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## ***The evaluation of two commercial electric sheep stunning systems: current applied and the effect on heart function***

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### **Abstract**

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*The maintenance of head-only minimum stunning currents for sheep to  $\geq 1.0$  Amp as per current legislation was examined in two trials in a commercial abattoir. In the first trial, a Jetco MS100 stunner failed to maintain the current to  $> 1.0$  Amp in 118 of the 228 sheep. In a second trial, a Jetco MS105 delivered sufficient current in all sheep ( $n = 275$ ) to meet the legislative requirement, apart from a single animal. Recorded electrocardiograms showed a regular heartbeat, with no evidence of ventricular fibrillation, in all animals in both trials following stunning and neck-cut. Only one of the two stun units may therefore be considered to meet the statutory requirements but both may meet the requirements for halal slaughter where pre-stun is considered acceptable.*

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