product for a specific application. Composition - and durability statements - as well as any other statements are not to be considered as a warranty.

The values contained herein are based on analysis/testing of laboratory test specimens and represent data that fall within the normal range of properties for natural materials, unless stated otherwise. Colorants and additives may alter properties.

This information is provided as a service for comparative purposes only and in no way constitutes any product specification or the like. For component design the data contained herein are applicable as guideline only.

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