

Qnixnews-de-cw-025-v1

Coating thickness measurement – state of the art:
Paint and corrosion protection measurements using innovative technology

Part 6:

Duplex measuring systems for the inspection of multi-layer systems in coating thickness measurement

Modern coating materials, especially applied in multiple layers provide reliable corrosion protection. In this regard, crucial steel structures such as „bridge railings“ are protected with a duplex coating system based on a galvanized and an epoxy based coating. To ensure the protective function of the coating materials used, their impermeability against affecting media is of importance. If pores exist, subsurface corrosion may spread from there and destroy the coating. Therefore, steel structures that have to be protected for a long time are painted with several layers of coating. In addition to the careful selection of appropriate coating material, the quality of the coating procedure is essential for the durability of the applied coatings. To guarantee the quality of the duplex systems i.e. the coating thickness of the galvanizing and the epoxy-based layer on the steel surface, both layers have to be inspected and measured using special gauges providing a combined duplex measuring mode.

Coating thickness gauges such as the QNix® 8500 measuring system offer a specially combined measuring mode. A convenient way to measure the galvanizing and the upper epoxy-based layer in one single measuring process and to record the readings. Thus, you can analyze the coating thickness of both layers at the same time.

In addition to multi layer measurements, the interchangeable probes from AUTOMATION Dr. Nix offer further advantages for an efficient quality control using wireless measuring technology.

Working on large steel structures such as pylons or antennae, where corrosion protection can only be inspected while climbing, QNix® Keyless gauges and the new modular measuring system QNix® 8500 have proven to be of particular value, because their very small measuring probes are equipped with a wrist warp allowing to use both hands for climbing.

This enables you to inspect the coating thickness completely and efficiently directly on the object – even with duplex probes or combined measuring probes. Particularly fast, convenient, and small measuring probes such as the radio-based thump-sized QNix® 8500 sat or QNix® Keyless measuring probes enable you to take your readings in many situations, even under difficult conditions such as working on pylons without any cables hindering you in your work. The coating thickness is being determined accurately and fast, for example with the only 30 grams light QNix® wireless probe. It can document the readings for later statistical analysis. An advancement that significantly facilitates the practical use as well as quality-cost-management and work efficiency.

More information: www.qnix.de → PRESS Downloads