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Weaving and Weaving Preparation at ITMA '03

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ABSTRACT

This paper extensively reviews the advances in weaving and weaving preparation at ITMA 2003. Whenever appropriate a technical background and/or critical comments are provided. ITMA 2003 has brought to weavers major technological advances that will help weavers to fully control their machines electronically from user friendly interfaces, produce broad range of woven fabrics, manufacture intricate jacquard designs at the speed of commodity fabrics, form leno fabrics faster, inspect fabrics on-loom, use optical and laser detection of warp break, reduce down time due to higher level of automation and quick style and warp beam change.

Key words: ITMA, Weaving, Automation, Leno Mechanism, On-Loom Inspection

INTRODUCTION

At the 14th ITMA show, weaving and weaving preparation equipment occupied a significant share of the number of halls at the National Exhibition Center (NEC) in Birmingham, UK despite the absence of major machine manufacturers. Prior to the show, the attitude toward holding the show in UK for the first time in its history was negative due to the low expectation of participation. Machine makers, however, have been overwhelmed by the success of ITMA' 2003 in terms of attendance and multimillion dollar sales contracts. Examples of sales contracts are: (1) Picanol contracted with 8 March Textile Company of Vietnam to deliver 150 machines, (2) Promatech sold 60 Mythos Tec air jet machines that was unveiled at this ITMA to Brazil's Textil Canatiba, a denim fabric producer, (3) Promatech will also supply 180 machines (mainly Alpha rapier and 18 new Myth Tec air jet machines) to Taiwan's Nien Hsing Textile, another denim producer, (4) Sultex (formerly Sulzer Textil) received a major order for 412 projectile weaving machines from Italy's Tessival SpA. The success of weaving and weaving preparation machine makers at ITMA' 2003 may be attributed to the realized advances that provide weavers with low power consumption, flexibility and versatility while weaving at high speed.

This report reviews new development in weaving and weaving preparation at ITMA' 2003. Technical background is provided whenever appropriate. The review follows the flow chart of processes from package winding to weaving.

WINDING

Muratec showed their No.21C winder. The new features of the winder include: (1) new