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FACULTY OF INDUSTRIAL TECHNOLOGY

DEPARTMENT OF TEXTILE TECHNOLOGY

THE EFFECT OF FIBRE PREPARATION PROCESSES ON COTTON FIBRE QUALITY

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Abstract

This report focuses on all the pre spinning processing stages that cotton fibres undergo with particular emphasis being placed on the effect spinning mill fibre preparation processes on cotton fibre quality. Commercially available fibre quality measurements are then carried out on medium staple cotton, starting with virgin lint on the bale lay down and repeating the measurements at progressive stages in the blowroom and the cards leading up to the combing stage. The impact of all the processing stages on each of the fibre parameters is observed. Further analysis is also carried out to determine the extent to which changes in some fibre parameters affect other measurements, establishing interdependencies among the measurements and therefore their predictive power..