STUNNING PIGS
2nd Edition

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Trouble Shooting

Stunning

1. Excessive electric prod use due to distractions
2. Stunner settings
3. Employee training
4. Wand ergonomics
5. Line speed
6. Poor bleeding
Both sides of restrainer must run at the same speed.
Electrodes must be positioned so that current goes through the brain.
Head only reversible stun correct position
Head to back cardiac arrest stunner
Head to body cardiac arrest stunner
Incorrect Head/Heart Saddle stunner placement
EEG brainwaves used to determine that a proper stun induces a grand mal epileptic seizure.
Minimum
Stunner Amperage Settings

1.25 amps for pigs
1.00 amps for sheep and cattle
Indicator Lights Show Stunner Function
Waveform of a good stun where the animal receives the full intensity and duration of the current.

Waveform of a correct stun.
Neville Gregory 2001
Waveform of bad stuns

Poor contact with the animal

Interrupted current (double stunning) and poor contact

Waveforms of poor stuns - Neville Gregory 2001
Blood Splash Caused By Poor Electric Stunning
Center Track Restrainer may have less blood splash than a V Conveyor because there is less pressure on the body
Electric Stunning Troubleshooting
Blood Splash (manual & automatic)

1. Sliding wand during the stun
2. Hot wanding
3. Frayed wires inside the cords
4. Corroded switches
5. Water in switches or cords
6. Dirty electrodes
7. Animal grounds out through restrainer
8. Hold Down pushing down on the animal
9. One side of restrainer runs faster

Blood splash trouble shooting.
Automatic Electric Stunners
Properly Stunned Insensible Pigs
Righting reflex in a fully sensible pig

Picture not from U.S.
Interpreting Eye Blinks in Electrically Stunned Pigs

Under plant conditions, avoid touching the eye. Watch for normal blinks which look like blinks on a live pig.

The following are not blinks:
1. Nystagmus - vibrating eye or lid
2. Eye clenched shut - pops open
3. Opens when touched but does not close

In captive bolt stunned cattle, nystagmus is a sign of a possible poor stun.

Eye reflexes.
Troubleshooting Return to Sensibility
Signs in Electrically Stunned Animals

1. Insufficient amperage
2. Poor bleeding
3. Poor initial contact that results in insufficient time
4. Interrupted current which results in insufficient time
5. Wrong placement on the head
6. Stunning-to-bleed interval too long with head only stunning

Trouble shooting return to sensibility.
Device to Facilitate Bleeding
Prone bleed may **reduce** blood splash because the **stun to bleed interval** is under 10 seconds.
On a single 100 animal audit by a customer 100% of the animals must be insensible to pass.

For regulatory purposes when hundreds of animals are observed I recommend keeping a running average on the percentage of animals that were insensible at hoisting that show signs of partial return to sensibility after hoisting.
Completely Eliminating these animals is impossible.

And I recommend setting the limits on Critical Control Points based on data collected on thousands of animals.
There is **Zero Tolerance** for Hoisting an Animal that is Showing Obvious Signs of Sensibility

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**There is Zero Tolerance for:**

- Skinning, Scalding, Dehairing or Removal of any Body Part on an Animal that Shows any Sign of Partial Return to Sensibility