



New concept for energy savings & yield improvement

Riedel Filbertechnik GmbH's **GreenLine concept** reduces energy costs and CO₂ emissions, and increases tobacco yield through optimization of Secondary processes at Heintz van Landewyck in Luxembourg.

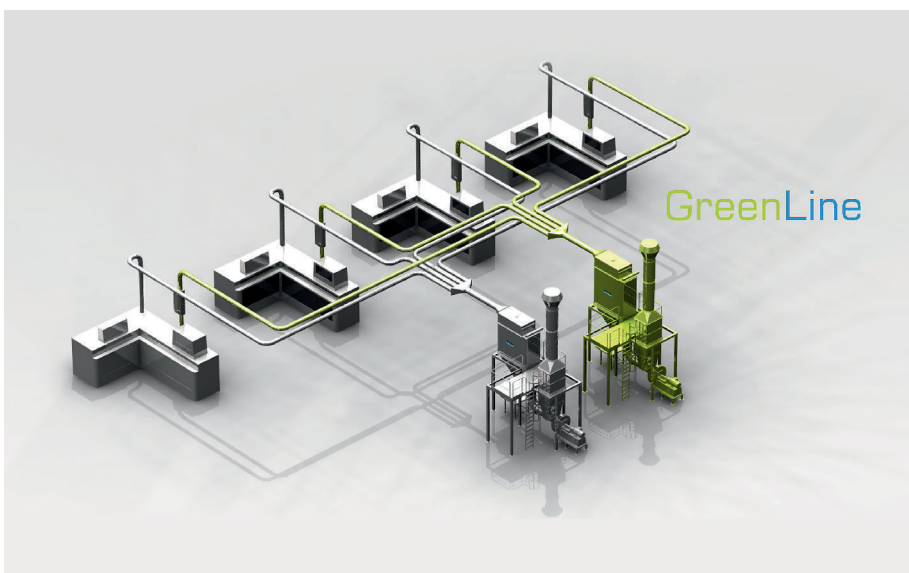
Heintz van Landewyck has been making tobacco products for 175 years and exports them to more than 40 countries. The family company currently produces more than 8 billion cigarettes, 8 billion tubes and 5,000 tonnes of rolling tobacco per year at its facilities in Luxembourg, Germany, Hungary and Andorra.

The company has been using Riedel filter systems for decades. In the course of the relocation and completion of the new plant in Fridhaff in 2019, Heintz van Landewyck focused on realizing highest energy savings and on improving product quality, yield and overall process stability. For reaching these ambitious goals the company has taken Riedel on board as a specialist in tobacco

processes and air handling. Together, Riedel and Heinz von Landewyck decided to leave established industry standards by implementing Riedel's GreenLine concept for maker dedusting, feeding and airflow control.

UNIQUE SOLUTION TO CONTROL AIRFLOWS IN CIGARETTE MAKING PROCESS

Traditionally, every cigarette maker is equipped with an internal fan and all makers are connected to one maker dedusting system. This approach has distinct disadvantages due to fluctuating airflows inside the maker, thus rod inhomogeneity, no demand oriented negative pressure as well as high need for air conditioning. The GreenLine concept overcomes these disadvantages by removing the internal maker fans, installing a central fan in a separate filter system and by integrating Riedel's proprietary Maker Airflow Control System (MAC) for each maker as shown in the graphic. The MAC enables a demand-oriented airflow control for each maker and ensures stable airflows at any time.



Part of Riedel's GreenLine concept with Maker Airflow Control

Two years after the implementation of the GreenLine concept, Riedel talks to Aloyse Metzen, Head of Fridhaff Coordination & Technical Projects, and Stefan Mergener, Secondary Line Manager, at Heintz van Landewyck about the optimizations carried

“Our processes are more stable and we save energy costs.”

Aloyse Metzen, Head of Fridhaff Coordination & Technical Projects



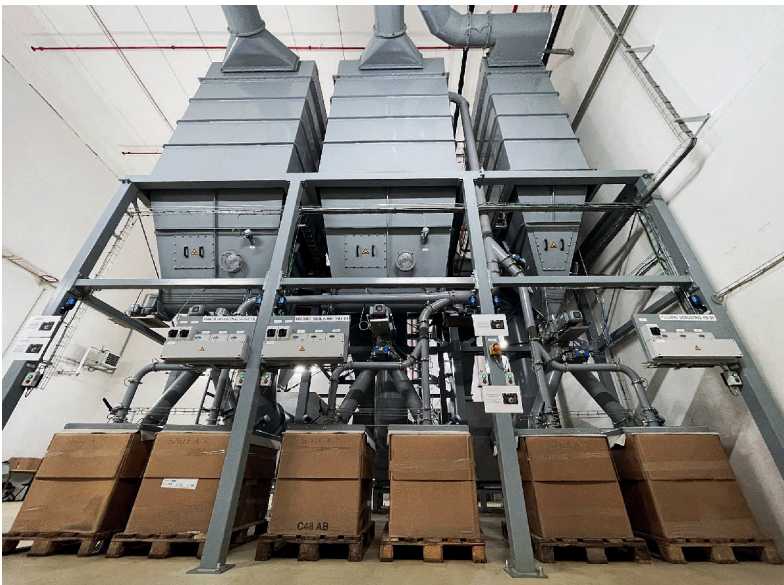
Aloyse Metzen, Head of Fridhaff Coordination & Technical Projects

out so far. Although ecological considerations are nothing new, they are becoming increasingly important because of the current rise in energy prices and the company’s environmental goals which constitute one pillar of Heintz van Landewyck’s CSR journey. For these reasons, they are happy about the integration of this concept into the new plant, says Aloyse Metzen. “Removing the internal fans of our makers was a big risk and we were very sceptical at the beginning. However, we had confidence that Riedel will make this a success and finally gave a green light for Riedel’s GreenLine concept.” After a

long-term test, Heintz van Landewyck drew a positive conclusion. “By removing the maker fans, we have lower energy costs due to demand-oriented and stable airflows, no heat and noise generation, lower maintenance costs, higher process stability and occupational safety for our operators,” says Metzen. Process stability in particular affects the cigarette quality immensely. “Since implementing GreenLine, we have had significantly fewer loose ends and maker rejects,” he adds. Through this measure, the

“[...] as if we put the tobacco into the maker by hand.”

Stefan Mergener, Secondary Line Manager



Secondary dedusting system consists of one feeding and two maker dedusting filter units



Cigarette makers equipped with Riedel’s technologies like MAC (Maker Airflow Control), SACU tobtronic® and TIRS (Tobacco Shorts Recovery)

GreenLine concept takes over process air handling tasks in addition to dedusting tasks.

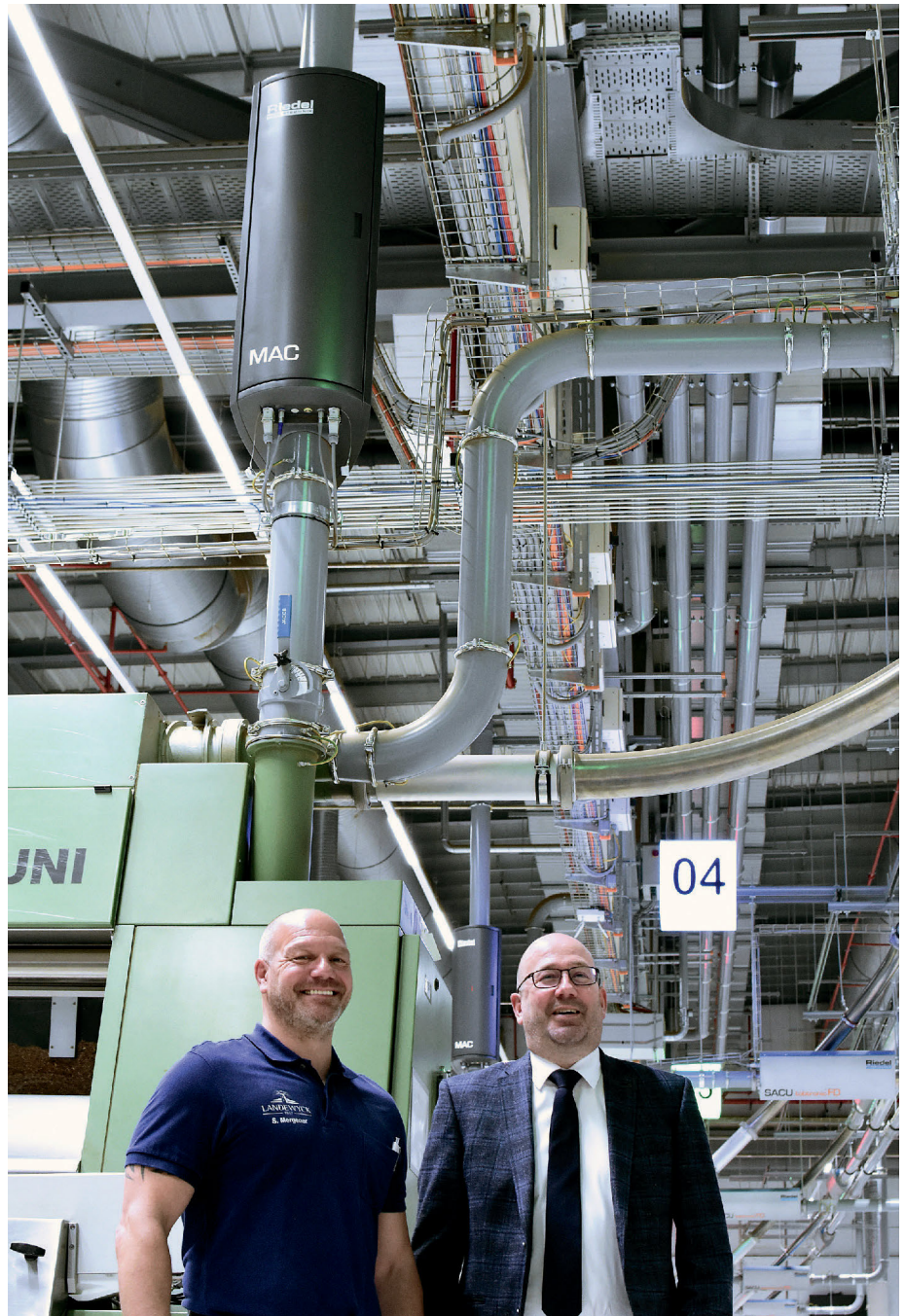
EXPLOITING THE COMPLETE HIDDEN POTENTIAL WITH GREENLINE

Another part of the GreenLine concept contributes to high product quality, yield improvement and energy savings: Riedel's patented SACU tobtronic® for the feeding process, installed at ten makers in Fridhaff. This unit controls the transport speed of the cut filler tobacco, thus enabling gentle transportation and the minimizing of tobacco degradation and dust generation. Accordingly, Riedel's technologies have a large impact on cigarette production in Luxembourg. Since the relocation, Landewyck has set itself the goal of continuously

“We don't have to worry, production is up and running.”

Aloyse Metzen

improving the energy management. “Riedel was the only supplier with an overall solution to meet our goals of achieving significant energy savings in our Secondary while also improving process stability and product quality,” says Metzen. “That is a unique concept. Of course we were concerned about implementing Riedel's GreenLine concept and, by this, leaving established industry standards behind. However, since we know Riedel's expertise and philosophy for years, we were convinced to have the right partner at hand to make the project a success. We appreciate the company's process know-how, the service, the innovation and the product depth,” adds Mergener. “Ultimately, our expectations were not only met, but exceeded. We don't have to worry, the production is up and running,” says Metzen. Heintz van Landewyck and Riedel will continue to work on process and energy optimizations, thus exploiting the hidden potential of Secondary processes – not only for greenfield but also for brownfield projects. **TJI**



Aloyse Metzen (right), Head of Fridhaff Coordination & Technical Projects, and Stefan Mergener (left), Secondary Line Manager, at Heintz van Landewyck

ADVANTAGES OF RIEDEL'S GREENLINE CONCEPT

- /// Smaller CO2 footprint
- /// Less consumption of electrical energy & conditioned air
- /// Less heat emissions
- /// Less sound emissions
- /// Higher process stability
- /// Better rod homogeneity, less rejects

GreenLine

SUSTAINABLE CONCEPT
FOR ENERGY SAVINGS &
YIELD IMPROVEMENT



Learn more on page 78 →

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