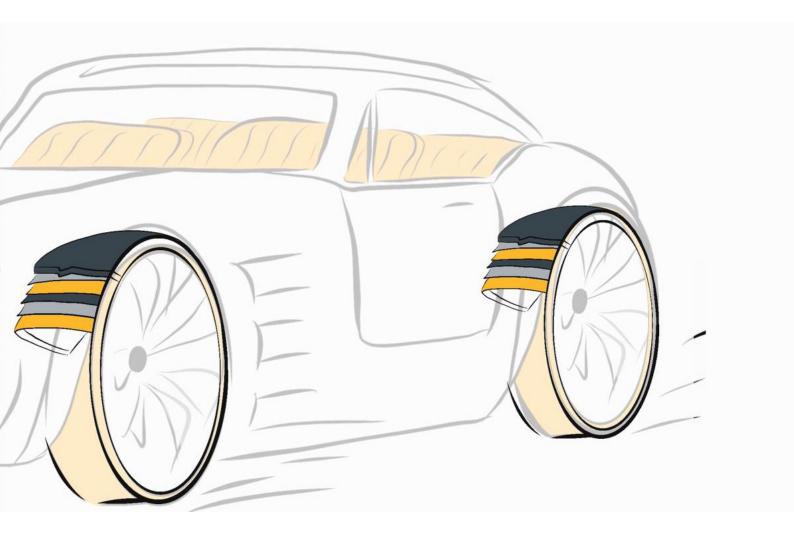


## **ZERO-DEFECT MANUFACTURING**

FOR TIRE CORD PRODUCTION



No compromise on safety with WeftMaster® FALCON-i. Ready for maximum performance?

# NO COMPROMISE ON SAFETY WITH WEFTMASTER FALCON-I

# **+** MEET THE AUTOMOTIVE HIGHEST QUALITY STANDARDS

There must be no compromises when it comes to products which affect safety. Car and aircraft tires, as well as high-pressure hoses, must meet the highest quality standards. In the tire manufacturing process, every step of the production is meticulously executed, monitored and controlled. That's why manufacturers rely on the best control instruments available – so it's no surprise that they choose the Loepfe WeftMaster FALCON-i, optical yarn defect sensor to support them in this important area.

Tire cords are used to ensure that tires maintain their shape. They are primarily made of polyester, nylon, aramid and rayon. Tire cords promote better handling and stability of vehicles, as well as greater comfort and have a significant impact on performance. During the manufacturing process, the high-quality yarns get polymerized, spun, twisted and then woven into fabrics. Before the yarns are woven into fabric, an all-round control over every single millimeter of the running yarn is applied by FALCON-i, as the high-tech yarns must be completely free of even the smallest knots, fluff and filamentation. The optical yarn defect sensor FALCON-i detects such defects in the yarn completely reliably – and is unaffected by the strong vibration caused by the weaving machine, the high speed (yarn speed up to 30 meters/second) and the yarn to be tested (any color, conductive materials, monofilament or multifilament yarns). Thus, the FALCON-i sensor consistently prevents faulty yarn from entering the fabric. In a worst-case scenario, undetected faults could otherwise lead to weak spots in the tire - a situation that absolutely needs to be avoided.

This is how Loepfe ensures a safe and comfortable ride - and keeps you moving wherever your wheels take you!

But there's even more – as well as in the automotive industry, the WeftMaster FALCON-i is also used successfully in the architecture, filtration, electronic, aeronautics, medical and carbon industries. In fact, any manufacturer of demanding technical fabrics and composite textiles or even, for example, car window or computer board manufacturers can benefit from this type of versatile quality monitoring sensor.

#### **+** MEETS YOUR NEEDS

Removing smallest knots, fluff and filamentation

- → Detects knots, fluff and filamentation
- → Allows easy handling with intuitive user interface and a chemical resistant housing
- → Ensures suitable settings with 9 different sensitivity levels
- → Provides automatic or manual sensitivity setting
- → Makes installation and setup quick and easy
- → Uses simple standard industrial connector
- → Provides signals with a PNP and NPN output
- → Provides processor controlled optical detection

## + FACTS & FIGURES

Adaptive quality control

- → Mono- and multifilament yarns
- → Carbon fibers
- → All yarn colors
- → Yarn range of 20 3000 dTex
- → Yarn speed up to 30 meters/second

