



Product BULLETIN

Wire Rope Corporation of America

May 2005

XLT⁴® Sheave Wear Facts

MORE AREA EQUALS LESS WEAR:
XLT⁴ PUTS MORE SURFACE AREA IN CONTACT WITH DRUMS AND SHEAVES.

The four strand, double compacted 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 (As shown on rope lay impression.)	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.

XLT⁴ Offers Less Scrubbing & Abrasion

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.