

# Sulzer Textil G6500 Rapier Weaving Machine with Active Rapier Technology

## G6500 ART



**SULZERTEXTIL™**  
*we rule the weft*

 **ITEMA**  
**WEAVING**

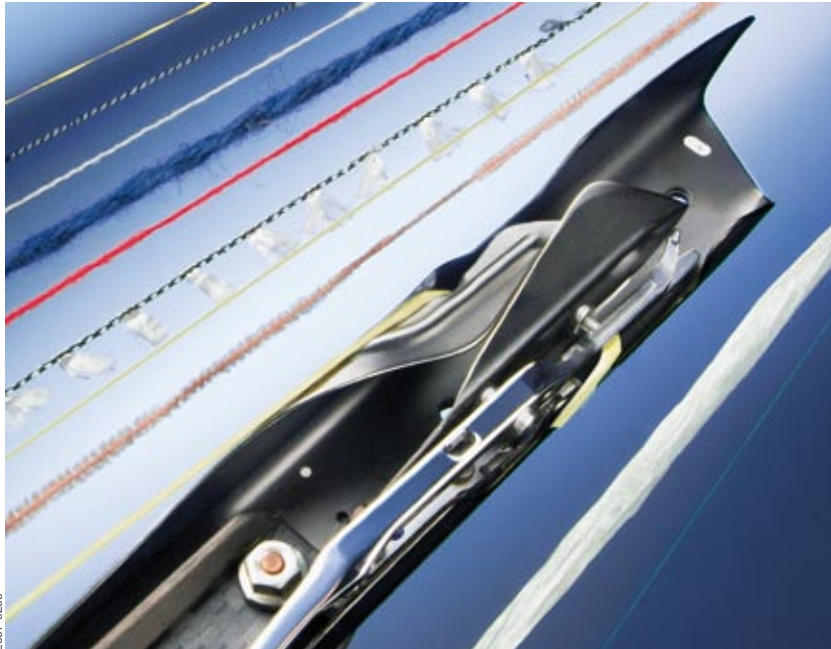
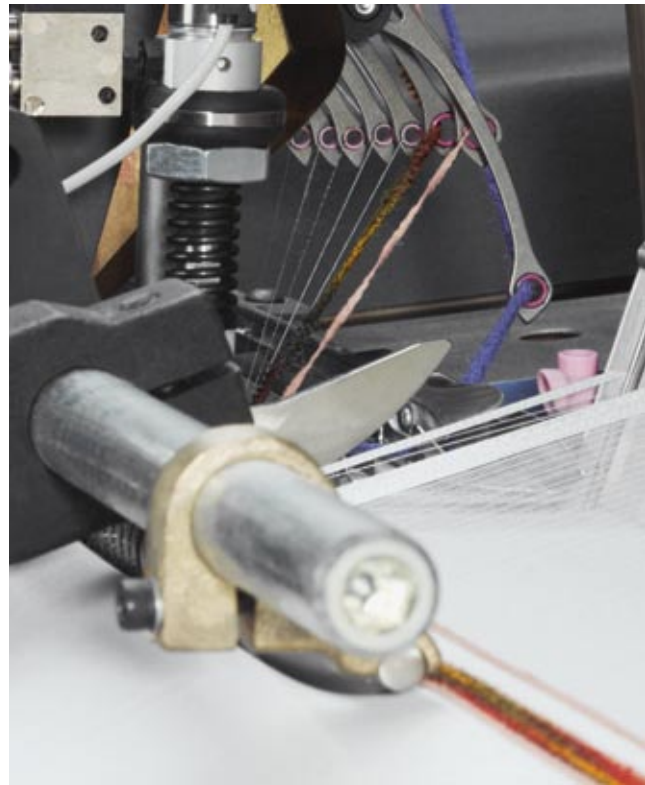
## Sulzer Textil G6500 Rapier Weaving Machine with Active Rapier Technology

### We rule the weft

The claim reflects the facts: Sultex Limited has equipped the Sulzer Textil G6500 rapier weaving machine with impressive innovations for weft insertion with flexible, unguided rapiers. Corresponding patents have been applied for. This machine weaves a previously impossible range of different weft materials.

As of now, the G6500 rapier weaving machine is equipped with Active Rapier Technology (ART). In combination with the electronically controlled weft brake, the gripper heads and the weft cutter, the weft run with its

high reliability in weft insertion, a previously impossible range of weavable yarns and a low load on the weft yarn.



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very few deflections results in extremely reliable weft insertion and gentle yarn manipulation with minimal yarn waste. This revolutionary technology checks and monitors weft insertion actively during the entire insertion cycle. The result is

### The components of Active Rapier Technology

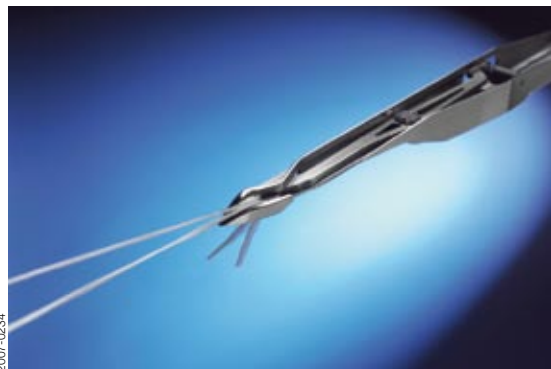
The main components of Active Rapier Technology are the new weft brake, the rapiers with their active yarn clamps, the weft cutter and the yarn-friendly weft run with very few deflections.

### The new, patented dynamic ART weft brake EFB-S

The weft brake can be individually and perfectly adjusted to the course of stress-strain forces for any type of weft yarn and any weft insertion channel. A very wide variety of yarns can thus be woven simultaneously, and every type of yarn is inserted in exactly the right length, which significantly reduces weft wastage. Thanks to the self-cleaning effect the braking characteristics remain constant and guarantee faultless running of the machine.

### Reliable weft insertion with patented ART components

The ART main clamp, the ART transfer clamp in the left-hand rapier and the ART receiving rapier head in the right-hand rapier grip and transfer every weft yarn reliably. Spun fibres and filament yarns, monofilaments and tapes, metal and ultra-coarse fancy yarns with yarn counts of tex 1 to 1700 can be woven simultaneously in any given mix.



Every weft is reliably gripped and transferred by the clamps in the gripper heads.

The dynamic weft brake can be perfectly adjusted to the stress-strain curve of any weft material.

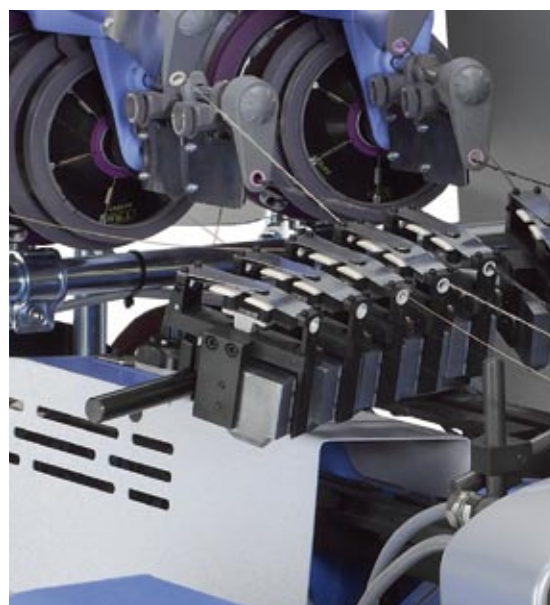
### The ART weft cutter

The pneumatically operated ART weft cutter always cuts the weft yarn reliably at the programmed optimum moment, matched to yarn type and material.

### Active Rapier Technology – advantages and benefits

Thanks to the versatile weft insertion, which enables a very broad range of weft yarns to be woven simultaneously, the G6500 rapier weaving machine is an absolute top performer in every field of application. In addition to standard fabrics

for apparel, household and technical textiles, ART offers major advantages in the weaving of furnishing fabrics. As regards curtain and furniture covering fabrics in particular, widely differing weft yarns are often woven simultaneously, e.g. spun-fibre yarns together with very coarse fancy yarns such as loop and bouclé yarns. On the G6500 with ART, all these fabrics can be produced extremely cost-efficiently, with high productivity and optimal fabric quality.



Thanks to Active Rapier Technology, spun fibres or filament yarns, monofil or tapes, metal or ultra-coarse fancy yarns with yarn counts of tex 1 to 1700 can be woven simultaneously in any given mix.



To summarize, the yarn-friendly, reliable weft insertion with Active Rapier Technology results in:

- extended patterning options
- fewer weft stoppages
- increased efficiency
- improved fabric quality
- less weft waste.

For curtain and furniture covering fabrics the G6500 can weave different weft yarns simultaneously, e.g. spun-fibre, coarse fancy, loop and bouclé yarns.



ITEMA Weaving is a Business Unit within the ITEMA group. It comprises of companies in Italy, Switzerland and China. We are developing and manufacturing state of the art weaving machines and accessories. All products are being sold and serviced world wide. The ITEMA Group (International Technology and Machinery Group)

unites globally leading brands in the textile machinery business, such as Sulzer Textil, Somet, Vamatex and Fimtextile (weaving machines and accessories), Steiger (flatbed knitting machines), Savio (winding and spinning machines) and Eutron (electronics) in an internationally operating corporation.

Specifications subject to change without notice.

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