CPD Training

SkyJacks

Advanced Crane Rope Inspections

Course Duration: 1 ECSA CPD Credit

www.skyjacks.co.za

We are WACO

We start by covering the history of the steel wire rope from when the rope made its first appearance around 17000 BC in the form of "hemp", through the Iron Age to where the first wire ropes were installed in the "deep" level mining industry in Germany in the early 1800's. The infamous "non-spin" ropes are explained and the trade-off between abrasion resistance and fatigue resistance is practically discussed and demonstrated. Rotational, semi non-rotational and fully non-rotational ropes will be covered and the details of the Seale and Warrington's construction designs will be explained. We will also discuss the well-known "D/d Ratio".We will make use of SANS/ ISO 4309 in this training session and the allowable number of broken wires allowed on a crane rope will become a practical classroom calculation. Typical wire breaks and common crane rope damage will be also be discussed and candidates are requested to bring pictures or actual examples of rope damage to review with the other delegates.

The following Items will be covered:

1. Wire Rope History & manufacturing process – Care of Haggie Rand Limited
2. DMR 18 – Discuss relevance to Steel Wire Rope
3. Wire rope behavior, bending versus abrasion & D/d ratios
4. Wire rope constructions like Seale, Warrington and more
5. Rotational, semi non-rotational & fully non-rotational ropes
6. Rope lay direction identification & advantages
7. Correct measuring of wire rope lay length & wire rope diameter
8. Crane rope inspections using SANS/ISO 4309 – Inspection points and hints
9. Nature & number of broken wires
10. Fleeting angles & rope kinking
11. Proper lubricating of a wire rope
12. Conducting correct & proper sheave inspections

Come and join our trainer the "rope maker" and with almost 20 years of stranding and rope closing experience for this interesting and insightful training session and earn yourself one CPD point. A well-prepared training manual, filled with information and details for reference will be issued to you on completion of the course.

What does Rope Spinning Loss Mean? Bring your answer!