



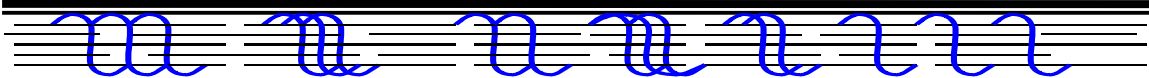
FASCIATED YARNS – A REVOLUTIONARY DEVELOPMENT?

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ABSTRACT

While Vortex Spinning is hailed as a revolutionary new technology it can also be viewed as a natural development in the technology of fasciated yarn production. From the earliest inception of fasciated yarns it was evident that there were limitations, which precluded its wide acceptance. From an understanding of the factors behind these limitations it has been possible to institute developments that have ultimately resulted in the present MVS system, which is being predicted to have profound impact on the cotton spinning industry.

KEYWORDS: spinning, vortex spinning, jet spinning, fasciated yarns, MJS, MVS

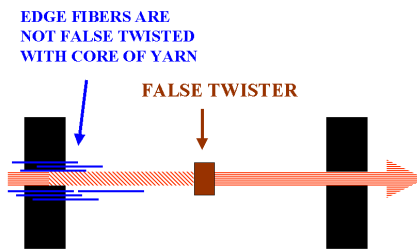


INTRODUCTION

The idealized structure of a fasciated yarn, which is shown above, consists of a core of parallel fibers held together by wrapper fibers [8]. The wrapper fibers and the core are composed of the same staple fiber material. If the structure of the yarn is the method adopted for characterizing this spinning system, then several different spinning machines, which have had varying levels of industrial acceptance, can be included in this group. These are:

- DuPont Rotofil
- Toray AJS
- Toyoda TYS
- Howa FS
- Murata MJS, MTS, RJS, Vortex
- Suessen PLYfil
- Fehrer DREF 3?

TWIST TRANSFERENCE



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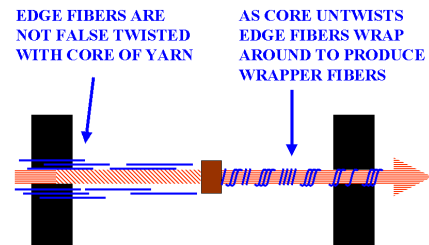


Figure 1