### **SUCCESS STORY**



# VOITH

Voith's aim was nothing less than to achieve the "next generation in milling through" the development of the new InfibraFiners system. Culminating more than 60 years of research and development, this new system perfectly marries cutting edgetechnology, industrial design and digitalization, and continues to build on the success of its predecessor: the over 1000-times implemented Twinflo Refiner.

Eye-catcher, with its centerpiece the Smart-Light IF90, was developed in a record-setting five months through the collaboration of the design company defortec and DIANA.





The Voith Group is an internationally-recognized technology firm that offers a diverse portfolio of assets, products, services and digital applications with a focus on the energy, paper, resource and transport/automotive market sectors. Founded in 1867, Voith today boasts 21,000 personnel, 4,2 billion Euros in annual revenue, locations in over 60 countries world-wide, and is one of Europe's most recognized family-owned businesses.

Voith's InfibraFiner ensures an especially sustainable milling process in the preparation of paper fibers by saving energy through increased efficiency and improved mechanical properties. Through the Digital Generation Implementation – and thanks to latest in sensor technology with the integrated SmartLight IF90 – an optimized management and control of the refiners is achieved.

From the very start of the joint project, DIANA was able to deliver the final product in a record five month period, all the while meeting the customization wishes and specifications of the Voith team and the defortec design agency. Additionally, the concepts put forth by defortec were implemented successfully on the first try, resulting in no delays.

"Staying true to the original design without compromising performance and quality posed a significant challenge from the outset. Thanks to DIANA's creative input and technical know-how we were able to achieve 100% of our goal."

Daniel Ross, engineering design, deforted

### **SUCCESS STORY**



The high quality of material, design and performance pay off with the Silver Design Award Focus Open 2022.



Keeping in line with defortec's design survey "Papermaking Vision," an appealing look for InfibraFiners was desired, with surfaces optimized for the user housed in a minimal, clean design. The jury of the Baden-Württemberg international design awards honored this exceptional achievement with the Silver Focus Open.

"We are extremely proud to have received this design award. DIANA, without a doubt, played a major role in this achievement."

Astrid Gilties, Project Coordinator Industrial Fiber Systems, Voith Group

The SmartLight IF90 adds value for the client through its practical visual setup: the signal light is divided up into three segments, each with a different color and signaling combination that quickly and easily communicates the machine's basic function, performance and service status. The light itself is controlled via an IO-Link.

The materials used had to meet specific standards: the housing of the signal light assembly had to withstand the harsh conditions of the working environment, constantly exposed to industrial-grade chemicals and lubricants. Accordingly, the signal light is seamlessly integrated onto the end of the shaft assembly. This way, the status of the three segments is easily noticeable even from a peripheral glance. The logo of the Voith Groups is also backlit, making its colors luminous and instantly recognizable.

"Meeting demanding performance requirements, along with implementing the desired design specifications 1:1, all the while staying within budget, are the sort of challenges that we enjoy taking on."

Martin Weller, CEO DIANA Electronic-Systeme

Following a smooth first assembly and operation of the SmartLight IF90, several small optimizations were conducted in time for the first deliveries of InfibraFiners to Turkey and South America to be made, enabling a literal dream start to their working lives.



## SmartLight IF90

- Indicating elements for signaling lights for status, performance and service
- A wide variety of color and signaling combinations
- Control over IO-Link
- Made of high-quality materials: polished 19-mm safety glass is set in custom-milled aluminum
- Contemporary design
- Minimal design makes for easy cleaning
- Seemless integration
- Clearly visible, even from peripheral angles
- Luminious, bright lighting in the corporate colors

#### **Additional Information:**

voith.com – technical innovation and digital solutions for the energy, paper, resource, transportation and automotive sectors defortec.de – industrial and product design with a focus on capital goods development

DIANA-Leuchten.de – industrial lighting solutions and custom signal lighting for machines and facilities