



Key Welfare Aspects

Mechanical Stunning in Cattle

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Mechanical Stunning

- Free Bullet
- Captive bolt
 - Activated by Cartridge (red or black)
 - Pneumatic



Captive Bolt: Main Points

- Correct Position
- Correct Direction
- Sufficient Power
- Correct Distance
- Pithing



Free Bullet: Main Points

- Three types
 - Rifle
 - Shotgun
 - Hand Gun
- Correct Position
- Correct Direction
- Sufficient Power
- Correct Distance



Is the animal dead?

- Immediate collapsing
- Stop breathing
- No corneal reflex
- Limited involuntary muscular activity
- No reaction on painful stimulation



Other Key Points

- Animal Category, Size and Age
- Moving and Restraint of Animals
- Operators' Skills
- Back-up System