

## Market oriented solutions by Suessen

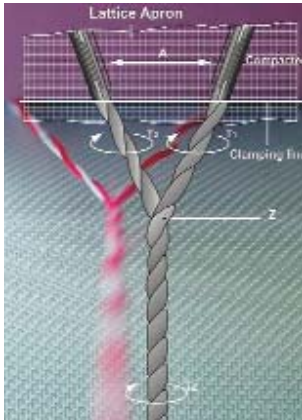
The purpose of a genuine compact spinning process is to arrange the fibres in a completely parallel and close position before twist is imparted. This is the most important criterion for perfect compact yarn. The eliminated parallel triangle is a by-product of this concept. This close and parallel arrangement of fibres immediately before twist is imparted is responsible for the characteristic advantages of compact yarn. Suessen is a pioneer in the compact spinning technology, a world-wide technological leader and a highly successful supplier of compact spinning systems. Since the ITMA 1999 in Paris, Suessen has sold more than 2.8 million EliTe® Compact Spindles and is, therefore, the most successful company offering compact spinning systems, as well as technology leader of the market. Over 10% of these compact spindles have been successfully equipped with the EliTwist® Technology.

### EliTwist® Two-Ply Compact Yarn directly from Ring Spinning Machine

EliTwist® has successfully further improved the excellent textile and physical characteristics of compact yarn. The extremely cost-effective application of this spinning process on existing ring spinning frames with the EliTe® CompactSet further emphasises the high flexibility of the EliTe® Process. EliTwist® can be retrofitted to all spindles of EliTe® CompactSet and Fiomax E already installed. EliTe® CompactSet with EliTwist® CompactSet can be used on many types of ring spinning frames. The structure of these EliTwist® Yarns provides new approaches for the production of core-yarns and

other special yarns. The Core-Yarn Device developed by Suessen for this purpose allows to spin core-yarns with perfect covering effect by feeding the filament into the centre of the twisting triangle.

Depending on the fibre material, even the smallest yarn twist coefficients are possible. As a rule, the optimum twist coefficient of EliTwist® Yarns is between the twist coefficient of a single yarn and the ply-twist coefficient of a conventional S/Z two-ply yarn. Splicing of EliTwist® Yarns is technically possible and has been solved by all manufacturers of winding machines.



EliTwist® Spinning Method.

### EliTe® CompactSet V5 - Compact Spinning System for any application

The EliTe® CompactSet V5 compact spinning system is designed to meet even the most challenging demands that high-end spinning mills make on a compact spinning system:

- ❖ Optimum and sustained yarn quality.
- ❖ High consistency of all yarn parameters.
- ❖ Minimal variation between spinning positions.
- ❖ No restrictions in regard to raw material.
- ❖ Easy handling.
- ❖ Universal application.
- ❖ Can be installed on almost all machine types.
- ❖ Many optional features.

#### Optional applications in compact spinning:

- ❖ **EliTwist®** - production of two-ply yarns directly on your ring spinning machine with compact spinning technology.
- ❖ **EliCoreTwist®** - production of two-ply core yarns directly on your ring spinning machine with compact spinning technology. ♦



Suessen - EliTe® CompactSet V5.

## Truetzschler comber proves successful in practice

The introduction of the new Truetzschler comber TCO 1 in Munich last year came certainly as surprise to many. Behind the scene, however, this involved long-term preparations. Marzoli comber specialists developed this machine in close cooperation with the Truetzschler Development Department.

The development goal was a nip rate of 500/minute, which is 25% higher than that of the Marzoli machines on the market at that time. And the first practical results show that this goal has been achieved. All the users mention that they are surprised about the smooth and quiet operation of the Truetzschler comber TCO 1. This is not only perceivable, but also measurable. The vibration level of the new comber TCO 1 at 500 nips/min. is only half that of older Marzoli machines at 400 nips/min. The low noise emission is the result of a number of new machine elements and drive solutions.

Thus, the frame has been newly designed. The dynamic stress during operation was simulated with special software. This made it possible to gear the design of the frame components precisely to the stress variations. The resulting combination of cast-iron and steel elements ensures minimum vibrations.



The new Truetzschler comber TCO1 and in the background, the Truetzschler Superlap TSL 1.

The nipper jaws have also been newly designed. At a nip rate of 500, they must swing forward and backward more than 8 times per second. Thus, it is important to have a very light-weight design, without impairing stability. The solution is found in the application of three special metal alloys. The actual nipper jaws are made of magnesium and aluminium alloy, the side parts of high-strength aluminium, and the jaws of precision-ground steel. It goes without

saying that these nipper jaws can safely handle today's regular batt weight of up to 80 g/m. Of course other successful Truetzschler solutions were adapted as well. Hence, the top rolls of the drafting system and the delivery rolls of the comber are individually controllable, pneumatically loaded - same as on Truetzschler draw frames. As is customary with Truetzschler, operation takes place via a large-size colour touch-screen. Meanwhile, Truetzschler combers are operating in spinning mills in eight countries. The applications range from Ne 30 at a nip rate of 480, to Ne 100 at a nip rate of 360. The quality expectations of the users have been met everywhere. Comparisons with existing combers were throughout positive. ♦