

PRODUCT BENEFITS

- » Ensures stimulation effectiveness to optimise product quality attributes including tenderness and colour
- » Identifies any equipment faults
- » Maintains record of stimulation data to prove compliance with industry and customer processing requirements

SUITABLE FOR:

- » Cattle
- » Sheep
- » Deer
- » Goats
- » Pigs



WHO ARE WE?

Carne Technologies is committed to providing systems and expertise to improve product quality and processing efficiencies in the primary, secondary and retail meat sectors.

We develop, manufacture and supply state-of-the art technologies for use in carcass processing, and real-time quality measurement systems. The technologies are integrated with in-depth consultancy to design, tailor or optimise processes and procedures in the abattoir, boning room or retail meat preparation facility. Our highly experienced technical team provide remote support for all our equipment and can problem solve processing and quality problems.

The pioneering technologies we have developed in New Zealand are being used by meat processors around the globe.



**ELECTRICAL
STIMULATION
MONITOR AND
LOGGER**

CARNE TECHNOLOGIES

4 Matos Segedin Drive PO Box 740
Cambridge 3450, New Zealand +64 7 827 0731

www.carnetech.co.nz



INTRODUCTION

Electrical stimulation of carcasses is a critical component in the processing chain to ensure a high quality end product.

Effective electrical stimulation impacts on a range of quality attributes, including tenderness, meat colour, retail colour stability and drip loss during storage.

Therefore, the ability to continuously monitor the performance of the electrical stimulation is important. Conventionally this is done by directly measuring the decline in carcass pH, but this is technically difficult and only small numbers of carcasses can be assessed. Our approach is to monitor and record the electrical information of the stimulation.

The Stimulation Monitor and Logger continuously monitors the peak value of current pulses used to stimulate carcasses.

This confirms effective performance of the stimulation equipment and supplies evidence to assure both the processor and customers that this procedure has been carried out correctly.



MONITOR FUNCTION

Information captured by the Stimulation Monitor and Logger is presented as a real-time graphical display.

Where multiple carcasses are being stimulated simultaneously, the logging function can measure the total current (which will vary depending on the number of carcasses being stimulated at any moment), the average current per carcass being stimulated or the absolute current value for one carcass as it passes over a representative portion of the stimulation rail.

In each case the peak amperage value for each stimulation pulse is captured and analysed.

A constant record of amperage and voltage is stored in a database to keep a complete record of the performance of the system. The stimulation record for any specified time period can be accessed through a web page to confirm effective performance of the stimulation.



SPECIAL FEATURES

- » The Stimulation Monitor and Logger is designed to operate in conjunction with the SureStim stimulation system but can also be interfaced with other stimulation systems where required.
- » The same system, or a simplified version incorporating only an LED amperage display, can be interfaced with other electrical processing equipment such as immobilisers, electronic bleeders and back stiffeners to enable plant operators to monitor system performance.
- » Measurements are stored in a database that allows rapid querying of information and simple interfacing with other plant systems.
- » System performance errors can be automatically sent to production managers and quality assurance personnel to enable quick corrective actions when faults occur.

ELECTRICAL SPECIFICATIONS

Power Input: 100-240VAC at ~5W
Voltage Input: 450VRMS

DIMENSIONS

460mm x 245mm x 160mm

COMMUNICATIONS

The Stimulation Monitor and Logger is equipped with a RJ45 jack, over which 100mbit/100mbit Ethernet is supported. A minimum cable specification of cat5e or greater should be used for attaching the logger onto a network for data access.