

African mill targets international standards

Alan Parker details the establishment and growth of a Zambian yarn-making plant where quality is the watchword

Many people seem to believe that the only place where textiles can flourish today is in the Pacific Rim – and one result of this is that many machinery makers are considering moving a substantial part of their organisations to be near to this market.

In fact, the idea that growth is possible only in the Far East is far too simplistic: there are many parts of the world where textile operations can prosper, if an entrepreneurial approach can be taken to ensure that the equipment purchased is appropriate to the skills of the indigenous workforce, and that there is adequate finance and sound management.

One example of a company which has successfully addressed these challenges is Swarp Spinning, of Zambia, in Southern Africa. The company is situated in Ndola, a town more usually associated with the Zambian copper mining industry than with textiles.

Swarp Spinning Mills Ltd. (SSML) started its spinning operations in 1984 with about 5,000 spindles and has overcome many complex difficulties and bureaucratic problems to expand steadily – such that by the end of 1996 it will have around 55,000 ring spindles and 1,400 rotor units, giving an annual production of about 16,000 metric tonnes of yarn.

Quality choice

Swarp management decided from the outset to produce yarns to meet international standards, as well as

satisfying the ever-increasing demands of the customer.

There was a clear awareness of the limitations of the indigenous workforce and senior management paid great attention to the selection of equipment which they considered would be appropriate to achieve their goals. Almost all the equipment has been sourced from European manufacturers, but the senior management of Swarp has selected the individual machines based on technical and financial considerations.

Equipment types

As a general rule Swarp's policy has been to purchase equipment offering the best automation possibilities with regard to quality and machine efficiency, but to disregard automation options designed simply to eliminate unskilled manual tasks.

Because the company's machinery has been purchased over a 12-year period, Swarp has sought to update plant continually, so that, by the end of 1996, all equipment will be capable of meeting current standards.

Fibre opening

Swarp uses only African cottons, most of which have been hand-picked. The average micronaire of the cottons is a relatively fine 3.9 to 4.0. By working in close consultation with the machinery makers, the number and type of cleaning points were selected to give an optimum balance between producing a

Cotton laydown showing a large number of bales employed to give good mix.



Bales of Zambian cotton being unloaded. Because of the dry weather, bales can be left outside except in the short rainy season.

clean yarn and yet causing minimum fibre damage to the fine cotton fibres.

The firm has installed an opening plant with a 100-bale laydown and great care is taken in the selection of the cotton bales to form each laydown. This has enabled Swarp to obtain a good reputation for uniformity of yarn, both within an individual batch and between batches supplied throughout the year.

Comments expressed by many customers indicate that they only rarely have to change dye specifications for different batches of yarn. This offers a significant cost saving in the dyeing operation.

Carding

Swarp attached great importance to having high-quality chute-fed carding machines, and ensures that card wire replacement cycles are selected so that a uniform product, particularly in terms of nep levels, is achieved week by week. All Swarp yarns are within the top 25% of Uster standards and a number within the top 5% in imperfections.

To ensure maximum efficiency, all cards are fitted with can auto doffers.



