

The importance of stun-to-stick times in group-stunning

- ✓ Best practice indicates that animals should be bled within 15 seconds of stunning
- ✓ This is particularly important for head-only electrical stunning to ensure animals do not begin to recover consciousness
- ✓ Stun-to-stick times should be checked frequently to ensure they remain within 15 seconds
- ✓ Elevator design is key; the speed, height and number of pushers all affect the time it takes to get the animals to the bleed area
- ✓ An adequate number of shackles must be available before stunning takes place
- ✓ Where possible, the animals should be shackled by a second operator
- ✓ The bleed area should be as close to the stun-pen as possible

Before changing or introducing a new group-stunning system, the following should be considered:

1. Conformity

- Will it comply with legislation?
- Will it enable minimum stun-to-stick times to be met?

2. Flexibility

Will it adapt to future:

- building changes?
- operational changes?
- species/sizes?

3. Useability/reliability

Will it be easily:

- installed?
- operated?
- inspected?
- maintained?
- cleaned?

4. Environmental factors

Have you considered:

- lighting?
- ventilation?
- noise? (for operator and animal)

5. Human factors

- Will it be safe for humans?
- Will it be easy to operate?
- Will it make handling easier?
- Will staff be consulted about it?

6. Animal factors

- Will it be suitable for different species?
- Will there be a risk of injury to animals?
- Will it prevent unnecessary stress?
- Will animals move into it easily?

7. Cost

Is it affordable in terms of:

- installation?
- running?
- maintenance?

8. Future Implications

- Will it meet the needs of your business?

Further reading

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| Electrical Stunning of Red Meat Animals. Guidance Notes No. 4 | Humane Slaughter Association 2005 |
| Best Practice Guidelines for the Welfare of Sheep and Goats in Abattoirs | Humane Slaughter Association 2004 |
| Best Practice Guidelines for the Welfare of Pigs in Abattoirs | Humane Slaughter Association 2004 |

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Best Practice Guidelines for Group-Stunning Systems

Group-stunning of sheep, pigs, calves and goats is a common practice, particularly in small- to medium-sized abattoirs. The design and operation of these systems has changed little for many years. The following guide examines current practice, its potential advantages and disadvantages and provides best practice recommendations for group-stun systems. The guide also suggests ways to improve the welfare of animals slaughtered in group-stun situations.



The information in this guide is taken from Defra Project MH0133. Further details are available on the Defra website www.defra.gov.uk

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What is group-stunning?

- Group-stunning of sheep, pigs, calves and goats is common practice, particularly in small- to medium-sized abattoirs
- The system is simple and animals are not physically restrained
- Group-stunning allows more than one species to be slaughtered through the same system
- In a typical system, a group of animals will be brought into the stun-pen
- An individual animal will be stunned, shackled, attached to the elevator and conveyed to the bleed area
- The slaughterman will continue to stun and remove individual animals

Advantages of group-stun systems

- Animals are not isolated and move freely together
- Animals are not actively restrained
- Specialised handling equipment is not required
- The system is flexible in terms of species, size and operator
- Group-stunning systems are easy and cheap to clean and maintain

Potential disadvantages of group-stun systems

- Overcrowding in the stun-pen may cause a number of issues including:
 - injury due to escape/crushing by other animals
 - increased chance of mis-application of stunning tongs
 - increased chance of delayed stun-to-stick times due to difficulties in shackling
- Fewer animals within the stun-pen means that there is more room for them to move around
- Stun accuracy is dependent on the skill of the operator

What is a good group-stun system?

- Ideally in group-stun systems animals will:
 - move easily into the stun-pen
 - locate themselves close to the elevator
 - stand still
 - have their heads in an easily accessible position

Improvements to group-stunning systems

- A system which incorporates a gradually-narrowing pen (funnel) with a barred gate at the end has the potential to improve the group stun system through a number of ways:
 - A funnel system can be used to passively restrain animals. They are then less likely to move around the pen, as the number of animals within the stun-pen reduces (Figure 1)
A barred gate at the end of the funnel, through which animals can see others, or a way back to the lairage, will encourage them into the funnel (Figure 2)
 - Animals are drawn to the barred gate as they are able to see other animals of their own kind and are therefore more likely to stand still and the slaughterman is less likely to be chasing them around the pen
 - The barred gate system also encourages animals to face away from the operator therefore stunning equipment is able to be positioned accurately
- A forcing gate may also be used with the stun-pen to restrain fractious animals or reduce the available floor area as the number of animals in the stunning pen reduces (Figure 3)



Figure 1. Sheep have been encouraged into a funnel system due to the barred gate at the end which allows them to see others or a way back to the lairage



Figure 2. Pigs standing still in front of a barred gate in the stun pen. This allows the slaughterman better tong placement and accuracy

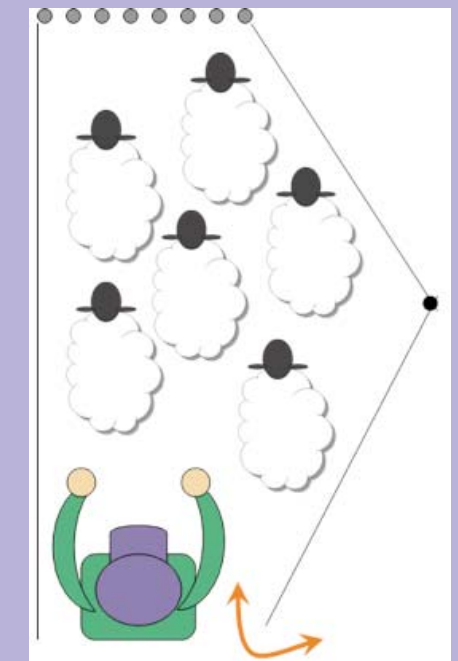


Figure 3. Diagram showing sheep positioned in the correct place for ease of stunning by the use of a funnel and a forcing gate

Best practice recommendations

- ✓ When deciding the optimum group size for your system, consider: pen area, species and size to be stunned, how many operators are in the pen and the original size of the group
- ✓ Move animals forward only when there is space ahead
- ✓ Ensure lighting enables operators to see clearly and use it to encourage animals to enter the pen
- ✓ Reduce background noise/switch off elevator
- ✓ Use calm handling techniques when moving animals
- ✓ Ensure walls of the pen have no projections on which animals or operators may injure themselves
- ✓ There should be suitable flooring and drainage to prevent slipping
- ✓ Animals should be prevented from escaping into the slaughter hall from the stun pen
- ✓ If swing-doors are used to prevent animals escaping the stun-pen, they should be baffled to reduce excess noise
- ✓ If there is a significant delay in the slaughter process, ensure that animals are returned to the lairage or provided with water
- ✓ Animals should not be left unattended in the stunning pen for extended periods
- ✓ Stun-to-stick times should not exceed 15 seconds
- ✓ Fit elevators with an easily accessible emergency stop button