

Slaughtering with maximum consideration for the animals

Obtain positive cost/benefit through optimal solutions!

The majority of the earth's population eat meat from animals that are bred and slaughtered under industrialized conditions. The farmers, hauliers and the meat industry are responsible for ensuring that the animals are treated well and without unnecessary use of force.

DMRI have experienced that it is lucrative to consider animal welfare, primarily because the quality of the meat is better from animals that are treated well. Gentle treatment also results in fewer injuries to the animals and survival of more animals until the time of slaughter.

In the EU and in many other parts of the world, legislation is very focused on the handling of living animals. Furthermore interest groups and consumers are very aware of animal welfare.

DMRI develop technical solutions and tools to ensure animal welfare from the animals are delivered from the farmers, during transportation, off-loading, lairage, driveway, stunning and slaughtering.

DMRI can help your company to choose and improve solutions to ensure animal welfare and the best economy for your company.



Best practice for building vehicles for animal transport

DMRI have the competences and tools to ensure animal welfare from the pigs and cattle are delivered from the farmers until slaughter. The inside construction of transport vehicles is important to avoid, squeezing and damages at the animals. It is also important to ensure sufficient ventilation during all weather conditions. DMRI have elaborated handbooks



(HST/HKT handbooks) for construction of vehicles for transport of pigs as well as cattle. When the directions in the handbooks are observed, the best conditions are present for transporting animals with a minimum of injuries.

A standardisation of equipment for transport and the use of handbooks provide the following advantages:

- Increased animal welfare, fewer injuries to the animals, less loss and a lower death rate
- Low costs for hauliers and vehicle builders when equipment is standardised
- Farmers and slaughterhouses can organize loading and conditions of receipt better and simpler.

Optimal construction of receipt and stunning are almost free of charge

A carefully prepared construction of loading ramp, lairage and driveways all the way to stunning at the slaughterhouse is crucial to minimize the stress that the animals experience when they are moved around in an unfamiliar environment. When the unloading facilities are examined by DMRI, only a small investment often can lead to improved animal welfare, more efficient driving to stunning and an improvement in meat quality.

Less stress and gentle treatment will:

- Improve the technological quality and shelf-life of the meat
- Result in less cut off from products
- Fewer animals with diverging pH

During a few days, DMRI can conduct a quality audit. Often, good animal welfare also improves production economy.

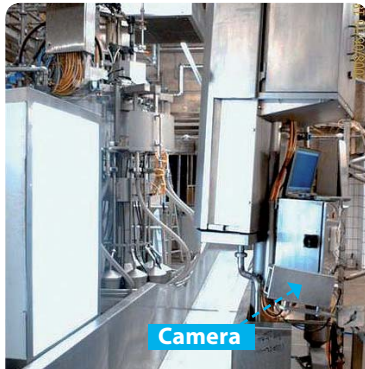
DMRI have for example made these quality audits:

- Examination and adjustment of facilities and procedures reduced the drip loss in pork by 0.5%-points
- The amount of shock marks/bleeding from driveways were reduced by 30 - 75%
- The capacity in the driveways was adjusted to the behaviour of the animals and led to reductions in the workforce
- Control and adjustments of the stunning installation improved the stunning quality and reduced the CO₂ discharge/consumption
- The audit expenses were paid back in 1 - 2 months, just by changing procedures and after 1 - 24 months by improving the construction
- Training of staff led to improved understanding of the treatment of pigs including limitation of injuries
- Control of sticking and debleeding resulted in less cut off from the fore end



New methods

DMRI have developed and optimized several methods for driving and stunning, especially for pigs. Automatic lairage as well as driving and stunning by groups have solved many problems. Recently, DMRI have developed a system



Further information - "Visstik"
http://www.butina.eu/products/visstik_new/

that efficiently controls the sticking of the pig at high slaughter speeds - "Visstik". A vision system controls if the amount of blood is sufficient or the sticking should be controlled. The new system has increased the safety for correct sticking at the large Danish slaughterhouses.

Increased demands in the EU

DMRI are experts in implementing efficient stunning and slaughtering that complies with laws and animal welfare. There is an increased attention on animal welfare for production animals and on the respect for responsible processes during stunning and sticking. This is especially reflected in the new EU regulations valid after 2012.

New demands for both authorities and companies comprise:

- Management responsibility
- Training of employees involved
- Demands for methods
- Equipment and approval

This will ensure that minimum rules for animal welfare are kept during slaughtering.

DMRI aim at obtaining status as a regional competence centre within this area.

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Profile

DMRI offers consultancy and innovation to the meat industry based on research regarding:

- Improvement of efficiency
- Management of product quality
- Maximal food safety

Key services

- Animal welfare – transportation, lairage and stunning
- Optimisation of byproduct handling
- Design and optimisation of chilling facilities
- Improvement of meat quality
- Improvement of food safety and hygiene
- Improvement of efficiency through automation and methods
- Optimized raw material utilisation through sorting and management
- Odour abatement
- Waste water treatment
- Reduction of water and energy consumption