

GALVO Test 2

Test device for anodised aluminium surfaces

With the GALVO Test 2, anodised surfaces can be distinguished from non-anodised surfaces.

As in some anodising processes, it is not possible to optically distinguish the anodised surfaces from the non-anodised surfaces, an electronic measuring device is required.

Anodised components demonstrate a significantly higher surface resistance than non-anodised components.

Surface resistance can be measured with standard commercial ohmmeters, which cannot be used in the running operation process, however, as disruptive feed lines and relatively long adjustment times ($> 1\text{S}$) disrupt the operation process and considerably reduce the delivery rate of components.

The basic measurement directive as well as the measurement procedure and the threshold values of the qualifying for anodised or respectively non-anodised surfaces are stipulated in Airbus Regulation AIM 6-9004.

The tester at hand meets and expands this regulation by allowing for the measuring time to be reduced down to 100 ms thanks to a spot measurement process and for results to be available for immediate display.

"Green = good" (anodised) and
"red = bad" (non-anodised).

The faultless contact with the surface to be tested is established by a spring-loaded contact fork, which bears an electrically conductive coating on the front ends.

The faultless contact and anodising of the surface is confirmed or signalled by a green LED along with a short "peep".

If the spot measurement triggered by the contact detects a non-anodised surface, the entire measurement head will light up red and the "confirmation peep" will change into a continuous tone.

This error recognition and signalisation is saved and has to be reset by pushing a reset button.

Thus, non-anodised components are surely detected.

In order to verify the test results, a reference board with 2 test surfaces is available: $< 100\text{ k}\Omega$ = bad; $100\text{ k}\Omega$ = good.

Technical data:

Measurement voltage: Max. 3V

Qualifying range: $< 100\text{ k}\Omega$ bad red; $> 100\text{ k}\Omega$ good green

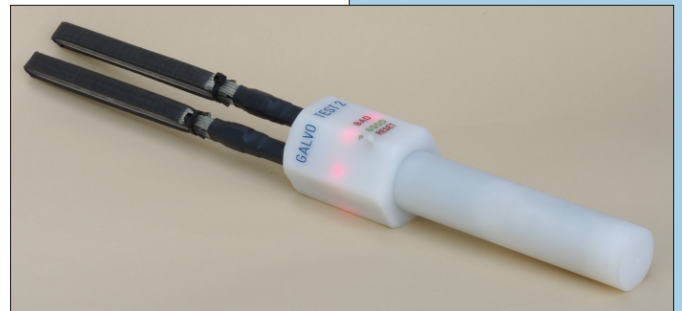
Battery: Lion battery 3V, 5000 mAh

Life cycle: 500 tests/d ca. 2 years

Test fork: Polycarbonate, spring-loaded exchangeable

Dimensions: D=35 mm, L= 180/350 mm

Weight: 240 g



Developed in cooperation with Airbus- Bremen, Dept. ESWNG A. Kück



DIE ENTWICKLER

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