



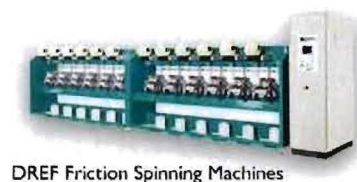
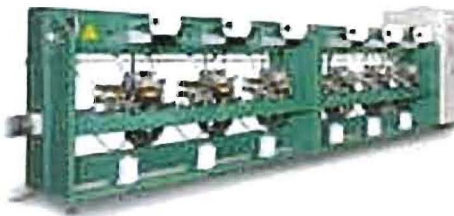
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DREF Friction Spinning Machines



Effect of process parameters on yarn twist and yarn strength in Dref - 2 friction spinning system.

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(Submitted in partial fulfilment of the Bachelor of Textile Technology Honours Degree)

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ABSTRACT

This study was aimed at maximising yarn production rate of Dref 2 spun yarn by achieving high yarn delivery rates with unobjectionable yarn quality. The combined effect of yarn delivery rate, spinning drum speed and suction pressure on yarn quality was investigated. A mathematical formula relating yarn twist, yarn delivery rate, spinning drum speed and suction pressure was deduced. The mathematical relationship was used to compute machine variables in order to come up with the best machine settings that allow yarn twist and strength to be maintained at high yarn delivery rates. The results revealed that it is possible to increase yarn production rate of Dref 2 spun yarn by using the mathematical relationship to control machine variables.