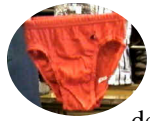


Roller-Air Yarns - Fabric and Garment suitability

Knitted Fabrics and Garments



The Roller-Air yarns are ideal for knitted fabrics. The important feature being their desirable bulky soft



feel, particularly for those garments requiring an aesthetically pleasant feeling next to the skin.



The much slower and very labour intensive



Ring spinners produce yarns with a similar soft feel and the knitting industry pays 10-12% more for these yarns than Rotor Spun yarns. However, Ring spinning machines produce a lean yarn without great bulk.

Towels

Fibre cleanliness is a crucial requirement for all towels and in this aspect Roller-Air yarns are much superior than Ring yarns. Most towel weavers require a surface which is soft, bulky and about 70% of the towel's weight. Yarn strength is not paramount. The Roller-Air yarns are sufficiently bulky, have the correct surface characteristics, and are sufficiently strong enough to weave.



Velour, Velvet, Corduroy and Brushed Fabrics

high quality end being ring spun, and the lower quality end being rotor, or cheap ring spun products. The Roller-Air's yarn structure is ideal for these fabrics and will produce a superb product. The yarns can compete across the board in these product areas. This applies equally to home furnishings (e.g. velvet curtains), as it does to clothing.

Denim

Rotor spun yarns are ideal for the weaving of denim and, except for brushed denim, the Roller-Air's penetration in this market will be small. However, the improved economics, combined with the characteristics of the Roller-Air process and yarn, should enable some penetration into the top-end where different fashion products create markets and also the bottom-end where fabric price is paramount.

Conventional Tie-wearing Shirts

The conventional - say business shirt - uses the finest yarns, and the more cotton in the yarn, the more expensive the shirt.

For such a shirt's warp yarn, it will take some time, if ever, for Roller-Air to make a large penetration. However, they may find a role as the weaver's weft yarn.



Casual Woven Shirts

Roller-Air yarn is ideal for the casual woven shirts in which a bulky product and a soft handle are good marketable features.

Woven Sheets

This is a complex area in that there is a preference, in many instances, for a soft handle: winceyette is the soft extreme. However, fabric strength does have a part to play also. Yarns are coarser than business/dress shirts and there will certainly be some areas in which the Roller-Air's yarn's improved aesthetics/appearance will balance out the lower fabric strength.

Yarns containing Elastomerics

The Roller-Air process is ideal for incorporating elastomeric yarns, and the additional yarn feeders can readily be incorporated and by-



passed to produce normal

spun yarns. This market is quite large, particularly for trousers in a range of fabric and fibre types. But like most things in textiles, it has its ups and downs.



A major economic factor

Cotton and/or man-made fibres are the raw material of the spinning process and are the major cost of yarn production. Consequently, another important economic factor is that the Roller-Air technology removes trash, dirt and short fibre as part of the spinning process. As such very dirty - and thus cheaper - cottons can be used to produce reasonably clean yarns. In effect the Mark 12 Roller-Air spin-box can 'turn a sow's ear into a silk purse'.