

PRODUCT BULLETIN



A WireCo® WorldGroup Brand

XLT⁴ SHEAVE WEAR FACTS

July 2014

XLT⁴ puts more surface area in contact with drums and sheaves

The four-strand, double-compact XLT⁴ mobile crane hoist rope provides a wider rope footprint when in contact with sheaves and drums. This supplies a greater bearing area for the rope, displacing its load across more surface area and reducing contact pressure on sheaves.

As a result, XLT⁴ operates smoothly on drums and extends the service life of sheaves because of lower contact pressure.

	PERCENTAGE OF ROPE-TO-SHEAVE CONTACT AREA*	CONTACT AREA <i>(As shown on rope lay impression.)</i>	PERCENTAGE OF SURFACE CONTACT AREA COMPARED TO THAT OF AN XLT ⁴ ROPE
XLT⁴	32%		XLT ⁴
35 x 7 COMPACTED	24%		75%
19 x 19 COMPACTED	15%		47%
6 x 25	12%		38%

*Percentage of rope contact in the available surface area of a properly grooved sheave.

Increased surface area reduces contact pressure on ropes

Compared to commonly used rotation-resistant crane hoist ropes, XLT⁴ offers more surface area which reduces contact pressure and results in less scrubbing and abrasion.

A proper fitting sheave groove supports rope over 135-150° of the rope's circumference. The unique design of XLT⁴ crane ropes gives you more rope surface area in contact with sheaves than any rotation-resistant crane hoist rope.

XLT⁴ meets the requirements of Category 1 rotation-resistant ropes for stability.