

# AUTOMATIC ROPE INSPECTION

## SMART CONTROL OF STRINGING ROPES

A.R.I. is the advanced device designed for the **automatic inspection** of pulling rope integrity.

It delivers maximum safety, proven reliability, and complete traceability through a fast and accurate inspection process.

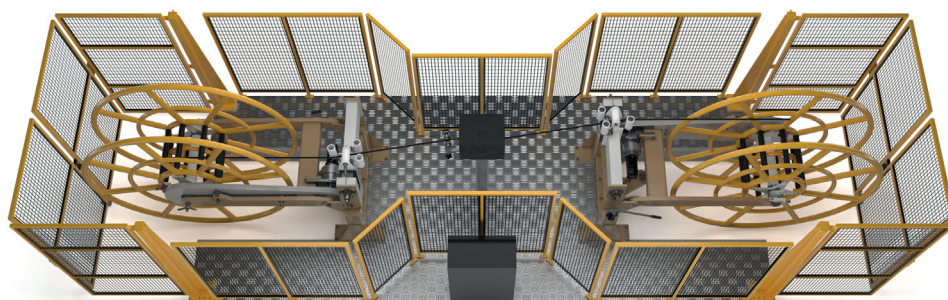
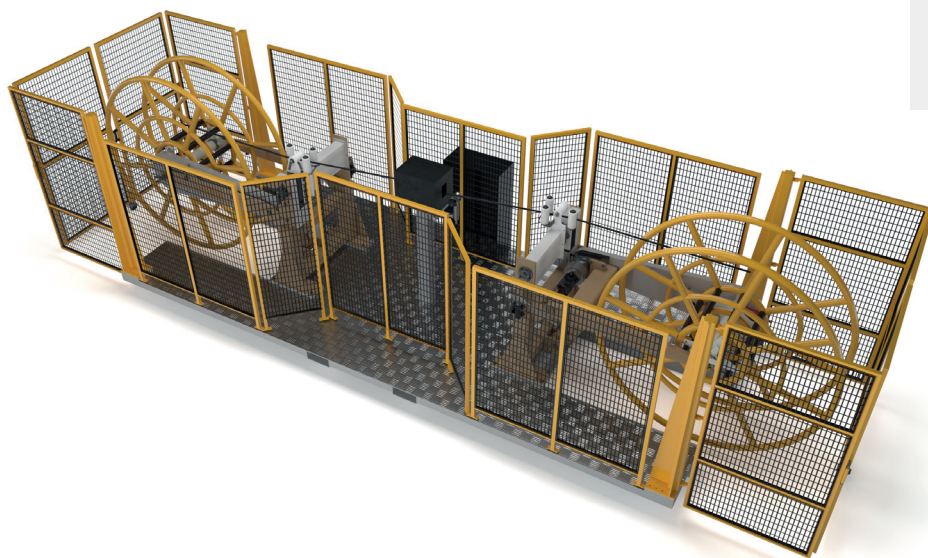
A.R.I. detects both visible and hidden anomalies, such as broken wires, corrosion, diameter reduction, and geometric defects.

The system includes two rewinders with an integrated sensor and is mounted on a dedicated skid, ensuring easy transport and quick setup on site.

### Configuration

- + Skid-mounted machine
- + Inspection speed: up to 10 km/h
- + two on board automatic reel winders with level wind for reel mod BOF010, BOF020 and BOF030
- + Color display for inspection results
- + Full electric machine

- + The machine is capable of automatically monitoring the stringing rope
- + The machine can reel / unreel automatically the rope
- + The analysis data is immediate and provided in real time
- + The analysis are recorded and downloaded via USB or printed.
- + A diagram shows the rope length on the x-axis and the amplitude of the magnetic field of the rope in the y-axis. Discontinuity (bigger amplitude on y axis) indicates possible defects in the rope.
- + Automatic and simplified data processing, with a graphical index of the rope's health (for example, through a dedicated dashboard).



# TECHNICAL FEATURES

| ARI - Automatic Rope Inspection      |                                                      | Features | Value      |
|--------------------------------------|------------------------------------------------------|----------|------------|
| Dimensions                           | Lenght                                               |          | 5.770 mm   |
|                                      | Width                                                |          | 2.250 mm   |
|                                      | Height                                               |          | 1.955 mm   |
|                                      | Weight                                               |          | 4.000 kg   |
| Configuration                        | On skid                                              |          |            |
|                                      | Safety operational lock                              |          |            |
|                                      | 2 automatic reel winders for BOF010 BOF020 and BF030 |          |            |
|                                      | Electric engine                                      |          |            |
| Performance                          | Working direction                                    |          | Both       |
|                                      | Max speed                                            |          | 10 km/h    |
|                                      | Working load                                         |          | 150 daN    |
|                                      | Min rope diameter                                    |          | 8 mm       |
|                                      | Max rope diameteer*                                  |          | 24 mm      |
|                                      | Sampling frequency                                   |          | max 0,5 ms |
| *Available also > 24 mm upon request |                                                      |          |            |
| Inspection                           | Fault - RMS signal                                   |          |            |
|                                      | Corrosion - LMA signal                               |          |            |
|                                      | Section variation                                    |          |            |
|                                      | Position of the fault                                |          |            |
|                                      | PDF report downloadable                              |          |            |
|                                      | Assessment of the rope                               |          |            |
|                                      | ISO4309 report                                       |          |            |

Please note that all dimensions and specifications provided are indicative only and may be subject to change

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