



Dr. Brandt
GmbH



TCK.W

TCK.W - Portable Handheld Series

Non-destructive Wire Rope Testing
Wire rope life cycle analysis

The innovative wire rope inspection technology

Innovative Inspection Technology

We've completely solved three existing issues: wire rope's hidden danger, it's waste and it's low efficiency

Our Product

Our Advanced Portable Wire Rope Inspection Device, which operates on a „spatial magnetic field vector resultant“, -theory, adopts large airspace and controlled (weak) magnetic fields as its operating principle.

Our device is capable of detecting LF and LMA defects (or flaws) more efficiently compared to conventional (strong) magnetic NDT devices and conforms to the ASTM -E1571-2011 standard.

Being highly sensitive, our inspection devices are able to detect both internal and external flaws such as broken wires, abrasion, corrosion, fatigue, deformation and other flaws.

Our portable device has been widely used in offshore crane, floating crane, port quay crane, mooring winch, gantry crane and tower crane inspections.

Inspection Process

Simple 4-step process:

1. Magnetize the wire using the portable hand-held magnetizer.
2. Enter wire construction parameter.
3. Sample short part of the wire to determine the benchmark value.
4. Look the inspection device on the wire rope and start to measure.

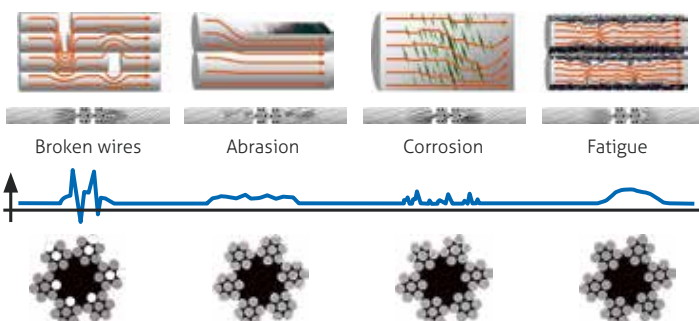


Technical Features

- Unique and innovative testing technology.
- Highly sensitive sensor. (Patented)
- Automatic noise filtering capabilities.
- Automatic system calibration.
- Digital (LCD) display for instant operator review.
- Accurate and precise flaw locating system.
- Device includes self-diagnostic features.

Operational Features

- Highly portable even in cramped spaces.
- Low weight. (2.8kg)
- Easy to learn and operate.
- Easy to maintain and clean.
- Automatic report generation.
- Fast report storage and retrieval.
- Capable of high-speed rope inspection up to 15 meter/second.








Unique Technology Advantages

Realizes three management objectives of wire rope's: safety, economy and efficiency

Technical Specifications

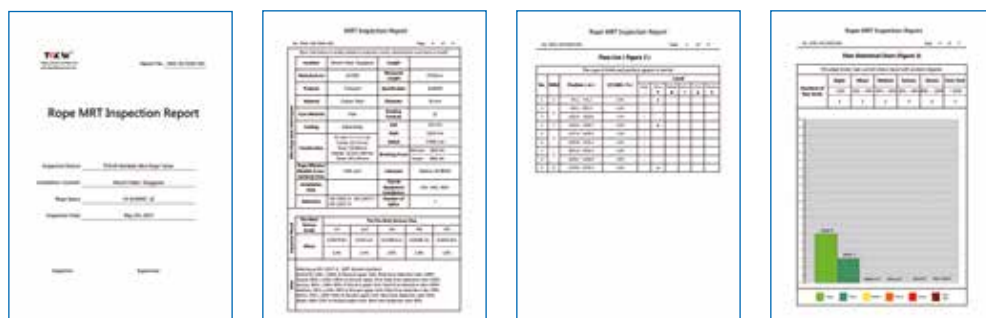
1. Sensor working sensitivity: $\geq 1.5V/mT$
2. Allowed tolerance (P): $\pm 1\%$
3. Defect locating accuracy: $\geq 99\%$
4. Inspection speed: 0-3m/s
5. Sensor operating field strength: $< 20mT$
6. Sensor working environment:
Temperature: $-20^{\circ}C \sim 55^{\circ}C$;
Humidity: $\leq 95\%RH$
7. Ingress protection: Ip53 (hand-held device) ask for higher level in case of fixed installations

Portable Handheld Series

Type	Model	Inspection range (mm)	Net weight (kg)	Dimension (mm)	Pictures
Standard	TCK.W-BX30	6-16	0.4	180x106x64	
	TCK.W-BX36	12-24	0.9	230x160x94	
	TCK.W-BX40	10-26	1.8	268x175x195	
	TCK.W-BX55	20-42			
	TCK.W-BX65	36-52			
Smart (II)	TCK.W-ZN2642	26-42	3.6	420x160x275	
	TCK.W-ZN3668	36-68			
Customized	TCK.W-ZN7090	70-90	5-8	Special order based on client's wishes	
	TCK.W-ZN90110	90-110			
Dedicated for elevator	TCK.W-DT1622	10-22	2.9	252x207x125 (1-6)	
	TCK.W-DT180	16-30	3-5	Special order based on client's wishes	
	TCK.W-DT230	20-36			

Industrial equipment	International standards
Winch mooring wires	API RP21
Crane hoist wires	API RP9B, BS71270202003, BS 6570, BS 302, ISO4309
Riser tension wires	API RP9B, BS71270202003, BS 6570, BS 302, ISO4309
Drill line	API RP9B, BS71270202003, BS 6570, BS 302, ISO4309
Elevator wires, suspension bridge wire	ISO4101
Cable car wire rope	En12927 Part 6,7,8
Lifts wire rope	ISO4344

Reports (examples)



Dr. Brandt GmbH

Dr. Brandt GmbH

Dr. Brandt GmbH has been an established manufacturer and technology leader in the field of high-precision measuring systems for many decades. Founded in 1949, we supply force and compression measurement technology which plays a vital role in the quality assurance and process control in industry.

Our focus is on the development and manufacture of customized measurement technology for individual fields of application. With the quality claim „Made in Germany“, Dr. Brandt GmbH combines devices and components that meet the highest requirements.

Luo Yang Wire Rope Inspection Technology Co.,Ltd.

Luo Yang Wire Rope Inspection Technology Co.,Ltd, briefly called TCK.W, inventor of the world's most advanced "Light Magnetic" inspection technology and the "Magnetic Field Memory" inspection method, located in Luoyang, PRC, has served worldwide 2500 customer in 42 different countries.

TCK.W's innovation have helped to solve several challenges for wire-rope inspection that puzzled the Non-Destructive Testing world for over a century. TCK.W technology exceeds in most cases today's wire rope inspection standards in the US and EU.



Precise. Durable. Innovative.

Rombacher Huette 9
44795 Bochum
Germany

Phone: +49-234-94393-0
Fax: +49-234-433431

Mail: info@strip-tension.com
Web: www.strip-tension.com

A Company of Group CFD