

Abstract

Title: Rope monitoring system

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The continuous and automatic monitoring of the steel wire ropes geometric parameters is a great technological challenge, due to the complex geometry of the object to be measured and the significant amount of the data that have to be analyzed.

The correct rope working conditions depends on many factors: wire resistance, system geometry, rope's maintenance etc, but the correct and constant rope geometry is the base for a proper rope functioning.

The new Redaelli's developed system, based on a latest absolute measurement technology, has been designed to fit this purpose. It traces the rope ID card both during production both on site recording all the minimum eventual geometrical variations induced during installation or its service life.

The first prototype has been tested and validated in different working conditions (production and on site) and its design is open to further and tailored developments.

