All Roped Up

Rope testing

Fit for the purpose

Safe hold or hanging by a thread: The condition of a rope cannot be determined at a glance. This can lead to false evaluation with potentially fatal consequences. Professional analysis of the state of a rope determines whether the rope under inspection can continue to be used without cause for concern.

Cover Page: Broken steel-wire rope after tensile strenght testing

Singapore Flyer

This is the reason why ropes and their end terminations that fall into the hands of the experts at DMT Rope Testing Centre undergo rigorous testing. Whether on-site, with the ropes in operation, or at our test lab, we make a detailed assessment of the properties and the wear resistance of the rope under test. We carry out tests on your products, taking the area of operation into account, before and during series production. This enables our clients to discover whether the new rope is suitable for its designated operational area and if it conforms with all the safety requirements. As a result, you can optimise your rope before actually putting it into use. This not only keeps costs down but also guarantees the maximum of safety and quality right from the very start.

A life of good connections

DMT Rope Testing Centre provides you with a comprehensive and systematic testing service. Right from the design stage, we provide consulting services. Later, we monitor production on-site and carry out initial tensile strength and endurance tests using our machines. Once the rope has been installed, we carry out an initial magnetoinductive test that provides reference values; the basis for reference values neccessary for inspection at periodical intervals later on.

Bridge over Rio Paraná Argentina

Back in the 1930s, DMT designed its own equipment for efficient non-destructive rope testing and has continually improved it. As a result, our know-how and our technology are a guarantee for high quality and performance.

We keep an eye on your ropes even during their operational life. Testing for damage to the inner and outer wires, deformation and corrosion provide data on the supporting cross-section of the rope. With the subsequent inspection of the end terminations, you receive an evaluation of the safety of the rope and the unit as a whole. Regular testing provides us with information on the condition of the ropes. This information enables you to plan ahead since you know exactly when a rope needs replacing.

Preparation for a modulus of elasticity test

Test of strength up to the limit

In black and white. As a legal accredited testing laboratory our tests are carried out according to legal requirements, standards or your own specifications. When necessary, we put your rope through rigorous tensile strength tests. At our test lab we can test static forces up to 20 MN or dynamic stress up to 5000 kN.

Non-destructive testing methods provide information on rope damage and the condition of the terminations: As a result of these meticulous testing methods, faults do not stand a chance. Our specialists find even the minutest irregularities. For instance, in the assessment and evaluation of damage caused by accident or inproper use. Our precise analysis provides you with reliable documentation on the causes. Regardless of the area of operation of your rope, we provide you with all-round support.

Our specialists operate worldwide, inspecting bridge and winding ropes, ropes of cable cars and rope ways, guy lines on broadcast masts and TV-towers, roofs and buildings and testing ropes used offshore. Competence that is in demand around the globe.

Overview of our testing range:

Actual state on-site analysis

- Visual and magneto-inductive testing on
  - External and internal wire breaks
  - Deformation
  - Corrosion
  - Wear
- Ultrasound testing on hidden areas
  - Under rope clamps
  - Inside casting sockets
- Further non-destructive tests on rope supports such as tie rods and tension members

Mechanical and technological determination of properties in test centre

- Determination of tensile strength
- Determination of rope modulus of elasticity
- Torque analysis
- Fatigue test
- Creep test

Service life prognosis

Using the results gained from laboratory testing and regular inspection on-site

Testing and consulting on all issues regarding

- Hosting ropes
- Crane ropes
- Cable way and cable car ropes
- Bridge ropes
- Guy ropes for broadcast and TV-towers, roofs and buildings
- Offshore ropes

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