

Solutions@Mecmesin Animal Identification Tags

Specification

The Danish Cattle Federation and its commercial arm RYK, is responsible for dairy cattle data recording in 98 per cent of herds in Denmark. It works closely with the International Committee on Animal Recording (ICAR) and required improved quality testing of the tensile strength of identification ear tags. These tags comprise of two flexible plastic leaves and a tamper-proof pin fastener. Having previously tested tags simply by hanging weights, they knew that to test to ISO 527-1 and ISO 37 standards would require greater sophistication. They would need to hold the tags under load and also control the speed of the applied force, both in axial and transverse pull tests. In addition they would need to ensure that tags, once opened, would break and become unusable.

Solution

A Mecmesin MultiTest 2.5-*xt* console-controlled test stand was supplied with wedge grips for the transverse pull test, effectively tearing the two leaves apart from their ends. Custom slotted grips were adapted from the previous test design, for pulling along the axis of the connecting pin. Under control of Mecmesin EmperorTM software, tests can now be run in stages, for example being held in tension at specific loads before being pulled further to breaking point, and run at a required speed of 500 mm/min. Programming these tests is easy and the measuring and reporting functions provide comprehensive test profiles.



Transverse pull test

System

- MultiTest 2.5-xt
- 5 kN wedge grips
- Custom grips designed for animal ear tags

Testimonial

"We were seeking a solution to improve repeatability, precision and documentation of our tests and also to automate our tests of the break force of plastic ear tags. We found an excellent solution with the MultiTest 2.5-*xt* equipment, providing not only precise measurements but also being easy to programme and having good software to produce test reports. We received excellent service from the supplier."

Ole Klejs Hansen, Senior Advisor, RYK/Danish Cattle Federation



Custom grips pull the pin apart axially

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agriculture industry

