Eight immediate ways to improve the handling of pigs:

- Reduce group size
- Move pigs forward only when there is space ahead
- Remove the appearance of a ‘dead-end’ on tight bends
- Ensure all floor surfaces are non-slip
- Remove all obstacles from the path of pigs
- Use increasingly diffuse light levels towards the stunning end of the handling system
- Reduce mechanical noise
- Use calm considerate handling techniques at all times

If you are thinking of altering your handling system or introducing a new system, then you should consider the following:

1. Conformity
   - Is it legal?
   - Has it been tested?

2. Flexibility
   Will it adapt to future:
   - building changes?
   - operational changes?
   - pig breeds/sizes?
   At stun, does it present:
   - suitable group sizes?
   - a steady flow of pigs?

3. Useability/reliability
   Can it be easily:
   - installed?
   - operated?
   - inspected?
   - maintained?
   - cleaned?

4. Environmental factors
   Have you considered:
   - heating?
   - lighting?
   - ventilation?
   - noise? (for operator and animal)

5. Human factors
   - Is it safe for humans?
   - It is easy to operate?
   - Is handling made easier?
   - Can all parts be reached?
   - Have staff approved it?
   - Do staff understand the reasons behind it?
   - Does it cater for worst case operators?

6. Animal Factors
   - Is it suitable for pig use?
   - Is there no risk of injury at all?
   - Does it prevent goading?
   - Can pigs walk at a natural pace?
   - Does it prevent confusion?

7. Cost
   - Is it affordable in terms of:
     - installation?
     - running?
     - maintenance?
   - Is investment justified?

8. Future implications
   - Have all future implications been considered?

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### On Floor Electrical Systems

**Current Practice**
- Small groups of pigs are moved into a stun-pen
- Electric tongs are applied by hand
- The pig is then shackled by a second operator

**Problem Areas**
- Sharp corners into stun-pen
- Group size
- Slippery floor surfaces
- Stun pen dimensions

**Requirements**
- Present successive pigs for stun:
  - every 16 secs, for stun-speeds of 220 pigs/hr
  - every 20 secs, for stun-speeds of 180 pigs/hr

**Solutions**
- The stun-pen should lead straight-on from the holding pens or walkway
- Provide a space allowance of 1.2m²/pig in the stun pen
- Provide a non-slip floor
- Ensure there are two operators in the stun pen, one to stun and one to shackle the pig, so as to reduce the stun-to-stick interval

### Further Information

More detailed information relating to these systems can be found in the following two factsheets:
- Generic problem areas of handling systems for pigs at slaughter
- Design specification for handling systems for pigs at slaughter

For further information then please contact:

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### Gas Systems

**Current Practice**
- Pigs are moved from a crowd pen to an enclosed race system
- They are encouraged into the cradle of a gas unit through a single entrance
- Usually the cradle holds one or two pigs

**Problem Areas**
- Group size in a crowd-pen
- Entry to the race
- Stop-start nature of system
- Lack of time to enter cradle
- Level of coercion and goading

**Requirements**
- Present pigs at the cradle entrance every 16 secs. Due to 12 sec cradle re-position time:
  - single pigs enter the cradle every 4 secs for stun-speeds of 220 pigs/hr
  - pairs of pigs enter the cradle every 4 secs for stun-speeds of 440 pigs/hr

**Solutions**
- Remove the enclosed race and explore group stunning and handling
- To stun in groups at 440 pigs/hr allow 3 pigs 12.5 secs to enter the cradle, or 4 pigs 21 secs to enter the cradle
- Provide an open walkway, 900mm wide for 3 pigs and 1200mm wide for 4 pigs
- Ensure that the walkway width equals that of the cradle entrance and the cradle
- Move pigs forward in the required group size with a moving gate, flush to the cradle entrance
- The ideal cradle loading for pigs is side by side; cradle length is 1900mm. For pigs loaded in pairs behind each other, a cradle length of 2800mm is required

### Restrainer-Conveyor Systems

**Current Practice**
- Pigs are moved from a crowd pen or step race to a single file enclosed race
- They are encouraged into a “V” or chest-belt restrainer
- Electric tongs are applied automatically or manually

**Problem Areas**
- Group size in crowd-pen
- Entering the race
- Pigs waiting in the race
- Entrance to the conveyor - the ‘visual cliff effect’
- Levels of coercion and goading

**Requirements**
- Present successive pigs in single file to the point of stun:
  - every 10 secs for stun-speeds of 360 pigs/hr
  - every 13 secs for stun-speeds of 280 pigs/hr

**Solutions**
- Replace the crowd-pen with a labyrinth system, for reducing groups of pigs into single file
- Ensure there are no pinch points in the race
- Provide a race length for 6-10 pigs maximum
- Use a batch-approach to filling the race
- Close the race when full with a barred guillotine-gate
- Ensure the level of the floor ‘drop off’ at the restrainer entrance is no less than 1100mm

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For more copies of this leaflet, please send a stamped addressed envelope to the Humane Slaughter Association, The Old School, Brewhouse Hill, Wheathampstead, Herts AL4 8AN