



In seven years of development cooperation, TEUFELBERGER, the specialist for steel wire and fiber ropes, and Liebherr, one of the world's leading crane manufacturers, developed a unique and intelligent high-strength fiber rope for cranes. In this joint effort, they combined the best from the two worlds of steel wire ropes and fiber ropes and, by drawing on in-depth user know-how, brought it to perfection. soLITE® caters readily and successfully to the increasing demands for larger lifting heights and higher load capacities.

## soLITE<sup>®</sup> excels in numerous tests

Only when a rope is used in practice does its quality really become apparent. Because of that, TEUFELBERGER leaves nothing to chance and, working together with Liebherr, has subjected its ropes to intensive real-life testing on cranes and test rigs.



- ✓ > 160 breaking load tests
- ✓ > 41,000 hours of multi-layer spooling
- ✓ > 48,000 meters of test rope produced
- ✓ > 126,000 hours of flexural fatigue strength testing

The neat winding pattern of soLITE® in multi-layer spooling is a prerequisite for smooth and safe crane operations.

## The comparison inspires confidence

High performance steel wire ropes are undoubtedly a good solution for many applications. However, especially on tower, mobile, and crawler cranes, soLITE® offers you unbeatable advantages.



- ✓ up to 200 % more load capacity on the crane
- ✓ 80 % less weight
- ✓ great ease of handling
- environmentally friendly
- many times higher lifetime

# **Reliable determination** of the point of discard

While the point of discard for steel wire ropes can, for example, be determined reliably based on the number of broken wires, damage symptoms, or corrosion, this has so far not been possible for fiber ropes. For soLITE®, the intelligent fiber rope, the point of discard can even be determined redundantly, that is, both optically and electronically.

### Optical parameter - 3-stage early warning system

The protective cover consists of multi-colored fibers which, due to their consistency, wear down in stages. As soon as the red core becomes visible, soLITE® has to be replaced or returned to TEUFELBERGER for inspection.



intact rope

### Electronic condition monitoring

Electronic pulses are used to check in the core whether or not the fiber rope still has its full load capacity. If the pulse is interrupted, this will be indicated immediately on the discard indicator.



electronic pulses in the core; when interrupted - indication on discard indicator

#### A Warning

Using these products may involve hazards. Therefore, use our products only for the purposes they are designed for. Customers must ensure that all users are familiar with their correct use and the necessary safety precautions. Please keep in mind that any of the products may cause damage or harm when overloaded.

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rope to be discarded

TEUFELBERGER Seil Ges.m.b.H. Böhmerwaldstraße 20 4600 Wels, Austria Telephone: +43 (0) 7242 615-326 Fax: +43 (0) 7242 605-01 christof.gstrein@teufelberger.com

#### www.teufelberger.com