### **Fall protection PM ideas**

(In the US follow OSHA 1926.500-3 and ANSI Z359 standards)

# Retractors (SRL's, Retractable Lanyards, Self-Retracting Lifelines) –use OEM frequency by maintenance or tool crib attendant

Inspect retractors per OEM recommendations. Never use any lubrication. In adverse conditions (chemical plants, refineries, ship yards, etc.) replace retractors annually. Perform function tests quarterly. If retractors have been subjected to a fall or show cable wear, snaphook damage or loss of label legibility they should be replaced immediately. In benign environments perform function tests quarterly and budget for replacement every 5 years.

Do not disassemble or service inside of retractor unless trained by OEM or certified. Consider marking the date into service on the retractors in indelible marker to be able to quickly see if it is outdated.

Attachment (anchorage) Points –inspected annually by a trained fall protection qualified inspector. Inspect annually for corrosion, distortion, twisting and broken welds (some manufacturers recommend 6 month intervals). In addition inspect after any fall arrest incident. A log of all attachment points and specific locations should be kept.

## **Webbing- Daily by Operations**

Inspect webbing using the standards for slings. No cuts, pulls, chemical spills or weld splatter. Use flashlight to inspect where webbing is attached to drum in retractor. Pull out all the way to see drum.

#### Harnesses – daily by operations

Inspect using the standards for slings. No cuts, tears, chemical spills or weld splatter. Do not repair –discard if damaged. Otherwise replace every 5 years.

# Wire rope- daily by Operations

Inspect wire rope using the standards for hoist cable. Look for kinks, broken strands, rust, damaged thimbles. Use flashlight to inspect where wire rope is attached to drum in retractor then return for maintenance. Pull out all the way to see drum; look for damage. Note: there should be a two cable wrap around the drum when the device is purchased.

Inspect wire rope catenaries where attached (critical inspection- look closely) and look for kinks, broken strands, rust. Do not bend rope to inspect. Be alert if acids or caustics are used. Look for accelerated deterioration. Do not repair- replace if damaged. If catenaries show signs

of stretching replace them also. Catenaries should be slightly loose and not pulled tight. All catenaries (designed as engineered horizontal lifelines) must be designed by a registered Professional Engineer in the USA (1926.502(d)(8))

# Temporary railings and barriers. Weekly by safety, operations or maintenance

Should be checked weekly for bending, weld breakage, looseness, corrosion. Follow established rules for height, density and strength. Should not move 3" at 200 lbs (OSHA 1926.502) applied outwards and downwards

# Hooks and attachment devices –daily by operations Check for distortion or gate looseness. Only use Z359.12 compliant snap hooks with 3600 lbs gate strength

Inspect using the standards for hoist hooks. No distortion or rust. Insure good attachment to webbing or wire rope.

By Joel Levitt, J. Nigel Ellis, PhD

Dr. Ellis is president of Ellis Fall Safety Solutions and is a leading expert in fall protection and can be reached at **efss@fallsafety.com** 

Joel Levitt, Director International Projects <u>JLEVITT@LCE.COM</u>
Life Cycle Engineering | 4360 Corporate Road Office | Charleston, SC 29405
843.744.7110
Mobile +1-267-254-0061
www.LCE.com