

PRODUCT BENEFITS

- » Ensure stun effectiveness to meet animal welfare, operator safety and meat quality standards.
- » Identifies any equipment faults.
- » Measures operator performance.
- » Assists with stun operator training.
- » Records stun data for compliance audit requirements.

SUITABLE FOR:

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



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.



ELECTRICAL STUN MONITOR & LOGGER

Ensures your electrical stunning system meets animal welfare, operator safety and meat quality standards

CARNE TECHNOLOGIES

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OVERVIEW

The Carne Technologies Stun Monitor and Logger (CTSML) monitors and records the electrical information of each stun. In addition, the CTSML is designed as a training aid to help improve the performance of stun operators: it provides immediate feedback to the operator to show whether the stun meets the requirements of an effective stun.

The CTSML is compatible with a wide range of manual and automated stunning systems and for any species stunned electrically, including beef, sheep, pigs and goats. It can be installed as part of a new electrical stun system or easily added onto an existing electrical stun system by plant electricians.

The CTSML is an essential component of stun performance monitoring and of total quality assurance in the critical areas of animal welfare, electrical safety, and meat quality

FUNCTIONS

For each animal stunned, the CTSML continuously monitors and displays in real-time the amperage and voltage as a time-series.

The CTSML saves the following information for each stun:

- Date and time of stun.
- Time to reach minimum required stun level from start of stun (induction time).
- Average amperage over the stun cycle.
- Average voltage over the stun cycle.
- Total duration of stun.
- Pass/fail for effective stun induction.

- Pass/fail for effective stun duration.
- A complete trace of the amperage and voltage.
- Identifier for the operator performing the stun.

MONITOR PAGE

The monitor page provides a real time graphical display of the stun amperage and voltage.

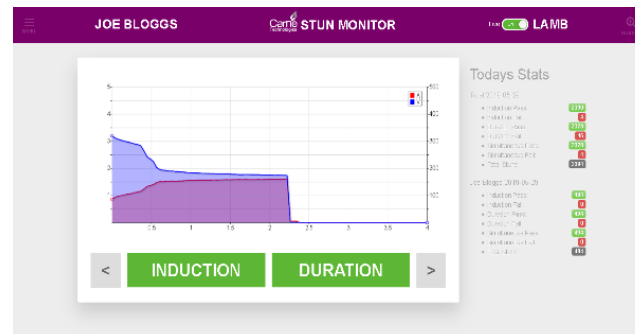
The display is supplied as a stand-alone HMI with a 12-inch touch screen display. Alternatively, the same display can be accessed remotely through the plant LAN

The display immediately alerts any aspect of the stun that fails to meet requirements

A scroll function allows earlier stun traces to be brought up and inspected.

Cumulative summary statistics of the current day's stun performance and current operator (if used)

All stun information can be accessed and displayed remotely in real time to allow supervisors and managers to view operations.



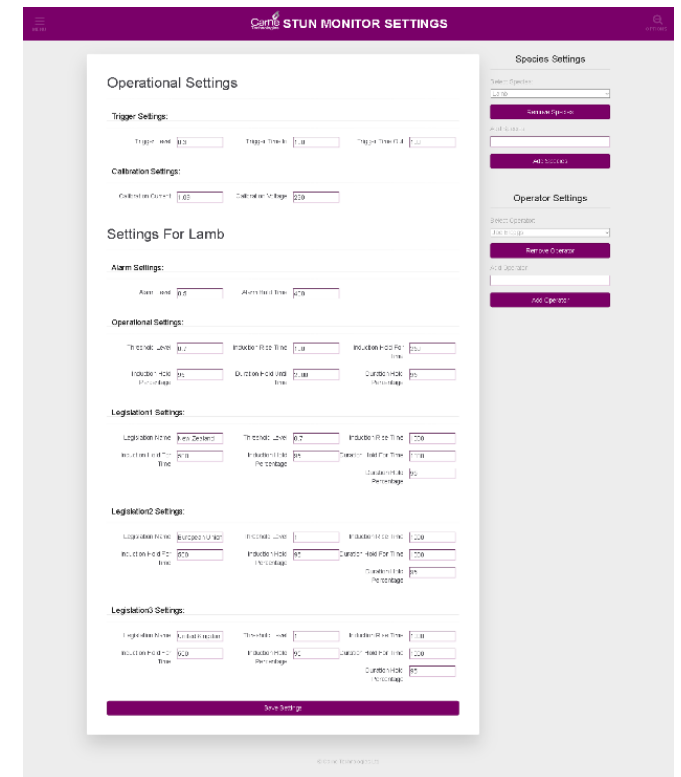
USER-DEFINED STUN SETTINGS PAGE

Each stun can be evaluated against up to 4 different stun specifications. This feature is to allow for different market/legislative requirements.

Each specification allows all the stun parameters to be defined independently. All analytical functions can be carried out relative to each specification independently.

Individual stun operators can be specified. Operators sign in using the touch screen, and analytics functions can be carried out for each operator independently.

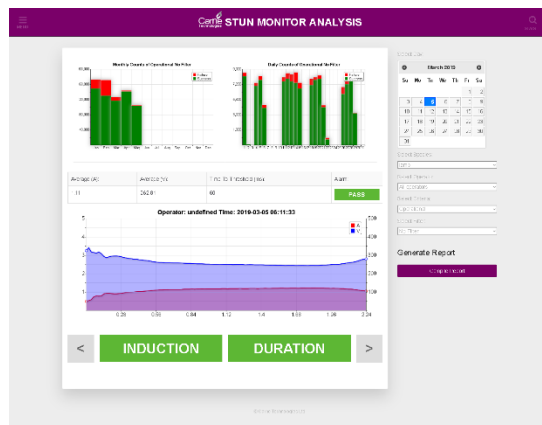
A STUN FAIL condition can be defined as a separate specification. This provides the conditions for a visual and/or auditory alarm to signal an inadequate stun.



ANALYTICS FUNCTIONS PAGE

The analytics page allows a review of the stun performance.

- Default histogram summaries of monthly and daily stun performance
- Filtering options to review traces individually. This is used to bring up and review only those stun traces that fail to meet the required stun specification.
- Filtered is performed using drop down menus. Additional filtering options for stun trace selection include:
 - Date and time ranges
 - Stun specification options
 - Operators
- Summary statistics reports to download as PDF file



COMMUNICATIONS

The stun loggers are equipped with a RJ45 jack, over which 100Mb Ethernet is supported. A minimum cable specification of Cat 5e or greater should be used for attaching the logger onto a network for data access.

The stun logger operates as a web server and can be accessed remotely from within the Local Area Network using a web browser.

SPECIAL FEATURES

- A built-in automated calibration facility allows the CTSML voltage and amperage measurements to be regularly calibrated.
- An additional output plug supplies LED or auditory signals near the operator to identify inadequate stunning in real time. This can either supplement the HMI graphical display or used as an alternative.

ELECTRICAL SPECIFICATIONS

Power Input: 100-240VAC; 300W

Stun Input: 600 VRMS; 6kW

HMI DIMENSIONS

460mm x 245mm x 160mm

