

Hauling Rope Condition Monitoring System for Peak Tramway System

機電工程署
EMSD



hkpc
生產力局

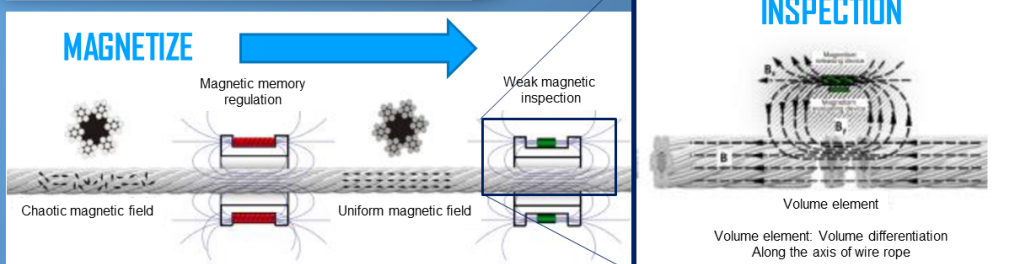
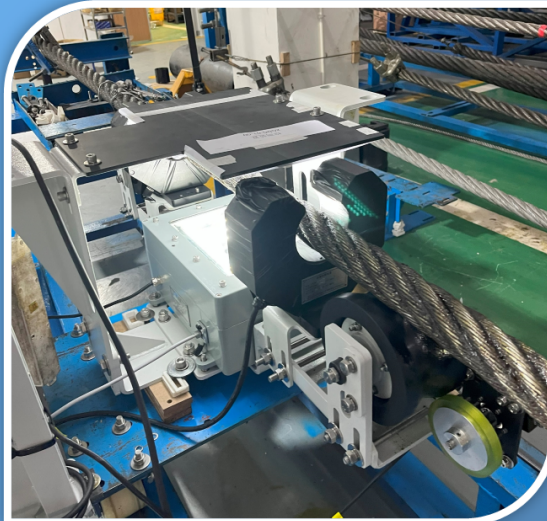
"Problem"



- Visual inspection
- Low defect detection efficiency

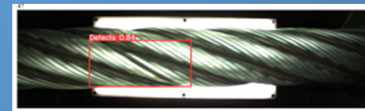


- Human involvement
- Service interruption for condition scanning
- Higher maintenance cost



"Solutions"

1. Computer Visual Identification



- Replacing bear eyes inspection
- Fast scanning of outer rope surface

2. Magnetic Rope Testing (MRT)

- Trend prediction
- Real time monitoring
- Inner rope defects detection

3. Smart Detection with Web-based Computer for Instant Alert

- Equipped with on-board microcomputer
- Displaying defect location on user's workstation



"Expected Outcome"

Higher Accuracy, Stronger Detection & Faster Response, Tying Solutions Together.

A real time continuous monitoring system using magnetic detection and image processing technology for analysis of health conditions of the entire hauling rope