



telaketju

Yarns from post-consumer textiles

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Mechanically opened fibres

- Post-consumer cotton, collected and sorted by waste management company
- Polycotton (polyester/cotton) mix, including work wear collected and sorted by industry partners
- Knitted cotton elastane mix, collected and sorted by industry partner





Post-consumer cotton, collected and sorted by waste management company

8,4 g



8,2 g



7,9 g



Polycotton mix, including work wear, collected and sorted by industry partners

4,8 g



6,0 g



5,6 g



Knitted CO/EL mix, collected and sorted by industry partner

12,2 g

Summary and conclusions

- Mechanically opened fibres from post-consumer textiles can be produced to yarns with ring spinning method
- However, blends with longer fibres are needed
 - In this case we used primary viscose fibres with length of 40 mm
- Opening quality (share of fibres and unopened fragments) and remaining fibre lengths had an effect on the spinnability



Thank you

Telaketju is an active cooperation network that aims to promote the sustainable production, use and circulation of textiles. Telaketju research work creates a basis for business in accordance with the circular economy and builds a Finnish ecosystem for textile recycling. Companies, associations and research organizations, as well as municipal waste facilities, are making the change.

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