SAURER.

Flexible, cost-effective and space-saving – Economic spinning mill automation

Autoconer MultiLink

Optimal machine networking, more intensive process automation and reduction of personal workload are the challenges of the modern textile industry. The Autoconer material flow with RFID technology forms the basis for intelligent linking of ring spinning and winding machines. With MultiLink now it's more flexible, cost-effective and space-saving.

Flexible, space-saving spinning mill layouts
Up to four ring spinning machines can be linked to one Autoconer via MultiLink. This makes automation possible in situations where it was previously not economical. This applies, for example, to conditions where space is cramped or limited, typical of the replacement segment. Spinning mill layouts with relatively small machine spacings, e.g. from 1.80 m distance centre to centre of the ring spinning machines, are possible. Thanks to MultiLink, spinning mills that still work manually today can now also be economically automated. This is because assigning up to four ring spinning machines also enables a profitable combination with shorter spinning machines. MultiLink can be implemented as a direct or underfloor link. Since the interface and the positioning of the machines are variable, there is a high degree of flexibility in the design of the spinning mill layout.

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Features and benefits

→ **Flexible design of spinning mill layouts**
  – Linking of 2 up to 4 ring spinning machines with one Autoconer.
  – Variable positioning of the Autoconer along the interface.
  – Available as direct or underfloor link.

→ **Economic automation**
  – Space-saving: Economic link of short ring spinning machines and for mills with limited space.
  – Cost-saving: reduction of investment and energy costs.

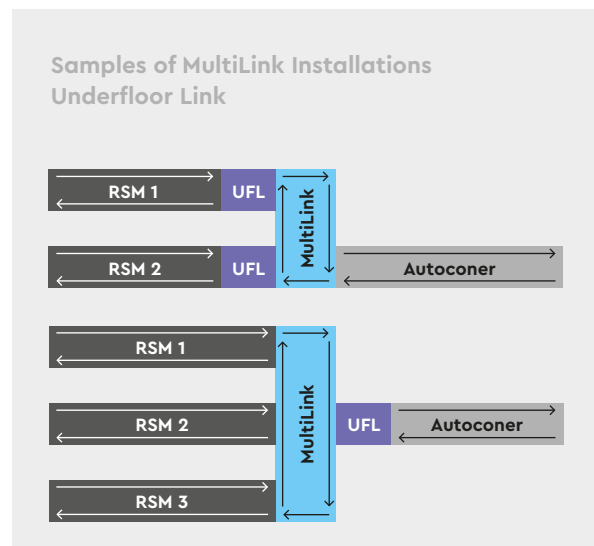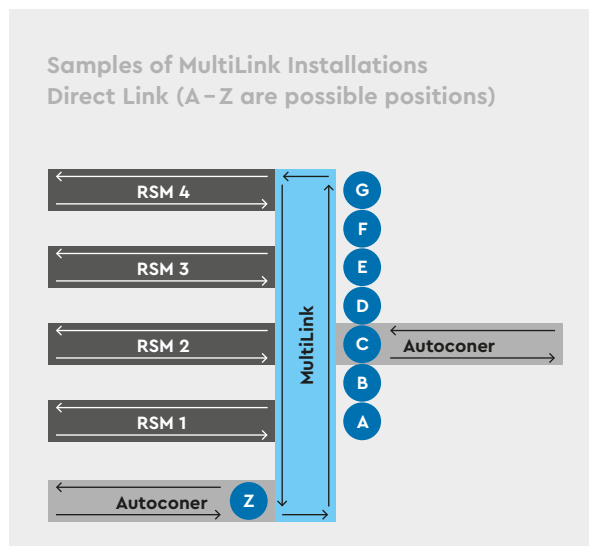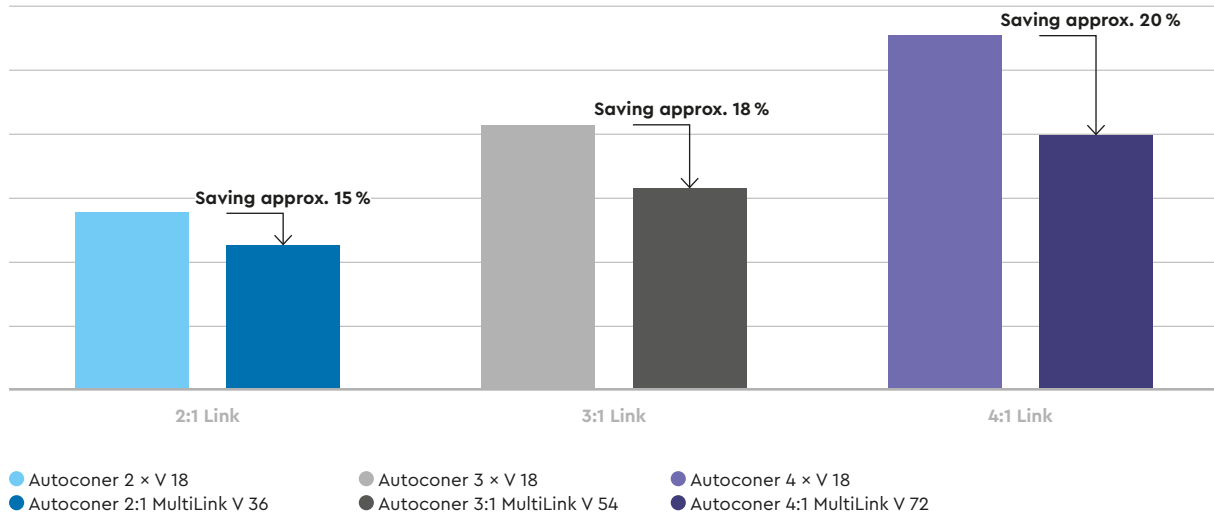→ **Maximum throughput rates**
  – Decentralized material flow with highest throughput rates.
  – Unique optic tube inspector with up to 100 cycles/min.

→ **Online quality monitoring with SPID**
  – Integration of Spindle Identification system SPID to monitor the quality of each ring spinning spindle.

Comparison of possible energy savings due to MultiLink
qualitative energy savings in %

Saving approx. 15 %

Saving approx. 18 %

Saving approx. 20 %

2:1 Link   3:1 Link   4:1 Link

● Autoconer 2 × V 18   ● Autoconer 3 × V 18   ● Autoconer 4 × V 18
● Autoconer 2:1 MultiLink V 36   ● Autoconer 3:1 MultiLink V 54   ● Autoconer 4:1 MultiLink V 72

Samples of MultiLink Installations
Direct Link (A – Z are possible positions)

Samples of MultiLink Installations
Underfloor Link

Investment costs are reduced by up to 15 % – Energy costs are reduced by up to 20 %

The flexibility and the small space requirement also open up economic perspectives in the construction of new spinning mills, especially if they are designed for small lot sizes. The maximum possible throughput rates are decisive for the design of such linked systems, and here the Autoconer has a unique advantage: the patented optical infrared tube inspector. It allows throughput rates of up to 100 tubes per minute. Therefore, more ring spinning positions can be assigned to an Autoconer than to other winding machines. Overall, investment costs are reduced by up to 15 %, as the costs for one-off units can be spread over more winding units. Since energy consumption, for example in suction systems or machine cleaning, only occurs once instead of 2 – 4 times, MultiLink saves up to 20 % on energy costs compared to conventionally linked solutions, depending on the configuration.

Guaranteed quality monitoring with SPID

The guaranteed and patented online quality control offers additional benefits in the Saurer solution thanks to integrated SPID (Spindle Identification System). This allows the yarn quality to be monitored at each individual ring spinning position, even when an Autoconer is flexibly linked to up to 4 ring spinning machines.