

Automatic winding  
Autoconer 338, 5, X5

**RIETER**

# Suction Nozzle

Energy saving solution with efficient yarn pick-up



## Your benefits:

- Improved energy efficiency
- Increased productivity
- Protected package quality
- Reduced operator's workload

# Suction Nozzle with Smart Aerodynamics

## Reducing Energy Costs up to 17%

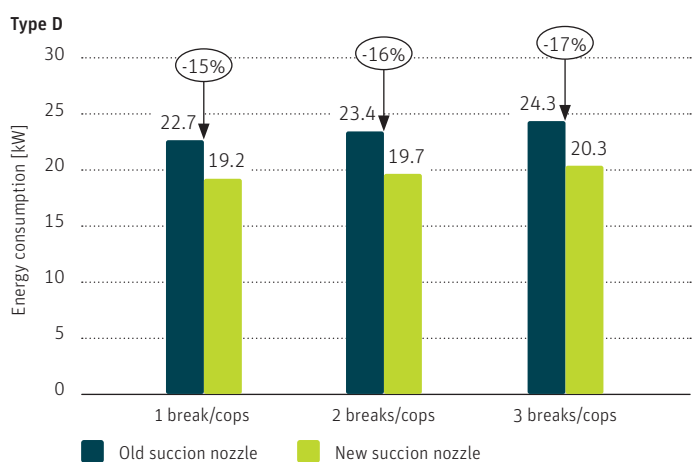
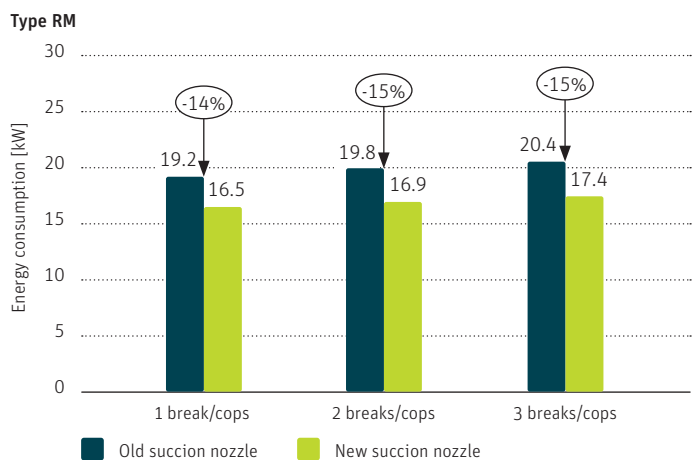
The winding process can only be highly efficient when the winding unit production time is maximized. This means that downtimes should be reduced to a minimum, even if they cannot be completely avoided. Thanks to the aerodynamically optimized design of the suction nozzle, the air flow is highly efficient. The possible lower negative pressure for reliable pick-up of the upper yarn saves up to 17% energy and customers can reduce their energy costs.

The suction nozzle upgrade consists of the latest upper yarn pick-up suction nozzle, which is used in the latest automatic winding machine Autoconer X6. The standard suction nozzles are replaced by new, flow-optimized suction nozzles. The new suction nozzle captures the upper yarn measurably faster and more reliably. This minimizes the cycle time for the yarn search and pick-up, e.g. after a clearer cut, yarn breakage or cop change. Overall, this makes the suction nozzle an economical solution that minimizes the energy cost. It simultaneously minimizes operators' workload through fewer red lights resulting in increased productivity.

### Energy saving, protection of package quality and increase of productivity

The graph shows the energy savings with the new suction nozzle. The new aerodynamic design saves up to 17% energy. In times of ever-increasing energy costs, this is a significant benefit.

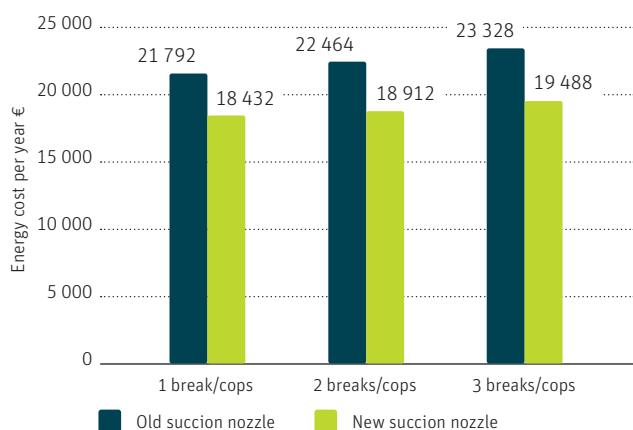
The improved new suction nozzle design also protects the package surface during upper yarn search, especially while processing fine yarn counts. In addition, the standard upper yarn sensor precisely detects the yarn end and stops the suction immediately. The yarn pick-up process is thus efficient and yarn waste is reduced. Repeater cycles of the winding unit and manual interventions are avoided due to the efficient yarn pick-up by the new suction nozzle.



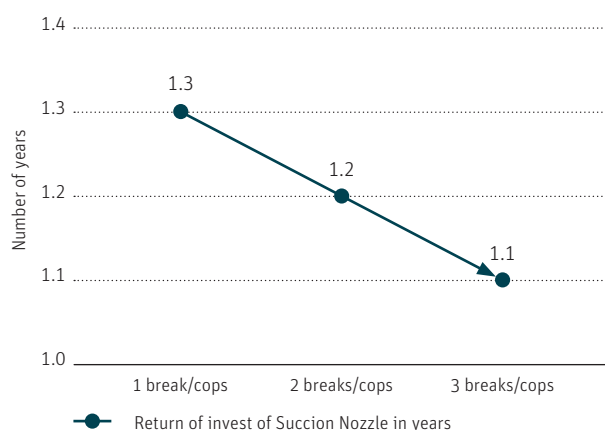
## Return on invest

The graph below shows the return of invest of the suction nozzle solution. Depending on the number of yarn breaks, customers can expect a return on investment of approximately 1.3 years by a production of 8 000 hours per year and energy costs of EUR 0.12 per KW/h. Yarn breaks have a major impact. With every yarn break, or clearer cut the Autoconer consumes air for upper yarn pick-up and splicing and the energy costs increase. The new suction nozzle saves resources.

Energy cost saving



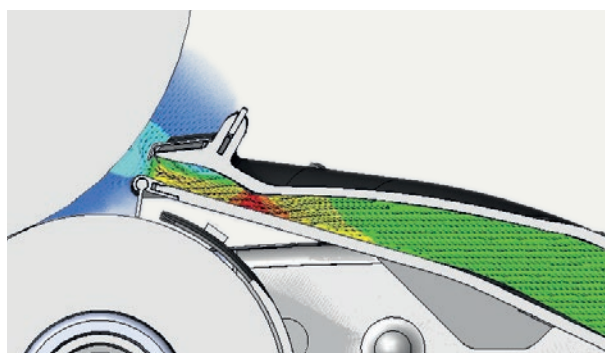
ROI



Return on invest calculated by energy costs of 0.12 € per kW/h and a production of 8 000 h per year.

## Combing stripes for all applications

The Comb stripe is located at the opening of the suction nozzle. It holds the yarn while the suction nozzle picks the yarn from the package. The customer can choose between three combing stripes. Depending on the processed material, Rieter recommends the best possible combing stripe, for efficient, but also smooth and gentle yarn pick-up.



Air flow in a suction nozzle with new design





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