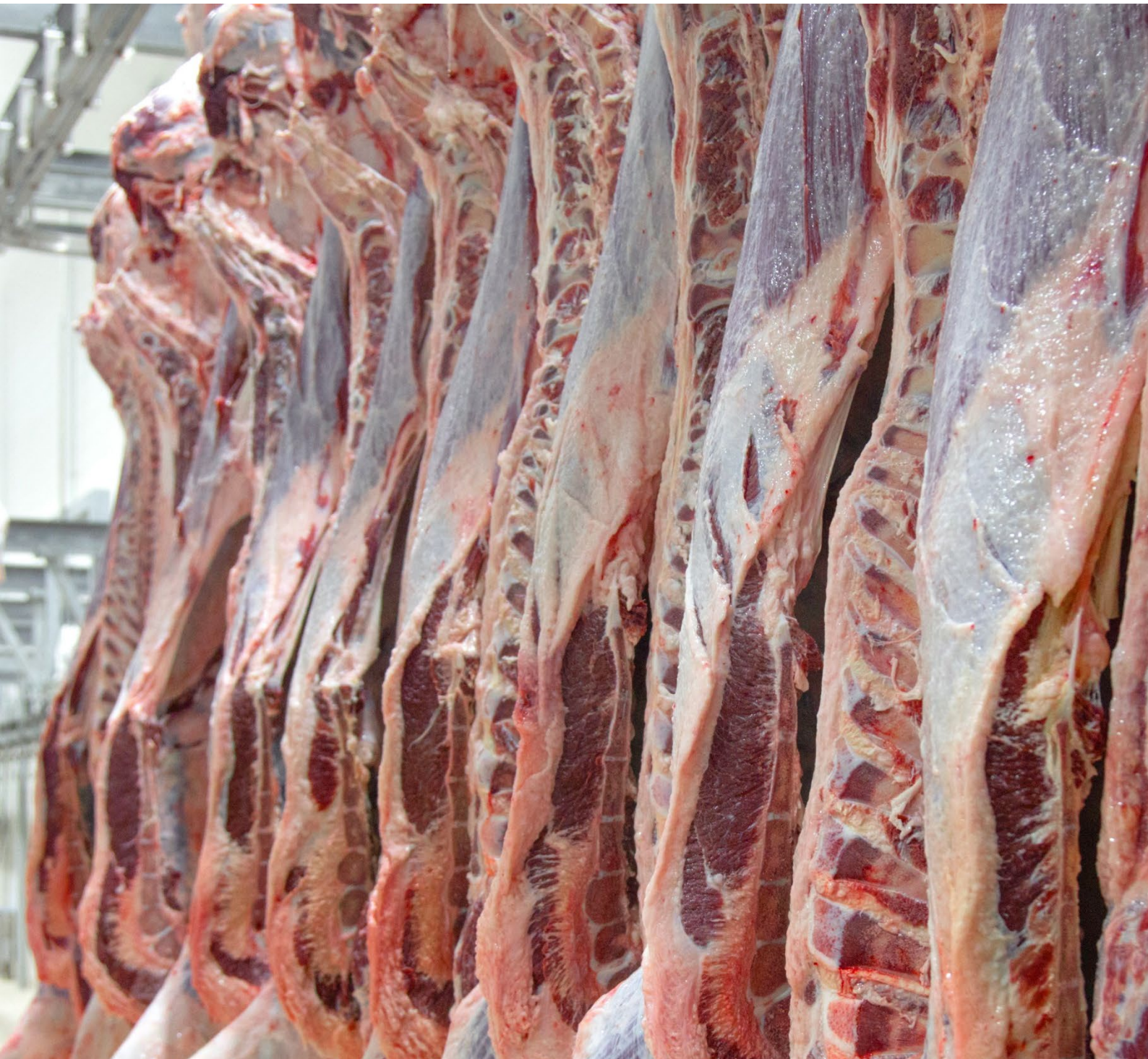
Guideline

Slaughtering/Deboning

Version: 01.01.2026



Contents

1 Fundamentals

You can find basic information about the QS scheme, such as how it is organised, the participation conditions, use of QS certification mark and sanction procedures in the General Regulations Guideline.

1.1 Scope

- Slaughtering/Deboning of red and white meat (meat, bones, offal and by-products suitable for consumption)

The following requirements apply to slaughtering/deboning plants and relate to all processes taking place at the production site. All processes that fall under the EU licence number at the registered location must be mapped to the relevant production scope when they are registered for the QS scheme and verified during an audit.

Slaughtering/deboning stage companies have the right to produce, sell and store QS meat and QS meat products. They do not need to have a separate certification for the meat wholesale stage. The entire scope of the wholesale meat stage is already covered by the slaughtering/debonig stage. Locations that are mapped to the deboning sector within the registered production scope are also allowed, with this stage of approval within the QS scheme, to produce minced meat, seasoned/marinated meat and cuts of meat, and to portion and pack meat.

If other ingredients are used in addition to meat, the requirements for the delimitation of the scope of application for composite products must be complied with in conjunction with the regulations for the use of the QS certification mark.

Please refer to the following supporting documents:

- Explanations Delimitation of the scope of application for composite products
- Style Guide for the QS certification mark
- Explanations Use of the QS certification mark for composite products
- Annex Additional module "Convenience"

1.2 Responsibilities

The **scheme participant** is responsible for ensuring:

- Compliance with the requirements
- Complete and correct documentation
- Completion of self-assessments
- Adequate and timely implementation of corrective actions
- Correct use of the QS certification mark and product labelling

Scheme participants must comply at all times with the requirements of the QS scheme and always be in a position to demonstrate compliance with said QS requirements. Scheme participants must ensure compliance not only with the requirements of this guideline and all other applicable QS requirements (e.g. the General Regulations Guideline, Salmonella Monitoring for Pigs Guideline, Salmonella Monitoring and Reduction Programme for Poultry Meat Production Guideline, Pig Slaughter Diagnostic Data Guideline, Cattle Slaughter Diagnostic Data Guideline, Poultry Slaughter Diagnostic Data Guideline, Live-stock Transportation Guideline, and Certification and Incidence Form Guideline) but also with the applicable legal provisions in the country in which the QS products are produced and stored as well as the country in which they will be marketed by the scheme participant.

2 General requirements

2.1 General scheme requirements

2.1.1 General business data

The following master data is to be recorded in the QS database and always kept up to date:

- Address of the main company and any subsidiary production premises with EU licence numbers
- Company name
- Telephone number, email address of the legal representative, contact person,
- Crisis manager
- Details on the type of plant and its (product- and process-related) operations, e.g. slaughter of red meat or deboning of white meat)

- Data on slaughter output
- Additional/location-specific information (per database)
- Operating hours

A plant overview must also be drawn up (existing documentation may be used, e.g. QM or HACCP), which contains the following data in addition to the information listed above:

- All production and storage facilities with EU licence numbers (this includes external companies such as deep freeze storage providers and outsourced processes such as thawing and repacking; where premises are shared by several companies, all premises belonging to the plant must be identified in an operating plan.)
- Information on existing quality management and audit systems (e.g. ISO 9001, IFS, BRC)
- Appointed laboratories (current address, telephone number, email address) and their field of accreditation

Plant overview / QS database

2.1.2 Incident and crisis management

QS has developed a comprehensive incident and crisis management system that actively supports scheme participants in the event of an incident or crisis. Scheme participants must immediately in-form QS and – where a legal obligation exists – the competent authorities about any critical incidents and public product recalls where these are of relevance to the QS scheme.

Critical incidents are events that pose or have the potential to pose a risk to humans, animals, the environment, assets, or the QS scheme as a whole.

In particular, if:

- Nonconformities in goods procurement become apparent during production or marketing, which could pose a risk to food safety
- Preliminary proceedings are initiated due to a violation of animal welfare provisions or food safety regulations or
- Investigations are carried out by the media, there are critical reports in the media, or public protests are held on issues of food safety

the scheme participants must inform QS.

All scheme participants must have a template document available for reporting an incident, e.g. the QS incidence form, so that they can convey all the required information in a targeted manner if an incident should occur. Moreover, all scheme participants must name a crisis officer, and this officer must always be reachable. The name of the crisis officer must be entered in the QS database.

A procedure of conduct for incidents and crises must be defined and implemented, as well as verified at regular intervals, at least once a year (approx. every 12 months). It must include the following points:

- Creation of a crisis team
- Emergency call list
- Procedure for product recall and return
- Communication plan
- Customer information

Documentation on incident and crisis management

2.1.3 Disaster concept

The food business operator has created a disaster concept for various disaster scenarios in one or more areas of the company.

In the context of the requirement, a **disaster** is the sudden occurrence of a failure that presents an immediate risk to:

- Food safety
- Animal welfare
- Humans
- The environment

and/or leads to the damage or destruction of assets.

A disaster concept/plan must be developed, which, as a minimum:

- Takes into account the risks outlined above

- Illustrates internal processes
- Determines actions
- Defines decision-making channels and responsibilities
- Ensures the availability of personnel (including outside normal working hours)

Disaster concept

2.1.4 Food safety culture

The food business operator has introduced an appropriate food safety culture as per **Reg. (EC) No. 2021/382** that is commensurate to the type and size of the company. The basic requirements for this are an integral component of QS participation and certification. With the QS participation and a successful certification, the QS participant proves the introduction and implementation of a food safety culture.

⇒ See QS-Document "Food safety culture - Implementation of **Regulation (EU) 2021/382** in the QS scheme"

The company's aim should be to permanently establish a culture in the sense of a defined food safety ideal that is achieved through conduct training and operational guidelines.

This awareness is encouraged and evaluated by the management.

Roles and responsibilities

The food business operator must ensure that the food safety culture is implemented and updated.
It may, however, delegate this task within the company.

Please refer to the following supporting documents:

- **Reg. (EC) No. 2021/382**
- **Reg. (EC) No. 852/2004**
- Explanatory notes "Food safety culture – implementation of **Regulation (EU) 2021/382** in the QS scheme"

2.1.5 Commissioning service providers

The commissioning of services (e.g. logistics, pest control, cleaning & disinfection, technology) is carried out as part of the scheme participant's duty of care.

Logistics

For the storage and/or transport of QS goods, the corresponding requirements of the *Guideline Logistics Meat, Meat products and Fruit, Vegetables, Potatoes* must be complied with. Participation in the QS scheme is also possible via a certification recognized by QS (for an overview, see the QS homepage).

Companies that are commissioned as service providers to carry out the following logistics processes for QS goods must have QS eligibility of delivery:

Process (service)	The contracted logistics company is authorised to deliver QS products for one of the following types of production:
Storage and, if necessary, picking of QS goods / transport of QS goods between QS scheme partners at the wholesale/logistics, slaughtering/deboning, processing, convenience and/or butchery stages.	• Wholesale • Logistics; QS, IFS or BRC certification systems • Slaughtering/deboning • Processing • Central warehouse • Convenience • Food retail warehouse • Butchery

The client of the logistics company/shipper (QS scheme partner) is responsible for fulfilling the requirements. They must inform the logistics company if the delivery involves QS goods (e.g. via remote data transmission).

Exemption for sporadic commissioning

In the case of sporadic* commissioning of logistics companies for the transport of QS goods, deviations from the above-mentioned requirement for QS eligibility of delivery are possible.

In this case, the client must oblige the logistics company to comply with the QS requirements (⇒ Guideline Logistics, Chapters 2.3, 3, 5) as part of the contract. The implementation of the requirements by the contracted logistics company must be ensured by means of evidence and checked on a random basis as part of the client's self-monitoring.

In addition, the client must require the commissioned logistics company to allow checks by the client's certification body and/or by QS in individual cases.

*Sporadic commissioning: a maximum of twelve individual orders to the same logistics company within a calendar year.

Process for checking QS eligibility of delivery, when using the exemption for sporadic commissioning of logistics companies: evidence of implementation of QS requirements, self-assessment checklist, letter of commitment to enable inspections

2.2 Microbiological Self-assessments and HACCP

2.2.1 [K.O.] Conducting self-assessments

Analysis methods – limit and guide values

The methods stipulated in the most recent version of **Reg. (EC) No. 2073/2005** or equivalent alternative methods are used to carry out analyses as part of a self-assessment. The analytical reference methods are:

- Salmonella testing — **EN ISO 6579** or PCR
- Aerobic colony count — **ISO 4833** before cooling
- Enterobacteriaceae — **ISO 21528-2** before cooling
- Campylobacter — **ISO 10272-2** after cooling
- *Escherichia coli* — **ISO 16649-1 or -2**
- *Listeria monocytogenes* — **EN ISO 11290-1 or -2**

The company is required to adhere to sampling plans (see tab. 1 and 2) and to document the micro-biological status. The analysis must be done accordingly to the standard procedure.

The analysis results must be evaluated promptly after the results have been submitted. Trend analyses must be carried out regularly and measures initiated in the event of unsatisfactory results or negative trends.

Carcass testing

Sampling cattle, calves and pigs

Five samples must be taken per week, each on one slaughter day, on alternating weekdays (rotating) throughout the slaughter process.

When sampling for Salmonella testing purposes, the samples must be taken using an abrasive sponge (as described in **Reg. (EC) No. 2073/2005** Annex I, chapter 3.2). Various points on the surface that are most likely to be contaminated (ham, belly, back and jowl on pigs; rump, flank, brisket and neck on cattle) must be chosen for sampling.

The overall sampling surface must measure at least 400 cm^2.

When sampling for Enterobacteriaceae and aerobic colony count testing, either a destructive or non-destructive method may be chosen in accordance with **Reg. (EC) No. 2073/2005**.

The tried-and-tested "punch sampling" method, which exhibits a high recovery rate, may be used:

- Punch samples: Four tissue samples with an overall surface area of at least 20 cm^2 (to test for Enterobacteriaceae and aerobic colony count)

If the "punch sampling" process is also to be used to test for Salmonella, the following conditions must be met:

- The responsible food business operator must explain to the competent authority that the sensitivity of the punch sampling method does not deviate significantly or systematically from the pre-scribed abrasive sponge method and

- that the punch sampling method is associated with "at least equivalent guarantees".

The samples should be taken after dressing but before cooling, provided there are no administrative orders in place to the contrary.

Please refer to the following supporting documents:

- EN ISO 17604 Microbiology of the food chain - Sampling of carcasses for microbiological examination

Poultry sampling

Five samples must be taken per week, each on one slaughter day, on alternating weekdays (rotating) throughout the slaughter.

Sampling of poultry carcasses for testing for Salmonella

Sampling for Salmonella must be carried out in accordance with **Reg. (EC) No. 2073/2005** Annex I, Chapter 3.2. Accordingly, at least 15 carcasses must be sampled after chilling. For this purpose, a piece of about 10 g of neck skin is taken from each carcass. Before testing, the neck skin samples from three carcasses each must be pooled to form the final number of samples (5 × 25 g).

Note: *If limit values are exceeded, the German document "Fleischhygiene zur Prävention lebensmittelhygienischer Risiken bei der Geflügelschlachtung (Meat hygiene for the prevention of food hygiene risk during poultry slaughter)" (from the Working Group on Meat and Poultry Meat Hygiene and the specific questions on food of animal origin) is a useful decision-making tool for introducing targeted improvement measures.*

Table 1: Process hygiene criteria(1) for carcasses and for minced meat and meat preparations (from **Reg. (EC) No. 2073/2005**)

Food category	Microorganisms	Sampling plan(2)/Limit values
Cattle carcasses	Aerobic colony count(3)	m=3.5 and M=5.0 log CFU/cm² daily average log value (Note: Corresponds to the values m=3.2x10^3 and M=1x10^5 CFU/cm²)
	Enterobacteriaceae(3)	m=1.5 and M=2.5 log CFU/cm² daily average log value (Note: Corresponds to the values m=3.2x10 and M=3.2x10^3 CFU/cm²)
	Salmonella	n=50(4) and c=2(5) Not detectable in the sampled area(6)
Pig carcasses	Aerobic colony count(3)	m=4.0 and M=5.0 log CFU/cm² daily average log value (Note: Corresponds to the values m=1x10^4 and M=1x10^5 CFU/cm²)
	Enterobacteriaceae(3)	m=2.0 and M=3.0 log CFU/cm² daily average log value (Note: Corresponds to the values m=1x10^2 and M=1x10^3 CFU/cm²)
	Salmonella	n=50(4) and c=3(5) Not detectable in the sampled area(6)
Broiler chicken and turkey carcasses	*Salmonella* spp.(7)	n=50(4) and c=5(5) Not detectable in 25 g of a pooled sample from the skin of the neck(6)

Food category	Microorganisms	Sampling plan[2]/Limit values
Broiler chicken carcasses	*Campylobacter* spp.	n=50[4] and c = 10[8] m=1,000 CFU/g[6]
Minced meat	Aerobic colony count[9]	n=5 and c=2 m=5x105 and M=5x106 CFU/g
	Escherichia coli[10]	n=5 and c=2 m=50 and M=500 CFU/g
Meat preparations	*Escherichia coli*[10]	n=5 and c=2 m=500 and M=5,000 CFU/g or cm²

[1] "Process hygiene criterion": A criterion that denotes the acceptable procedure to be used during the production process. This type of criterion does not apply to products in the retail stage. It determines the guidance value for contamination, which requires corrective actions if exceeded, so that the process hygiene procedures remain in line with food law.
[2] n = Number of sample units per random sample; c = Number of sample units with values between m and M.
[3] The limit values (m and M) only apply to samples taken using the destructive method. The daily average log value is calculated by first determining a log value for each individual test result, then calculating the average of these log values.
[4] The 50 samples are to be taken during 10 consecutive sample collections in accordance with the sampling provisions and frequencies specified in **Reg. (EC) No. 2073/2005.**
[5] The number of samples in which Salmonella was detected. The c value is to be reviewed so that progress with reducing Salmonella prevalence can be taken into account. EU member states and regions with a low prevalence of Salmonella can also start to use lower c values before the review.
[6] m=M
[7] If *Salmonella spp*. is detected, the isolates for the detection of *Salmonella typhimurium and Salmonella enteritis* are further serotyped in order to verify compliance with the microbiological criterion in accordance with **Reg. (EC) No. 2073/2005.**
[8] Satisfactory if no more than c/n values > m; unsatisfactory if more than c/n values > m.
[9] This criterion does not apply to minced meat that has been produced at the individual retailer level, provided the product will be in date for under 24 hours.
[10] In this case, *E. coli* is used as an indicator for faecal contamination.

Table 2: Food safety criteria[1] for meat and meat products marketed during the shelf-life (from **Reg. (EC) No. 2073/2005**)

Food category	Microorganisms	Sampling plan [2]/ Limit values
Ready-to-eat foods, other than those intended for infants or for special medical purposes, which may encourage the multiplication of *Listeria monocytogenes*	*Listeria monocytogenes*	n=5 und c=0 **until 30 June 2026** 100 CFU/g[3] in 25 g not detectable[4] **from 1 July 2026** 100 CFU/g[3] in 25 g not detectable[5]
Ready-to-eat foods, other than those intended for infants or for special medical purposes, which cannot support the multiplication of *Listeria monocytogenes*	*Listeria monocytogenes*	n=5 und c=0 100 CFU/g

Food category	Microorganisms	Sampling plan [2]/ Limit values
Minced meat and meat preparations intended to be eaten raw [6]	*Salmonella*	n=5 and c=0 in 25 g not detectable
Minced meat and meat preparations made from poultry meat that are intended to be eaten cooked [6]	*Salmonella*	n=5 and c=0 in 25 g not detectable
Minced meat and meat preparations made from non-poultry meat that are intended to be eaten cooked [6]	*Salmonella*	n=5 and c=0 in 25 g not detectable
Meat products that are intended to be eaten raw, except products for which the risk of Salmonella is excluded as a result of the production process or the product composition [6]	*Salmonella*	n=5 and c=0 in 25 g not detectable
Meat products made from poultry meat that are intended to be eaten cooked [6]	*Salmonella*	n=5 and c=0 in 25 g not detectable
Fresh poultry meat [6] [7]	*Salmonella typhi-murium* [8] *Salmonella enteritidis*	in 25 g not detectable

[1] "Food safety criteria": A criterion which determines the acceptability of a product or a lot of food and which applies on products in the market.
[2] n = The number of units comprising the sample; c = number of sample units giving values between m and M
[3] This criterion applies if the manufacturer can demonstrate to the satisfaction of the competent authority that the product does not exceed 100 CFU/g throughout its shelf life. The food manufacturer may set intermediate limits during the process, which should be sufficiently low to ensure that the limit of 100 CFU/g is not exceeded at the end of the shelf life.
[4] If the food manufacturer cannot demonstrate to the satisfaction of the competent authority that the product will not exceed the limit of 100 CFU/g throughout the shelf-life: n=5 and c=0 in 25 g not detectable for products before they have left the direct control of the food manufacturer who manufactured them.
[5] Unless the manufacturer can demonstrate to the satisfaction of the competent authority that the content of *Listeria monocytogenes* does not exceed 100 CFU/g throughout the shelf life, the following applies: n=5 and c=0 in 25 g not detectable for products placed on the market during the shelf life.
[6] m=M
[7] This criterion shall apply to fresh meat from breeding flocks of Gallus gallus flocks, laying hens, broilers and breeding and fattening flocks of turkeys.
[8] As regards monophasic Salmonella typhimurium only 1,4[5],12: i- is included.

If zoonotic agents are detected during in-house inspections in accordance with **Reg. (EC) No. 2073/2005** or any other analyses carried out as part of in-house inspections, the competent food safety monitoring authority must be informed of the test result immediately. The requirements of the **German Ordinance on surveillance of zoonoses and zoonotic disease** and/or the relevant national regulations must be observed, particularly with regard to:

- In-house inspections
- Duty to report to the authorities
- Retained samples
- Record-keeping duties
- Corrective actions

In the event that companies manufacture products outside the food categories described above or do not have to carry out tests in accordance with **Reg. (EC) No. 2073/2005,** the companies are guided by the recommendations of the Food Microbiology and Hygiene Section of the German Society for Hygiene and Microbiology (DGHM, excerpted in Table 3 for guideline and warning values for the assessment of raw beef, pork and poultry meat at the end of the best-before date or consumption date).

Table 3: Guidance and warning values for assessing raw beef, pork and poultry at the end of the expiry or use-by date[(a)]

	Guidance value (CFU/g)	Warning value (CFU/g)
Enterobacteriaceae	$1x10^4$	$1x10^5$
Escherichia coli (beef and pork)	$1x10^2$	$1x10^3$
Escherichia coli (poultry)	$5x10^2$	$5x10^3$
Coagulase-positive staphylococci	$5x10^2$	$5x10^3$
Listeria monocytogenes(b)	---	$1x10^2$
Pseudomonads	$1x10^6$	---
Salmonella	---	Not detectable in 25 g
Aerobic colony count (Pork and poultry)	$5x10^6$	---

[(a)] Not seasoned, loose or pre-packaged
[(b)] To detect and evaluate L. monocytogenes, the provisions of **Reg. (EC) No. 2073/2005** must be observed.

Corrective actions in case of negative trends or values exceeding the guide values

In accordance with **Reg. (EC) No. 2073/2005**, suitable measures must be implemented in the event of unsatisfactory results or negative trends:

- Determination of the causes
- Corrective actions to reduce the bacteria count

Sampling plans for surfaces, test results, temperature recorders, temperature monitoring, measuring logs

2.2.2 Listeria monitoring

A listeria monitoring strategy must be implemented within the company in line with the legal requirements as per Art. 5, **Reg. (EC) No. 2073/2005** if the following conditions are met:

- The company produces ready-to-eat foods and
- The ready-to-eat foods may pose a health risk as a result of *Listeria monocytogenes*

Relevant plants must test samples from their food processing areas and equipment for *Listeria monocytogenes* as part of their sampling plan.

The samples are taken both during processing and after cleaning and disinfection. Furthermore, the requirements of the German Ordinance on surveillance of zoonoses and zoonotic diseases or equivalent national law must be observed, particularly in respect of:

- In-house inspections
- Duty to report to the authorities
- Retained samples
- Record-keeping duties
- Corrective actions

Please refer to the following supporting documents:

- Reg. (EC) No. 2073/2005
- German Ordinance containing food law provisions for the surveillance of zoonoses and zoonotic agents (ZoonoseV)
- QS supporting document on Listeria prevention for the slaughtering, deboning and processing stages
- Guideline for Good Practice - Recommendations for preventive measures against *Listeria monocytogenes* in certain areas of food production (Lebensmittelverband Deutschland e. V.)

2.2.3 Document handling

A procedure for archiving documentation must be available and applied at the plant. All relevant records must be kept in detail and in full, and – unless longer retention periods are stipulated individually by law – retained for a period of at least two years.

Sampling plans for surfaces, test results

2.2.4 [K.O.] HACCP Concept/Food safety management systems

To comply with food safety standards, the company must create, apply and maintain a hazard control system in accordance with the HACCP principles (**Reg. (EC) No. 852/2004**) in such a way that it is comprehensible to third parties.

The HACCP system is incorporated into the food safety management system based on fundamental hygiene measures, including the codes of Good Hygiene Practice (GHP) and Good Manufacturing Practice (GMP).

The process from incoming goods through to outgoing goods is designed to prevent raw materials, semi-finished products, finished products, packaging materials, machines and any other substances that come into contact with the food from becoming contaminated. The concept ensures that physical, microbiological and/or chemical, allergenic contamination and, if applicable, ionising radiation are minimised or prevented by employing effective, technically feasible measures. The HACCP concept must take into account the goods thawing and temperature regulation processes.

If any HACCP-relevant changes are made to a product or manufacturing process, or to a production, processing, storage or sales stage, the company must review and, if necessary, modify the HACCP concept.

Self-assessment records, checklists

***Reference to further documents*:**

- Commission Notice on the implementation of food safety management systems taking into account good hygiene practices and procedures based on HACCP principles ...2022/C 355/01

2.2.5 HACCP team

To develop an efficient HACCP concept, the team must possess the requisite knowledge. The members of the HACCP team must be recorded in writing. The HACCP team must be trained as and when required. In this case, records of the training must be kept.

2.2.6 Product description

A complete description of the product / product group must be compiled and its intended purpose defined. The product description must contain:

- Composition of the product / product group
- Physical and chemical structure
- Antimicrobial/Static (high-pressure) treatment
- Packaging
- Shelf life
- Storage conditions

- Distribution channels (e.g. foreign/domestic, physical state, loose goods / self-service packaging, etc.)

2.2.7 Flow chart

A flowchart diagram must be created. The flowchart must incorporate all the operating processes and product groups.

2.2.8 Hazard analysis

The HACCP concept is based on the determination of hazards that must be avoided, eliminated or reduced to an acceptable level.

2.2.9 Critical Control Points (CCP)

Critical control points must be defined where a certain level of control is required to avoid, eliminate or reduce a hazard to an acceptable level.

2.2.10 Limit values for CCP

Limit values must be defined for the critical control points, which can be used to distinguish between acceptable and unacceptable values.

2.2.11 Monitoring and verification of limit values for CCP

Procedures for monitoring and verifying critical control points must be defined and implemented. These procedures must be applied regularly.

2.2.12 Corrective actions for CCP

Corrective actions must be defined in the event that monitoring reveals that a critical control point exceeds the set limit values.

2.2.13 Responsibilities

The responsibilities must be clearly defined in an organisational chart.

2.2.14 Documentation

Appropriate records for the type and size of company must be kept to provide evidence that points 2.2.1 to 2.2.13 are applied.

2.2.15 HACCP verification

The effectiveness of the HACCP concept must be checked at least once per year (approx. every 12 months).

2.3 Good manufacturing and hygiene practice

2.3.1 Water quality

Water – irrespective of its origin or aggregate state – that is used for manufacturing, treating, pre-serving or distributing foodstuffs, and for cleaning objects and facilities that may come into contact with food as intended, must comply with the latest version of the **German drinking water ordinance (TrinkwV).** Drinking water must be provided in suitable quantities and may not pose any risk of contamination.

The plant must have a tapping point plan in place. The tapping points must be sampled using a risk-based approach in accordance with the latest version of TrinkwV, depending on the type of drinking water supply (i.e. own water supply system (e.g. own well) or mains supply).

Beyond the legal requirements, the QS scheme requires the water used at the location to be ana-lysed using a purpose-driven approach as part of the plant's self-assessment measures. The goal is to assess the quality of the water as it comes into contact with products, equipment and/or surfaces. As such, any water/ice that is used as an ingredient, to treat food during the manufacturing process or to clean objects and facilities that may come into contact with food as intended, must be sampled **using a risk-based approach in accordance with Purpose C of DIN EN ISO 19458.**

A risk-based sampling plan for analysing drinking water comprises the following information as a minimum:

- Tapping point allocation
- Risk level
- Purpose of the analysis
- Frequency of the analysis
- Reference to analysis parameters and limit values

The type and frequency must be specified in the company's sampling plan.

Tapping point plan

Please refer to the following supporting documents

- QS supporting document water quality
- Reg. (EC) No. 852/2004
- Directive (EU) 2020/2184
- German drinking water ordinance (TrinkwV)
- DIN EN ISO 19458: Water quality: Sampling for microbiological analysis

2.3.2 Development of cleaning and disinfection plans

Based on a risk analysis, cleaning and disinfection plans must be drawn up to include:

- Responsibilities
- Products used and their instructions for use
- Areas and facilities (incl. cold stores and staff rooms) to be cleaned and/or disinfected
- Cleaning intervals
- Record-keeping duties
- Cleaning process and procedure
- Hazard symbols (if necessary)

Implementation of the cleaning and disinfection plans must be documented.

Training

The cleaning staff must undergo training that includes first aid measures, cleaning procedures and labelling practices for the cleaning products used. The employees must be aware of the cleaning process as per the cleaning and disinfection plan.

Cleaning and disinfection plans

2.3.3 Microbiological control of cleaning and disinfection measures

A risk-based sampling plan is in place to support microbiological inspections of the cleaning and disinfection measures, which adequately takes into account the physical size of the plant, the complexity of the production process and the type and quantity of products. Samples are taken from defined points in line with the internal risk assessment. The inspections are repeated at intervals of at least 4-8 weeks. In the examination spectrum, the germ types listed under "Assessment" are obligatory.

Sample collection

The samples must be taken at the very latest before production starts, and in areas that have an immediate impact on product hygiene (e.g. knives, knife sterilisation equipment). The sampling points must be selected once and should be sampled alternately. A recognised method must be used for taking the samples and be specified in a sampling plan. Furthermore, the requirements of the latest version of the German Ordinance containing food law provisions for the surveillance of zoonoses and zoonotic diseases (ZoonoseV) must be taken into account.

Assessment

The following species of bacteria must be used to determine a plant's hygiene status:

- Aerobic mesophilic bacteria
- Enterobacteriaceae
- *Listeria* spp.

The evaluation can be carried out according to the evaluation scheme in Table 4 (orientation values); the limit values to be applied internally must be defined.

Table 4: Assessment chart for monitoring cleaning and disinfection success

Area	Bacteria species	Limit value
Surfaces with food contact – immediately after cleaning and disinfection	Aerobic colony count (1)	≤100 CFU/100 cm^2
	Enterobacteriaceae (1)	n.d. /100 cm^2
	Listeria spp.	n.d. /100 cm^2 or risk-based depending on product/process

(1) Limit values for aerobic colony count and Enterobacteriaceae following DIN 10516:2020-10

***Note*:** *In accordance with Reg. (EC) No. 2073/2005, food companies producing ready-to-eat foods that may pose a risk to public health as a result of L. monocytogenes must analyse samples from their food processing areas and equipment for L. monocytogenes as part of their sampling plan.*

Testing for *Listeria* spp. is not a legal requirement but is required by QS as a "hygiene indicator" regardless of the legal requirements.

Recommendation for supporting methods

Additional methods such as ATP measurement and/or rapid tests for proteinaceous/protein-like contaminants are recommended to control cleaning and disinfection.

Reporting results

The cleaning staff responsible must be informed of the results as soon as possible. Appropriate corrective actions must be introduced (e.g. training/instruction, cleaning equipment and product checks, cleaning equipment servicing, cleaning process monitoring), particularly in the case of unsatisfactory results. The corrective actions taken must be documented.

Proof of cleaning and disinfection, sampling protocols, corrective actions

2.3.4 Foreign matter management

The company has an appropriate, effective foreign matter management strategy in place to eliminate and/or reduce the risk of foreign matter entering food. By means of risk assessments, risks and potential entry points must be identified and assessed for at least the following types of foreign matter:

- Metal
- Hard plastics
- Soft plastics
- Glass
- Stone
- Pests
- Paper
- Wood
- Lubricants
- Paint/coatings (Teflon)
- Species-specific foreign matter (e.g. bone, cartilage)

When using foreign matter detectors (e.g. X-ray or metal detectors), detection limits and functional tests (including ejection) are defined for the individual devices and are demonstrably complied with. For products to be delivered to the final consumer, a technically possible detection size for metallic foreign matter of < 7 mm should be ensured. The devices are serviced annually according to the manufacturer's specifications. Plastics that are in direct contact with food should preferably have a clear colour contrast (excluded from this are e.g. red E2 boxes customary in the industry). Before the production starts, each machine/plant must be inspected for damage. In case foreign matter (including metal-detected units) are found, measures must be defined and product hazards must be safely excluded. Foreign matter findings are categorised, the frequency of occurrence,

the cause of entry and the measures taken are evaluated (e.g. evaluation of complaints, process inspections, error messages).

The responsible employees must be trained regularly on the prevention and control measures.

Documentation of foreign matter management

Please refer to the following supporting documents

- IFS Guideline for an Effective Foreign Body Management (see QS documents "further-documents")

2.3.5 Production release

Before production begins each day, a site inspection must take place for the production area to be approved. An optical check of successful cleaning as well as damages must be performed. This approval must be documented in a corresponding form.

In case of deviations corrective measures must be defined. Implementation of the corrective actions is documented.

Documentation of the production release, implementation of corrective actions

2.3.6 Pest monitoring/control

It must be ensured that a high level of cleanliness and hygiene is maintained in all work/storage areas in order to prevent the attraction of pests and vermin. Preventive precautions must be taken in both the operating premises and in outdoor areas to ward off pests. Appropriate pest control measures must be introduced to monitor and, when necessary, tackle pests.

When performing pest control, the measures and user qualifications must comply with the legal requirements of the respective country as well as the particular product specifications. Monitoring and bait points must be inspected at least once a month, unless a different control interval is determined on the basis of a risk assessment. In order to guarantee the safety of both the food and the employees, suitable pest control methods and products must be used. The safety of the products produced or stored in the plant must not be compromised by the Pest monitoring/control measures.

Permanent baiting (regardless of infestation) using rodenticides is only permissible in exceptional cases if it is carried out strategically by a qualified professional (pest controller as defined in Appendix I Number 4 Paragraph 4.4) of the German **Hazardous Substances Ordinance (GefStoffV**)). The exceptional case must be proven and documented by the qualified professional as part of an annual hazard analysis and risk assessment. In this case, only baits that are approved for this purpose may be used. Different regulations may exist in other countries and must be observed accordingly.

The documentation must contain at least the following information:

- Information on products used for pest prevention and control
- Date of treatment and specification of the applied quantities
- Evidence of qualifications for the employees involved in pest control
- Control point plans showing the positioning of monitoring and bait stations
- Records of pests found (findings)
- Corrective action plans in case of pest infestation
- Annual risk analysis if necessary

Documentation of pest control

Please refer to the following supporting documents

- IFS Pest Control Guideline (see QS documents "further-documents")

2.3.7 Maintenance and repairs

A servicing plan containing the planned servicing measures and intervals must be created and implemented for all operating premises, facilities and equipment that influence product and process safety. Maintenance and repair work must not pose any hazard to food safety. Maintenance and repair work must be documented. Before the commissioning, the hygienic and safe condition must be ensured. The manufacturer's instructions regarding the maintenance and inspection of the facilities and devices should be taken into account when planning. maintenance.

The servicing plan must include the following elements:

- (Operating) areas and operating premises
- Facilities and (internal) transport systems
- Conformity of the consumables and lubricants used
- Responsible employees (both internal and external)
- Frequency

Servicing plan, servicing and repair work documentation

2.3.8 Monitoring of test equipment

When calibrating and monitoring the functionality of the devices and facilities used for testing (e.g. thermometers), the intervals stipulated by the manufacturer must be adhered to. If no relevant manufacturer information is available, the test equipment must be calibrated or checked in line with the company's own risk assessment, although at least once per year (approx. every 12 months). The measuring methodology of the various test devices must be taken into consideration (including measuring ranges and standard deviations, if applicable). The calibration or examination procedure is described for each test device. The results (incl. nonconformities, corrective actions) must be documented and clearly assigned. The measuring precision, reliability and usability of operational test equipment must be guaranteed.

Proof of calibration and surveillance of measuring equipment

2.3.9 [K.O.] Contamination

When evaluating production processes, the potential for direct and/or indirect re- or cross-contamination must be taken into account. The risk of transferring undesirable substances must be minimised during production and during the internal storage and transport of products through the use of effective measures.

2.3.10 Allergen management

Allergen management must be regulated within the company. Appropriate guidelines and work instructions must be in place. Employees must be adequately trained.

The allergen management strategy incorporates the following aspects as a minimum:

- Risk assessment of cross-contamination during processes (taking into account raw materials, ingredients and additives, and/or semi-finished products)
- Actions taken to avoid and/or reduce the spread of allergens
- Cleaning validation (incl. cleaning in between processes) for relevant processes
- Rules on labelling allergens and traces of allergens
- Information on allergens in raw material, semi-finished and end product specifications

2.3.11 Species-specific product separation

Species-specific product separation must be ensured to eliminate any negative reciprocal effects. Plants that separate out their work processes over time due to a lack of physical separation must ensure they clean in between processes. From the deboning stage onward, animal species-specific product separation must be implemented on the basis of an operational risk analysis, taking into account microbiological and ethical aspects as well as the relevance of animal species carryover.

2.3.12 Organisation of hygiene zones

Rooms in which food is stored, prepared, treated or processed must be designed and laid out in such a way that good food hygiene is guaranteed and contamination between and during work steps is avoided. The overall concept of the business with regard to the flow of goods and people and the organisation of hygiene zones are defined and correspond to product sensitivity.

2.4 Technical/structural condition

Plants in which food is handled and premises in which food is stored, prepared, treated or processed must be clean and permanently maintained in accordance with **Reg**. **(EC) No. 852/2004** Annex II. They must be laid out, designed, built and proportioned so as to enable adequate cleaning and/or disinfection, prevent airborne contamination or reduce it to a minimum and provide sufficient workspace to enable hygienically sound work steps.

The following requirements must be met:

- All floor coverings and wall surfaces must be kept in a spotless condition and must be easy to clean and, if required, disinfect. They must be waterproof, water repellent and abrasion resistant, and consist of non-toxic material. Waste water and other liquids are channelled away to prevent the formation of puddles or the accumulation of liquid on floors. Wall surfaces must have smooth surfaces up to an appropriate height for the respective work processes.
- Ceilings (or in the case of no ceilings, interior roof) and ceiling structures must be built and fabricated to prevent the accumulation of dirt and to minimise condensation, mould and flaking.
- Windows and other openings must be constructed in a manner that avoids the accumulation of dirt. If they are intended to be opened, they must be fitted with insect mesh that can easily be removed for cleaning purposes. Windows that could promote contamination must not be open.
- Shatter protection must be in place (for windows and bulbs in the food and primary packaging material production and storage area based on the foreign matter management risk assessment).
- Doors must be easy to clean, and if required, disinfect. They must have appropriately smooth, water-repellent surfaces.
- Surfaces (including equipment surfaces) in areas in which food materials are handled, and in particular surfaces that come into contact with food, must be kept in an immaculate condition and must be easy to clean and, if necessary, disinfect. They must be made of smooth, abrasion-proof, corrosion-proof, non-toxic material.

2.5 Premises, facility and device hygiene

All premises, facilities and machines in which food is stored, prepared, treated or processed must be in a clean, hygienic and dirt-free condition. Water must be prevented from accumulating in unused spaces and corrosion spots on machines and facilities. Equipment (knives, saws, etc.) must be functional and hygienically sound.

2.6 Ground Clearance

Products may not come into direct contact with the floor. The goods must be stored and transported in such a way that there is no risk of contamination. Containers that are authorised for food transport may not be placed directly on the ground. They must always be kept on pallets or mobile platforms.

This requirement does not apply to industrial containers (e.g. BIG Boxes) that are designed to stand on the floor on skids or legs. If these containers are stacked, internal rules must be followed and contamination of the food must also be prevented.

2.7 Staff

2.7.1 General rules of conduct and staff hygiene

Documented guidelines must be present concerning staff hygiene, which have been communicated to staff during training sessions. Staff hygiene provisions must be observed and applied by all concerned (employees, service providers, etc.). At least the following points must be taken into consideration:

- Cleaning and disinfection of hands
- Eating, drinking, smoking, Vaping, stimulants and chewing gum
- Conduct in case of injury
- Fingernails, jewellery, piercings, artificial eyelashes/fingernails and watches
- Hair and beards
- Protective clothing

All employees must be provided with suitable protective clothing and headgear (plus beard protection if applicable) in sufficient quantity. Sufficient handwashing facilities must be available as well as signs explaining how to use the disinfectant. The handwashing facilities in the production premises must meet the following minimum requirements:

- Running water of a suitable temperature with touch-free taps (sensor/knee switch)
- Liquid soap and disinfectant from dispensers
- Hygienic hand drying means (exceptions in the slaughter area according to internal regulations)

There must be a procedure in place for checking on a regular basis that staff hygiene is consistently implemented at the plant. The results must be evaluated and, if necessary, corrective actions for optimisation initiated. Anyone whose activities directly influence product safety must possess the necessary experience/training.

Procedure for implementing and reviewing staff hygiene

2.7.2 Premises and access regulations

All buildings and production facilities must be protected from unauthorised access and be kept closed. For this reason, access regulations must be defined. Operating areas in which food is produced or stored may not be accessible to unauthorised persons. External visitors can only access the plant when accompanied, or by permission. All external visitors – except for drivers during loading operations in the designated loading area – must receive instructions prior to entering the operating areas. If external vehicles, e.g. livestock wagons or disposal vehicles, enter the premises, this must be taken into account as part of the risk assessment.

Access regulations

2.7.3 Staff rooms and sanitary facilities

Suitable changing rooms must be provided for employees and external visitors. Outdoor and protective clothing must be kept separate. The sanitary facilities and staff rooms must be in a clean condition. If showers are available, they must be in good order and properly maintained. If coat hooks are present, they must be mounted properly in an appropriate location.

2.7.4 [K.O.] Hygiene sluice

The production areas are entered via hygiene sluices that are equipped and functional to ensure that hands are effectively cleaned, dried and disinfected, and that soles are effectively cleaned, i.e.:

- Running water of a suitable temperature with touch-free taps (sensor/knee switch)
- Liquid soap and disinfectant from dispensers
- Hygienic hand drying means
- Sole cleaning (or change of shoes before entry)

Sluices are located in a suitable position and different hygiene zones are separated by sluices. The entrances from the workshop to the plant are also equipped with appropriate devices. Sluices cannot be circumvented, except in emergencies. The cleaning procedures are governed in the plans – the facilities must be hygienically sound.

2.8 Training of staff

2.8.1 [K.O.] Hygiene training/Protection against Infection Act

Based on **Reg. (EC) No. 852/2004**, hygiene training courses are to be held at the plant once a year (approx. every 12 months). Documented training programs must be specified in line with product requirements and the employees' areas of activity.

The training plan must contain the following points:

- Content
- Training intervals
- Participants and trainer
- Languages

Staff are to be trained in line with the provisions of the German **Infection Protection Act (IfSG)** and the training documented. The training must be performed at least once a year (approx. every 12 months).

Training plan and training evidence, instruction/certification from the local health authority

2.8.2 Information on the QS scheme

All relevant employees must be informed about the requirements of the QS scheme manual. In addition to the basic principles of the QS scheme, this primarily includes the specific requirements in the area of activity of the employees in question.

3 Animal welfare

3.1 General requirements

3.1.1 [K.O.] Animal welfare officer

At least one animal welfare officer must be appointed at the plant. The responsibilities of the animal welfare officer are defined in the slaughtering plant's standard work instructions. The animal welfare officer must satisfy the requirements of **Reg. (EC) No. 1099/2009,** Article 17, and carry out the tasks listed in the regulation.

These include:

- Verifying that employees are working in a manner that respects animal welfare (observing employees as they perform stunning and bleeding tasks and observing how they handle and care for the animals).
- A commitment to maintaining the current proof of competence, which incorporates all the activities that are performed within the officer's area of responsibility.
- Appointing a substitute with the appropriate proof of competence for handling and caring for animals as well as stunning and bleeding them.
- Regular participation in further training (internal/external) at least every three years.
- Direct reporting to the executive board/company leadership team on animal welfare matters including measures to improve animal welfare.
- Ensuring that each animal shipment is examined by a competent individual and documented, and that animals requiring special care are handled appropriately.
- Ensuring that the health and general condition of the animals in the holding area/shed are examined on a regular basis.

Documenting animal welfare violations and the corrective actions taken.

3.1.2 Standard work instructions

Standard work instructions must be in place covering all areas from loading through to the death of the animals. The instructions state how and when compliance with the specifications is inspected, and how the inspection results are documented.

The standard work instructions must include the following points:

- Information on individuals performing the work
- Description of work processes
- Key parameters (in accordance with Reg. (EC) No 1099/2009, Annex I, Chapter I) are defined for each stunning procedure in such a way that adequate stunning is guaranteed for all animals subject to this procedure
- Description of "monitoring points"
- Description of monitoring frequency at the "monitoring points" (circumstances and/or point in time when monitoring must be performed)
- Description or definition of the "limit values" that indicate nonconformity with a standard and require corrective actions to be taken
- Description of the corrective actions to be taken when a "monitoring point" inspection reveals nonconformities

Corrective actions and nonconformities

Please refer to the following supporting documents

- Handbuch Tiertransporte (Livestock transportation manual) (FLI homepage)
- Handbuch Tierschutzüberwachung bei der Schlachtung und Tötung (Animal welfare monitoring during slaughter and killing) (FLI homepage)
- Leitfaden Bewährte Verfahrensweisen für eine tierschutzgerechte Schlachtung von Rindern (Guideline to good practice for the welfare-conscious slaughter of cattle) (Homepage VDF)
- Leitfaden Bewährte Verfahrensweisen für eine tierschutzgerechte Schlachtung von Schweinen (Guideline to good practice for the welfare-conscious slaughter of pigs) (Homepage VDF)

3.1.3 Employee competence

- All employees with animal contact must possess proof of competence (handling and caring for animals, and if required, restraint, stunning, shackling and bleeding).
- Annual training of the competent employees with slaughter animal contact.
- Employees and visitors in the cattle and pig housing, herding and stunning areas must wear dark clothing.

Documentation on the examination of defined key parameters in accordance with internal instructions

Please refer to the following supporting documents

- E-learning training documents to improve animal welfare during the transport and slaughter of cattle and pigs (https://tetfolio.fu-berlin.de/web/eschults2)
- Training documents bsi Schwarzenbek stunning of cattle

3.1.4 [K.O.] Livestock handling

The wellbeing of the animals must not be compromised during unloading.
The following is forbidden:

- Hitting or kicking animals,
- Putting pressure on sensitive body parts, causing unnecessary pain or suffering for the animal
- Hoisting pigs/cattle using mechanical devices attached to the body
- Pulling animals up by the head, ears, horns, legs, tail or coat/feathers, or handling them in a way that inflicts any unnecessary pain or suffering on them

Using devices/objects with pointed ends or sharp edges for driving. The slaughtering plant must take precautions to ensure that the animals do not suffer any unnecessary stress or are exposed to it. Driving tools such as driving boards and paddles may only be used in an animal-friendly manner. The use of electric driving tools for pigs and cattle must be avoided. They may only be used on fully grown cattle and pigs in isolated cases where the animal refuses to move forward and does not respond to non-contact stimuli (visual or acoustic) or mechanical contact stimuli (e.g. driving paddle on the hindquarter), and only on condition that the animals have sufficient free space to move forward.

Pigs

If an animal needs to be separated out, the use of an electric prod is only permitted on healthy, uninjured pigs that are over four months old, and even then, only on their hind leg muscles. It is only permitted if the animals refuse to move forward before or in the process of being driven directly to the restrainer.

Cattle

Electric prods are avoided as much as possible (only used for separating out or driving cattle into the restrainer, and only when other driving tools have been unsuccessful). They are only used on healthy, uninjured adult animals (cattle > 1 year) and only on the hindquarters. The electrical impulse lasts for a maximum of one second. The electrical impulse is not repeated if the animal does not respond.

3.2 Animal welfare in the shed/sty area

3.2.1 Water dispensers, feeding and bedding

A sufficient quantity of suitable water dispensers must be provided for cattle, calves and pigs in the holding area. The water dispensers must be hygienically sound and functional. After a six-hour wait in the holding area, animals must be fed, and after 12 hours they must be supplied with bedding.

3.2.2 Climatic conditions

The animals must not be subjected to extreme heat or cold in the shed/sty area. The temperature must be between 5 °C and 35 °C. Draughts and high humidity are to be avoided in this area.

3.2.3 Sprinkler system

The fine-spraying sprinkler system should have a positive impact on the pigs' thermoregulation.

Internal rules on the use of the sprinkler system must be in place and take into account the following parameters as a minimum:

- Outdoor climate
- Indoor climate
- Sprinkling interval

Description of the sprinkler system

3.2.4 Pen allocation

The pen allocation must be defined and adhered to. When allocating the crates, the following values must be observed:

Pigs:	0.6 m^2/animal
Cattle:	2 m^2/animal
Calves:	1 m^2/animal

The space allowance in the holding area and/or the pen allocation must be arranged in a way that allows even extremely heavy animals to lie down.

Pen allocation

3.3 Animal welfare in the stunning area

3.3.1 Stunning system

The proper functioning of stunning devices and equipment must be examined in accordance with the German **Animal Protection Slaughtering Ordinance (TierSchlV)** before work begins each working day and, if necessary, cleaned several times a day. Spare equipment must be kept in working order. Its functionality must be examined at the required intervals. Any defects must be remedied without delay. The manufacturer's instructions regarding the maintenance and inspection of the stunning systems/equipment must be observed and complied with.

The permitted stunning procedures and related information are described in **Reg. (EC) No. 1099/2009**, Annex 1, Chapter 1.

Electric stunning devices must be equipped with apparatus for displaying and recording data on the key electrical parameters in accordance with **Reg. (EC) No. 1099/2009**. For cattle and pigs, the data must be available for each animal that is stunned. The apparatus must be attached so that it is clearly visible to staff and emits a clearly visible and audible warning signal if the electrical impulse does not last for the required amount of time. The records must be kept for at least one year.

Stunning equipment records

Please refer to the following supporting documents

- DIN 10547 (Requirements for electrical stunning systems for slaughter animals)

3.3.2 Driving animals to the stunning facility

The animals must be driven without rushing them. The employees in the herd have to drive the animals forwards in a calm flow of work. Driving tools may only be used in a compassionate manner.

Please refer to the following supporting documents

- Guideline bsi Schwarzenbek
- E-learning training materials to improve animal welfare during the transport and slaughter of cattle and pigs (https://tetfolio.fu-berlin.de/web/eschults2)

3.3.3 [K.O.] Effective stunning

Animals must be stunned quickly and painlessly in such a way that they are immediately rendered unconscious and remain so until their death. Animals that are stunned by means of a mechanical or electrical device must be brought into a position that enables the device to be operated easily and precisely for as long as is necessary. Pigs and cattle may only enter the stunning facility and be tranquilized once the person carrying out the stunning is ready and waiting to start immediately.

Effective stunning is also subject to the following requirements:

- Ensuring that the devices and equipment used for stunning and slaughtering are examined for damage, condition, functionality and electrical specifications, and, if necessary, serviced on each day of slaughtering.
- Twice daily or ongoing monitoring and documentation of stunning success data (for cattle and pigs) for 10% of the average hourly slaughter output or (for poultry) for approx. 1% of the daily slaughter capacity. Documentation of any corrective actions required.

Poultry:

If the stunning facility has an exemption in relation to Table 5 and Table 6, the permit from the competent authority must be provided during the audit.

Table 5: Stunning procedure based on species

Species	Stunning procedure	Sign of stunning failure (after cattle and pigs are ejected)
Cattle	Penetrative (captive bolt) stunning	Animal does not collapse, straightens itself up (lifts head and neck back and/or up) or stands up again; animal exhibits targeted eye movements, spontaneous eyelid closure, consistently positive corneal reflex, four or more breaths, or makes a vocal sound Animals that have not definitely been stunned exhibit eye squinting, eyeballs that move and stay turned away, and a positive eyelid reflex after they are ejected.
Pigs	Electrical stunning	Animal does not tighten up or does so abnormally, straightens up or stands back up. Animal displays deliberate eye movements or spontaneous lid closure, four or more breaths or makes a vocal sound Animals that have not definitely been stunned lift their heads up during horizontal bleeding instead of laying it flat; occasional gasps for breath
	CO_2 stunning	Pig lifts its head, displays continuous walking movements or convulsions in the hanging position; more than four gasps of breath in a row with the eyes reacting to touch; targeted eye movements or spontaneous lid closure or vocal sounds Animals that have not definitely been stunned kick during shackling, fold their front legs in, take individual breaths (1-4 times), have narrowed pupils, and can trigger eye closure 1-2 times
Poultry	Electrical stunning CO_2 stunning [1]	Regular beak opening, repeated spontaneous eyelid or eyeball movements, regular pelvic floor movements, raising of the body during bleeding

[1] In accordance with Annex 1, Chapter 1, Table 3 of **Reg. (EC) No. 1099/2009**, stunning ducks using CO_2 is not permitted. In Germany, stunning chickens using CO_2 requires a licence from the competent authority.

Anyone who slaughters or otherwise kills an animal via bleeding must begin the bleeding process immediately after stunning and within the specified timeframe for each stunning procedure.

Pig:

Exemption for Stun to Stick time related to Table 6 must be available accordingly for deviations from the EU Animal Welfare Slaughter Regulation and the National Animal Welfare Slaughter Regulation.

Table 6: Maximum duration from stunning to bleeding incision (stun to stick)

Stunning procedure	Seconds
Captive bolt for:	
• Cattle	60
• Other animals and other shot positions	20

Stunning procedure	Seconds
Electrical stunning of warm-blooded animals	10 (for horizontal bleeding) 20 (for hanging bleeding)
CO_2 stunning	20 (after leaving the stunning facility) 30 (after the final stop in the CO_2 atmosphere)

Proof of competence, stunning procedure exemption as required

3.3.4 Re-stunning

The re-stunning procedure is governed via standard work instructions. The employees performing re-stunning have evidence of being trained on the procedure and apply this in practice.

Animals that do not appear to have been sufficiently stunned during stunning inspections must be re-stunned using the permitted stunning measures per internal specifications.

Standard work instructions for re-stunning

4 Slaughter requirements

4.1 Livestock transport monitoring – transport practice

4.1.1 [K.O.] Verification animal transporter

If the slaughterhouse commissions commercial livestock hauliers for the transport of animals from QS-approved livestock owners, the QS eligibility of delivery as a QS livestock haulier must be available in the QS software platform so that the meat obtained from this can be marketed as QS goods. The procedure for querying eligibility of delivery must be documented and the QS eligibility of delivery examined for each transport journey.

Documented procedure for querying eligibility of delivery in the QS database

4.1.2 Delivery

Deliveries are planned so that the animals can be unloaded as soon as the transport vehicle arrives at the premises.

The plant has a delivery management/planning strategy in place to ensure swift unloading. If prompt unloading is not possible, adequate protection from the weather must be guaranteed.

As part of its responsibilities, the abattoir must guarantee that cattle and pigs are carefully and individually assessed during unloading, with the aim of detecting and if necessary, separating out any animals requiring special care. The slaughter and delivery times must be coordinated. Rest times must be defined and documented for the animals delivered. The meat quality and structural requirements of each livestock waiting area are important factors when setting rest times.

Unjustified delays must be avoided when transporting emergency slaughter animals from the farm business to the abattoir.

4.1.3 [K.O.] Verifying the indication of origin and delivery authorization of QS livestock owners

The animal identification and delivery paperwork must be reconciled to ensure compliance with **Reg. (EC) No. 1760/2000** for cattle in conjunction with national regulations, and compliance with origin labelling conventions as per **Reg. (EU) No. 1337/2013** for pigs and poultry.

If meat or animal by-products from QS plants are marketed as QS products, it must first be verified for all livestock deliveries that the livestock owner is displayed as eligible for delivery in the QS database, including for the correct production scope (a summary of production scopes can be accessed from the QS homepage). This is a prerequisite for marketing the meat from these animals as QS products. The VVVO number (registration number according to the German Livestock Transport Regulation) is used for verification purposes.

Goods that are produced and/or marketed in a QS-certified plant in line with the QS scheme requirements are considered to be QS products.

Documented procedure for querying eligibility of delivery in the QS database

4.2 Ramp area, shed/sty, waiting area

4.2.1 Unloading facilities

Facilities used to load and unload animals, including floor coverings, must be designed, built, maintained and used in a way that avoids causing the animals injury, suffering or stress, and ensures their safety. The ramp area must be equipped with weather protection. Entry to the shed/sty and waiting areas must be controlled (if applicable by means of a sign stating "No unauthorised access").

4.2.2 Separating animals out

Animals requiring special protection must be separated out. Based on the decision of the competent authority, the animals are killed or slaughtered immediately as an emergency case (outside the actual stunned slaughter location). Emergency killing and/or slaughtering is performed in compliance with animal welfare regulations.

4.2.3 Technical/structural condition

⇒ 2.4 Technical/structural condition

The floor in the ramp and housing areas must be non-slippery and undamaged. The floor must have drains installed. The housing area must have adequate lighting and ventilation. The animals must not be dazzled.

The angle specifications for race ramps (**Reg. (EC) No. 12005 on the protection of animals during transport**) must be observed subject to any deviations approved by the authorities:

- Facility and races leading to unloading – maximum 20° incline
- Facility and races leading to pig stunning – maximum 10° incline
- Races leading to cattle stunning – maximum 7° incline
- Races are designed to encourage animals to move forward independently

4.2.4 Premises, facility and device hygiene

⇒ 2.5 Premises, facility and device hygiene

Accumulated manure, bedding and feed remnants must be disposed of safely.

4.3 Slaughter process

4.3.1 Shackling and hoisting

Staff that are assigned to shackling must introduce defined corrective actions (in line with standard work instructions) for re-stunning if an animal shows visible signs of failed stunning. The maximum time between stunning and bleeding incision (Table 6) must not be exceeded.

4.3.2 Bleeding

Only individuals with the relevant proof of competence per § 4 of the **EU regulation on the protection of animals at the time of killing** are permitted to kill animals.

During the bleeding process, staff must ensure that, by opening at least one carotid artery or the corresponding main blood vessel, heavy bleeding quickly occurs, leading to the animal being bled. Bleeding must be performed as long as the animal remains unconscious. The bleeding process must be controllable.

After the bleeding incision, the next steps in the slaughter process may only be performed as long as no more signs of life can be detected (at least 180 seconds). The effectiveness of the stunning must be checked without a time delay before and after the haemostatic puncture and also during bleeding (random sample testing based on requirement 3.3.3) in order to establish whether the animal is unconscious.

If the blood is collected for further processing, it must be stored/transported in such a way that it reaches 3 °C as soon as possible. It is vital for carcasses and blood to be clearly assigned if the pro-portion of slaughtered QS animals is under 100 % and the blood is to be marketed as a QS product.

Poultry

Slaughtering plant operators that use automated neck cutters to bleed poultry must ensure that animals not cut by the machine are cut by hand.

4.3.3 Skinning/bristle removal/plucking

The handling of abscesses and infectious areas of the carcass that pose a risk of contamination must be specially controlled and regulated. The preparation procedures prior to opening the carcass must be designed to align with best practice. Carcass contamination must be avoided as far as possible.

4.3.4 Removal of stomach and chest organs

Evisceration is one of the riskiest steps in the slaughter process when it comes to contamination. Employees working in this area of activity must specifically be made aware this risk.

Staff, slaughter and blade hygiene are especially important in this area. Hygienic requirements for hand- and tool hygiene must be defined and implemented in the company in a risk-orientated manner.

4.3.5 Carcass splitting

Hygiene measures must be observed when splitting carcasses. Contamination must be avoided. A procedure for handling risk material must be defined and documented.

Documentation for handling risk material

4.3.6 [K.O.] Sluice option

After the meat inspection, there must be an option to discharge rejected carcasses and their by-products (e.g. entrails/organs). There must be a guaranteed clear link between a carcass and its by-products (e.g. entrails/organs).

4.3.7 Post processing line

On the finishing line, the carcasses are examined once more and any hooves/claws, coat remnants and loose fat are removed as required.

If cattle carcasses are treated with lactic acid, it must be applied per the requirements of **Reg. (EU) No. 101/2013.**

4.3.8 Technical/structural condition

⇒ 2.4 Technical/structural condition

There must be a functional partition between the housing and stunning areas. The partition must block out noise.

The pressure ratios between the clean and unclean areas are to be configured in such a way that air from the unclean area does not enter the clean area. The separation between the clean and unclean sides must be distinguishable and observed.

4.3.9 Premises, facility and device hygiene

⇒ 2.5 Premises, facility and device hygiene

4.3.10 Ground Clearance

⇒ 2.6 Ground Clearance

4.3.11 [K.O.] Organisation and workflows

Structured workflows, responsibilities and accompanying inspections are defined for the slaughter segment and implemented accordingly. Potential risks for food safety or negative impacts are avoided.

4.3.12 Blade hygiene

⇒ 2.3 Good manufacturing and hygiene practice

Effective hygiene measures must be taken for blades and cutting equipment during the slaughter process. Methods for handling (e.g. changing, cleaning and disinfecting) blades, cutting devices and/or equipment parts (e.g. saws and drills in poultry evisceration equipment) are defined internally with a view to minimizing the risk of contamination.

Cleaning and disinfection plan for blades

4.3.13 Climatic conditions

The temperature and humidity should support optimum working conditions and not have a negative impact on the meat. The room must be well ventilated. Draughts should be avoided.

4.3.14 [K.O.] Diagnostic data pig

The responsible authority shall carry out a proper post-slaughter post-mortem inspection. The post-mortem inspection is carried out in accordance with applicable Community law (**Reg. (EU) 2017/625**). In the course of the post-mortem inspection, the diagnostic data are recorded. They must be reported back to the livestock owner or supplier in accordance with a standardized procedure.

Pig slaughtering within Germany:
For pig slaughtering within Germany, the *guideline on diagnostic data in pig slaughtering* applies. All requirements for the collection, reporting and evaluation of the findings are set out here.

Slaughterhouses slaughtering an annual average of at least 50 fattening pigs and sows per week are obliged to report slaughter diagnostic data to the QS diagnostic database. Slaughterhouses slaughtering less than 50 fattening pigs and sows per week may submit diagnostic data on a voluntary basis. The reporting of diagnostic data is done for all fattening pigs and sows delivered from farms participating in the QS scheme.

For each carcass, the information must be recorded in the slaughterhouse's EDP system and reported to the QS diagnostic database (https://pig.qualiproof.de). The requirements of the guideline *diagnostic data in pig slaughtering* apply.

The slaughterhouse must provide the technical prerequisites for recording and transmitting all required diagnostic data.

Pig slaughtering outside of Germany:
Reporting diagnostic data to the QS diagnostic database is only necessary for plants in Germany. Outside of Germany, the diagnostic data must be recorded and reported back to the pig fattening farm in accordance with **Reg. (EU) No. 2019/627**.

The following also applies to all instances of pig slaughter **outside of Germany:**

- All the diagnostic data is entered into the slaughtering plant's EDP system.
- The diagnostic data is reported to the pig fattening farm.
- Using this information, the livestock owner can compare itself to all the other livestock owners that have supplied the slaughtering plant.
- Once a quarter, the slaughtering plant provides the QS head office with an Excel spreadsheet containing an overview and assessment of the diagnostic data it has recorded for all its QS-certified livestock owner suppliers. This is available from the QS head office on request. The report must be sent to diagnosticdata@q-s.de at the beginning of each quarter.

4.3.15 [K.O.] Diagnostic data cattle

The responsible authority carries out a proper post-slaughter post-mortem inspection. The post-mortem inspection is carried out in accordance with applicable Community law (**Reg. (EU) 2017/625**). In the course of the post-mortem inspection, the diagnostic data are recorded. They have to be reported back to the animal owner or the supplier according to a standardized procedure.

Slaughtering of cattle within Germany:
For cattle slaughtering within Germany, the *guideline on diagnostic data in cattle slaughtering* applies. All requirements for the collection, reporting and evaluation of findings are set out here. The reporting of diagnostic data is carried out for cattle delivered from farms participating in the QS scheme, irrespective of the number of slaughtered animals. The reporting of diagnostic data is also carried out for cattle from farms that participate in an animal welfare program recognized by QS (e.g. QM+ of QM Milk), provided that this program maps the monitoring of diagnostic data via QS.

For each carcass, the information must be recorded in the slaughterhouse's IT system and reported to the QS diagnostic database. The requirements of the *guideline diagnostic data in cattle slaughtering* apply.

The slaughterhouse must create the technical prerequisites for recording and transmitting all required diagnostic data.

Slaughtering of cattle outside Germany:
Reporting of the diagnostic data to the QS diagnostic database is only necessary for companies in Germany. Outside Germany, the diagnostic data must be recorded and reported back to the cattle farm in accordance with **Reg. (EU) 2019/627**.

In addition, the following points must be fulfilled for all cattle slaughtering outside Germany:

- All diagnostic data are recorded in the slaughterhouse's EDP system.
- The diagnostic data are reported to the cattle holding.
- The animal keeper can use the information to compare himself with all animal keepers who have supplied the slaughterhouse.
- Once a quarter, the slaughterhouse reports to the QS office an overview of the recorded findings and an evaluation of the recorded findings for all QS-certified livestock farmers using an Excel spreadsheet. The QS office will make this available on request. The feedback must be sent to diagnosticdata@q-s.de at the beginning of the calendar quarter.

4.3.16 [K.O.] Diagnostic data poultry

The responsible authority shall carry out a proper post-slaughter post-mortem inspection. The post-mortem inspection is carried out in accordance with applicable Community law (**Reg. (EU) 2017/625**). In the course of the post-mortem inspection, the diagnostic data are recorded. They have to be reported back to the animal owner or the supplier according to a standardized procedure.

For poultry slaughtering, *the guideline on diagnostic data in poultry slaughtering* applies. The reporting of the diagnostic data is carried out for all broilers and turkeys including the parent birds, Peking ducks, laying hens and pullets/young cocks that have been delivered from farms that participate in the QS scheme or that are authorized to deliver into the QS scheme due to the recognition of other standards (e.g. KAT e.V.). The slaughterhouse must ensure that, in addition to the requirements of this guideline and the other applicable QS requirements, the applicable legal provisions (comparable foreign legal provisions outside Germany) are fulfilled.

The following diagnostic data must be recorded for each slaughter batch and reported to the central poultry diagnostic database:

- Mortality on the fattening farm (animals that died and were culled during the passage)
- Transport mortality (animals that died during transport to the slaughterhouse)
- Foot pad changes/paddle changes (score) (not for laying hens and pullets/young cockerels) with indication if an exceedance Proportion 2b > 20 % for broilers or if Proportion C > 25 % for turkeys for fattening,
- Number of discarded birds differentiated according to the defined main reasons for discarding
- Breast skin lesions in turkey cockerels (proportion of assessments A, B and C in the total slaughter batch)
- Indication if disaster is present.

4.3.17 [K.O.] Salmonella monitoring

A concept for reducing Salmonella infestation during the slaughter process (salmonella reduction plan) must be developed and implemented within the slaughtering plant for pigs and poultry based on HACCP principles.

Salmonella monitoring and reduction programme

Pigs

Salmonella monitoring must be performed in accordance with the *Guideline Salmonella monitoring for pigs.*

Salmonella database pig

Poultry

Salmonella monitoring must be performed in accordance with the *Salmonella monitoring and reduction programme for poultry meat production.*

The abattoir must transmit the results of the salmonella monitoring (initial inspection - sock test) of the farms to the central findings database for poultry.

Salmonella monitoring documentation for poultry

Poultry diagnostic database

Reference to further documents

- Recommendations for the reduction of cross-contamination with salmonella during the slaughtering process (QS)
- Guideline salmonella monitoring pigs (QS)
- Guideline salmonella monitoring and reduction program for poultry production (QS)

4.3.18 Logistical slaughtering of Salmonella-positive flocks (poultry)

Positive flocks within the meaning of **Reg (EC) No. 2073/2005** and untested flocks must be slaughtered at the end of the slaughtering day (logistical slaughtering).

4.3.19 Taint detection

Plants that slaughter uncastrated male pigs (young boars or young boars treated with a vaccination against boar taint) must implement procedures as part of their self-monitoring that ensure the identification of carcasses with a pronounced sexual odour.

On-farm self-inspection of carcasses of non-castrated young boars to detect pronounced boar taint is carried out independently of the official post-mortem inspection. Irrespective of this, the assessment of the carcasses is subject to the official post-mortem inspection.

The food business operator's internal control system must take the following points into account:

- Work instructions must be in place describing how boar taint is detected on carcasses within the slaughtering plant. The instructions must describe all the relevant aspects for detecting boar taint via the human nose.
- Employees that are selected to detect carcasses with boar taint must be adequately trained (initial and regular training). The training content and frequency must be documented.
- Procedures for separating carcasses with boar taint and subsequent measures must be defined and implemented

Evidence of taint detection procedure, applicable work instructions, evidence of training

4.4 Cold storage (carcasses)

4.4.1 Technical/structural condition

⇒ 2.4 Technical/structural condition

4.4.2 Premises, facility and device hygiene

⇒ 2.5 Premises, facility and device hygiene

Mould accumulation in cold storage must be prevented and, if necessary, steps to remove mould must be implemented. It must also be ensured that frosting is kept to a minimum. Transport containers and vehicles are in a hygienically sound condition.

4.4.3 Ground Clearence

⇒ 2.6 Ground Clearance

To avoid contact with the floor, parts of the forequarter must be removed before refrigeration as required.

4.4.4 Storage management

A comprehensible storage management system must be in place to enable employees to quickly identify the goods storage date without any ambiguity. Each product and/or packaging unit must be uniquely identifiable. The first in, first out method must be adhered to. The storage conditions may not have any negative effect on food safety.

A procedure specifying the corrective actions and steps to be taken in the event of a system failure or malfunction must be defined and communicated to the employees responsible.

Storage management procedure

4.4.5 [K.O.] Temperature recording and monitoring after slaughter

Temperatures must be recorded and monitored in accordance with the latest version of **Reg. (EC) No. 853/2004** unless the meat is deboned whilst warm.

Cattle and pigs: Cooling after slaughter

For cattle and pig carcasses, the following core temperatures must be reached before dispatch:

- Slaughter animal carcasses immediately to *max. +7* °C
- Slaughter by-products immediately to *max. +3* °C

Poultry: Cooling after slaughter

QS poultry meat, including giblets, must reach a core temperature of max. +4°C. All the necessary precautions must be taken to avoid carcasses becoming contaminated, taking into account parameters such as carcass weight, temperature and refrigeration time.

For hygiene reasons, cooling the carcasses using a spin chiller or similar cooling process is not permitted in QS plants. If this type of cooling system is used for giblets, the latter may not be marketed as QS products.

Documentation of temperature

4.4.6 Quartering cattle

Hygiene measures must be observed when quartering half carcasses of cattle. Contamination of the carcass and/or the part cuts of meat must be avoided.

5 Requirements for deboning

5.1 Deboning, fine deboning

5.1.1 Technical/structural condition

⇒ 2.4 Technical/structural condition

5.1.2 Premises, facility and device hygiene

⇒ 2.5 Premises, facility and device hygiene

5.1.3 Ground Clearance

⇒ 2.6 Ground Clearence

5.1.4 [K.O.] Organisation and workflows

Structured workflows, responsibilities and accompanying inspections are defined for the deboning segment and implemented accordingly. Potential risks for food safety or negative impacts are avoided.

5.1.5 Handling of non-conforming products

The handling of non-conforming products (abscesses, puncture sites and dropped products), resources and packaging materials must be regulated and well-functioning.

A responsible employee must decide on their later use (release, post-treatment, blocking, rejection, disposal).

Evidence of usage/disposal of non-conforming products

5.1.6 [K.O.] Temperature recording and monitoring

The legally specified temperatures (**Reg. (EC) No. 853/2004**, see Table 7) must be observed. The cold chain may not be interrupted. A room temperature of ≤ 12 °C must be maintained during deboning, otherwise it must be ensured that the temperature of the meat does not exceed the specified temperatures (e.g. by using actively cooled workbenches).

Table 7: Maximum product temperatures during the deboning, storage and transportation of meat, minced meat and meat preparations

Products	Measurement location (P) (1)	Maximum temperature [°C]	Source of supply
Meat, fresh (except poultry)	P	+7	Reg. (EC) No. 853/2004 Annex III Section I Chapter V Point 2b
Slaughter by-products (e.g. offal)	P	+3	Reg. (EC) No. 853/2004 Annex III Section I Chapter V Point 2b

Products	Measurement location (P) [1]	Maximum temperature [°C]	Source of supply
Minced meat	P	+2	Reg. (EC) No. 853/2004 Annex III Section V Chapter III Point 2c
Meat preparations	P	+4	Reg. (EC) No. 853/2004 Annex III Section V Chapter III Point 2c
Poultry meat (incl. giblets)[2]	P	+4	Reg. (EC) No. 853/2004 Annex III Section II Chapter V Point 3

[1] The product temperature (P) is the maximum temperature to be maintained at all points on food that re-quires cooling.
[2] Poultry meat that is processed into fresh poultry preparations must be stored at a temperature of -2 °C to +4 °C at all times in accordance with **Reg. (EC) No. 1308/2013.**

Meat may be deboned during cooling without having reached the temperatures stated above provided the deboning process takes place in the same location as the slaughter process. In this case, the meat must be taken either straight from slaughter to deboning or into cold storage first. Once deboning and any necessary packaging is complete, the meat must be cooled to the temperatures stated above.

Documentation of temperature

5.2 Cutting, portioning and minced meat production

The cutting, portioning and minced meat production process incorporates the portioning processes for cuts of meat (such as steaks, barbecue items), cutting joints with or without a marinade, and producing minced meat.

5.2.1 Technical/structural condition

⇒ 2.4 Technical/structural condition

5.2.2 Premises, facility and device hygiene

⇒ 2.5 Premises, facility and device hygiene

5.2.3 Ground Clearance

⇒ 2.6 Ground Clearance

5.2.4 [K.O.] Organisation and workflows

Structured workflows, responsibilities and accompanying inspections are defined for the cutting, portioning and minced meat production segment and implemented accordingly. Potential risks for food safety or negative impacts are avoided.

5.2.5 [K.O.] Temperature recording and monitoring

The legally specified temperatures (**Reg. (EC) No. 853/2004**, see Table 7) must be observed during processing as well as storage and transportation. The cold chain may not be interrupted and the health of the consumer may not be jeopardised by a rise in temperature. A room temperature of ≤ 12 °C must be observed, otherwise it must be ensured that the meat temperature does not surpass the specified temperatures.

5.2.6 [K.O.] Raw material selection minced meat

When selecting raw materials for minced meat products, the applicable legal requirements and national guidelines must be complied with. In particular, it must be ensured that only authorised meat raw materials and qualities are used that meet the requirements for fresh meat and originate from skeletal muscle (including adherent fat)

Please refer to the following supporting documents:

- Guidelines for meat and meat products (Germany)
- Reg. (EC) No 853/2004

5.3 Labelling and packaging

5.3.1 Technical/structural condition

⇒ 2.4 Technical/structural condition

5.3.2 Premises, facility and device hygiene

⇒ 2.5 Premises, facility and device hygiene

The cleaning procedures must be physically and/or temporally separated from the packaging procedures.

5.3.3 [K.O.] Packaging material

The packaging material must be stored in a separate area. Packaging materials and resources must be stored and transported in a way that minimizes the risk of contamination. Damage to the packaging material must be avoided. Packaging materials and resources must be fit for purpose and comply with legal requirements.

Plastic packaging materials with direct food contact must have a current declaration of compliance (in accordance with Article 16 of **Reg. (EC) No. 1935/2004**) aswell as individual measures in accordance with Regulation (EU) No. 10/2011 and be suited to the product in view of its specific properties (e.g. fat content, pH level) and equipment (e.g. pasteurisation). All other primary packaging materials used (e.g. glass jars) must have a confirmed declaration of no objection.

Declaration of compliance/declaration of no objection

Please refer to the following supporting documents:

- Explanatory notes for conformity assessments of packaging materials
- Regulation (EU) No. 10/2011
- Reg. (EC) No. 1935/2004

5.3.4 [K.O.] Final product inspection

Test procedures must be defined for final product inspections to guarantee impeccable products.

These include:

- Leakproofness inspection
- Fill weight inspection: The weighing scales must be calibrated and regularly tested. The fill weight inspection must be performed and documented on a regular basis and comply with the legal specifications. The quantity and content (minus tolerance) must match the information on the packaging and/or specification.
- Packaging gas concentration
- Temperature check
- Labelling (labels, packing notes, QS certification mark, best-before date/use-by date/storage instructions)

The company must have a procedure in place for defining best-before/use-by dates. The dates must be defined for each product group.

Procedure, final product inspection, defining best-before/use-by dates

5.3.5 [K.O.] Product labelling

All beef products must be labelled in accordance with **Reg. (EC) No. 1760/2000,** taking into consideration **Reg. (EU) No. 1308/2013**, Annex 7. Pig and poultry products must comply with the provisions of **Reg. (EU) No. 1337/2013**. Compliance with these regulations can be verified via the ORGAINVENT system for meat origin labelling.

The following information must be stated on the product packaging for food designated for final consumers:

- Food name/description
- List of ingredients (QUID if applicable)
- Reference to allergenic substances (also applies to bulk goods per LMIV)
- Total net quantity of the food
- Best-before date/use-by date

- If necessary, special instructions for storage and/or use (such as heating instructions)
- Name and address of the food company
- Nutrition declaration (does not apply to primary products and foods according to Annex V of **Reg. (EC) No. 1169/2011)**
- EU licence/registration number
- Date of freezing
- Indication of origin, if legally required

5.3.6 [K.O.] Recipes/specifications

Recipes/specifications must be created for all self-produced products. Current specifications/ingredients lists must be available for all purchased products, which as a minimum comply with the applicable legal provisions. The recipes/specifications must contain a list of all the components. Mechanically separated meat (according to Chapter 8 'Definitions'), pig spinal cord may not be marketed as QS goods.The responsible employees must be aware of and have access to the recipes/specifications. A procedure for modifying recipes/specifications must be defined and applied.

The product must comply with the respective requirements/traditional views of the country of destination. In Germany, the German guidelines for meat and meat products apply.

Specifications, recipes, procedure for changing recipes/specifications

5.4 Meat cold store

5.4.1 Technical/structural condition

⇒ 2.4 Technical/structural condition

5.4.2 Premises, facility and device hygiene

⇒ 2.5 Premises, facility and device hygiene

Cold stores must be in a clean and hygienically sound condition. Mould accumulation in cold storage must be prevented and, if necessary necessary steps must be taken to remove the mould within a reasonable period of time. It must also be ensured that frosting is kept to a minimum. The cooling systems must be regularly serviced and kept in a hygienically sound condition. A documented cleaning plan must be in place for the cooling facilities. Proof of cleaning must be documented.

Transport containers and vehicles are in a hygienically sound condition.

5.4.3 Ground Clearance

⇒ 2.6 Ground Clearance

5.4.4 Storage management

⇒ 4.4.4 Storage management

Compliance with the best-before date/use-by date must be observed in the cold storage facilities. To this end, a regular examination of the best-before date and the use-by date must be ensured. Goods that are past their use-by date may not go on sale or be distributed. Goods that are past their best-before date must be dealt with according to internal guidelines.

5.4.5 [K.O.] Temperature recording and monitoring

In premises or facilities used for storing produce, raw ingredients, additives and resources, specific climatic conditions such as temperature, humidity and other requirements are to be adhered to as per the stored products' specifications.

Defrosting processes must be defined, monitored and adhered to.

Documentation of temperature

5.5 Deep-freeze facility

5.5.1 Technical/structural condition

⇒ 2.4 Technical/structural condition

5.5.2 Premises, facility and device hygiene

⇒ 2.5 Premises, facility and device hygiene

Cold stores must be in a clean and hygienically sound condition. Mould accumulation in cold storage must be prevented and, if necessary, steps to remove mould must be implemented. It must also be ensured that frosting is kept to a minimum. The cooling systems must be regularly serviced and kept in a hygienically sound condition. A documented cleaning plan must be in place for the cooling facilities. Proof of cleaning must be documented.

5.5.3 Ground Clearance

⇒ 2.6 Ground Clearance

5.5.4 Storage management

⇒ 4.4.4 Storage management

Compliance with the best-before date/use-by date must be observed in the deep-freeze facilities. To this end, a regular examination of best-before dates and the use-by dates must be ensured. Goods that are past their use-by date may not go on sale or be distributed. Goods that are past their best-before date must be dealt with according to internal guidelines.

5.5.5 [K.O.] Temperature recording and monitoring

In premises or facilities used for storing produce, raw ingredients, additives and resources, specific climatic conditions such as temperature, humidity and other requirements are to be adhered to as per the stored products' specifications and the German **Ordinance on deep-frozen food (TLMV).** The maximum temperature to be maintained throughout the food is -18 °C for deep-frozen food. For these products, a temperature increase of max. +3 °C is permitted in accordance with **TLMV.**

Freezing processes must be defined, monitored and adhered to**.**

Temperature documentation, storage management procedure

6 Additional production departments and facilities

6.1 Cleaning areas and material storage

6.1.1 Container washing

The room must be in a tidy and hygienic properly condition.

Containers used for storing and transporting meat and meat products (E2 crates, mobile container trucks, etc.) must be thoroughly and properly cleaned. Above all, it must be ensured that they are properly dried.

6.1.2 Packaging material storage

Packaging material must be stored separately from other goods. The room must be clean and organised. Only packaging material from which the outer packaging has already been removed may be used in the production rooms. Packaging materials and resources must be stored and transported in a way that minimises the risk of contamination.

6.1.3 Cleaning product and disinfectant storage

The rooms or facilities in which cleaning products and cleaning equipment are stored must be clean and tidy. They enable equipment to be stored hygienically and, if applicable, separated into a clean/unclean area. The equipment must be regularly maintained and cared for. A procedure for cleaning and disinfecting rooms and cleaning equipment is in place and implemented.

All cleaning product containers must be clearly labelled. Additional precautions (e.g. protective tubs) must be in place for potentially environmentally hazardous substances.

Cleaning chemicals and products must have up-to-date safety data sheets and usage instructions. The usage instructions must be known to the responsible members of staff and must be stored on site. Cleaning equipment and chemicals must be clearly labelled and stored separately from food.

Access to this area is restricted. The responsibilities for storing and using cleaning and disinfection products are regulated and the responsible employees are trained on how to handle the relevant chemicals.

Safety data sheets, usage instructions

6.1.4 [K.O.] Spice room

Spices must be stored cleanly and tidily in suitable premises under the recommended storage conditions. Spices containing allergens are to be stored in a specific area and are taken into account in the allergen management strategy. Any risk of allergen contamination in the spice room must be excluded.

An up-to-date specification must be present for all the spices used. If spices are removed from their original packaging, the label and best-before date must be transferred to the new storage container. Spice containers must be completely emptied, cleaned and disinfected before any new goods are placed into the container. All spices and spice mixes can be clearly identified via traceability information.

6.2 Disposal

6.2.1 Disposal logistics

Suitable precautions must be taken for the storage and disposal of food waste, inedible by-products and other waste products.

These products must be removed as quickly as possible from premises in which unpackaged foods are handled. They must be stored in closed containers. The containers must be suitable to be maintained, easy to clean and, if necessary, easy to disinfect.

All waste must be disposed of in a hygienic and environmentally friendly manner in line with the applicable local regulations and may not have any direct or indirect impact on food.

6.2.2 Disposal area

The area or room in which waste is collected and temporarily stored, and any containers used for this purpose are kept in a clean, hygienically sound condition.

6.2.3 [K.O.] Slaughter by-products and risk material

A procedure must be defined and implemented at the plant for handling animal by-products from slaughter that are not intended for human consumption and risk material in accordance with the German **Act on the Disposal of Animal By-Products (TierNebG)** and **Reg. (EC) No. 1069/2009**, including its **implementation order (EC) No. 142/2011.**

Unless otherwise agreed with the competent animal carcass disposal plant, a separate collection of the different legally specified categories must be observed. Separate internal transportation arrangements must also be observed.

The following labels must be applied:

- "K1 – For disposal only" (means of transport must be marked in black)
- "K2 – Not for feeding" (means of transport must be marked in yellow)
- "K3 – Not for human consumption" (means of transport must be marked in green with a high blue content)

If packaging, containers and/or vehicles cannot be completely colour-coded, prints, signs or stickers must be used that are colour-coordinated, clearly visible and remain attached for the duration of the journey. The plant must also provide evidence that enables quantitative conclusions to be drawn about how the products are used and recycled. When delivering animal by-products and secondary products that are unsuitable for human consumption, generating the relevant commercial paperwork is mandatory.

Commercial paper, carcass disposal plant receipt, section delivery paperwork, holding register

Cattle must be tested for BSE in accordance with the latest version of the **TSE Regulation (EC) No. 999/2001.** The respective provisions of the EU member state must be adhered to in addition.

Findings, laboratory approval

6.3 Fleet

6.3.1 Transport vehicle washing facilities

A sufficient number of suitable washing and disinfection facilities must be available for transport/delivery vehicles.

6.3.2 Cleaning and disinfection

Livestock transport vehicles and refrigerated vehicles for food must be cleaned and disinfected separately, i.e. at different times or in different places. It must be ensured that any negative reciprocal effects (airborne particles!) are prevented.

A procedure for examining the standard of cleaning and disinfection of the refrigerated vehicles is defined and is applied and documented on a regular basis.

If no suitable actions (wash bay) have been taken for cleaning and disinfecting lorries during the winter months, a disinfection product that also works in sub-zero temperatures must be made available during that time.

Examination of cleaning and disinfection

Reference to further documents:

- Guideline on means and procedures for the implementation of disinfection for certain animal diseases (Homepage FLI)

6.3.3 Temperature monitoring system

The prescribed product temperature must be guaranteed at all times. Evidence of the correct product temperature must be provided at all times by means of a suitable method, such as taking temperature measurements on the product or via a functional temperature recorder.

7 Procurement, traceability, labelling, use of QS certification mark and goods separation

7.1 Incoming and outgoing goods

7.1.1 Technical/structural condition

⇒ 2.4 Technical/structural condition

7.1.2 Premises, facility and device hygiene

⇒ 2.5 Premises, facility and device hygiene

7.1.3 Ground Clearance

⇒ 2.6 Ground Clearance

7.1.4 [K.O.] Incoming goods inspection

Incoming goods inspections (purchased goods acceptance) must be defined and documented. They must incorporate all the relevant products. If required, the incoming goods inspection must be adjusted to any changes in manufacturing, storage or transport conditions. Points that are relevant to food safety (e.g. temperature) must be recorded during the incoming goods inspection.

Incoming goods documentation

QS supplier list

It must be possible to trace which products were procured from which supplier. A comprehensive list of QS suppliers must available.

Supplier list

7.1.5 [K.O.] Outgoing goods inspection

Clear procedures and workflows must be defined in the outgoing goods area, which take into account and ensure compliance with the following points as a minimum:

- Goods identification
- Temperature
- Damage/contamination and transport safety

A structured and comprehensible outgoing goods inspection procedure must be implemented at the plant. The manner in which nonconformities are handled must be specified. The responsible employees must be trained in dealing with non-conforming products. Goods must be transported as per product requirements. Suitable evidence of this must be provided.

As a matter of principle, carcasses and the meat yielded from them may not exceed a core temperature of +7 °C before dispatch. This temperature requirement does not apply to plants that debone carcasses exclusively for their own requirements or if the carcasses are destined for specific distribution channels (e.g. warm deboning) and the relevant exemption is in place.

Outgoing goods inspection procedure

QS customer list

It must be possible to trace which products are delivered to which customer. A comprehensive list of QS customers must available. If a plant is delivering pre-packaged food products for delivery to final consumers, it must examine the customer's approval in the QS database upon delivery.

Customer lists

7.1.6 [K.O.] Returns management

A system for processing and completing returns must be in place. Returns are defined as goods returned to the supplier e.g. due to defects, ordering errors, etc. When returned, goods return to the ownership of the sender. The following allocation and processing steps are regulated as part of the returns process:

- Acceptance and categorisation of returns
- Labelling and separating QS goods and non-QS goods
- Corrective actions
- Record-keeping duties
- Responsibilities

Returns management documentation

7.1.7 Claims and complaints

There is a system for dealing with complaints (including food safety and animal welfare-related defect reports) and product complaints, which includes at least regulations:

- Recording and evaluating complaints and claims
- Introducing and implementing corrective actions
- Responsibilities and internal communications

7.2 Labelling and use of QS certification mark

7.2.1 [K.O.] Labelling of marketed QS goods

Goods that are marketed as QS products must be clearly labelled (e.g. by stamping each half with the certification mark, using the mark, labelling E2 crates with a QS label, tracking via the slaughter number, etc.) during the outgoing goods stage. The reference to the QS products can be made either directly via labelling on the goods or via defined coding (with a link to the specification). Additionally, it must be guaranteed that the relevant accompanying documents (delivery notes) are clearly labelled so that the relationship between the QS products and its accompanying documentation/invoices, etc. is distinguishable at all times. The same applies to the use of goods documents in electronic form. Scheme participants may only label QS products as such in the accompanying documents if the reseller is also a QS scheme participant.

The QS labelling procedure must be explained and known to the employees responsible, even if no QS goods are traded.

Marketing at business customer level

At business customer level, scheme participants may only label QS goods as such in the accompanying documents if (1) the reseller is also a QS scheme participant or (2) the reseller is prohibited from actively advertising the goods as QS goods in the further course of business and in contact with its customers. The prohibition can be declared by a corresponding note on the accompanying documents.

Reference to further documents:

- Explanations: Labelling of QS products (meat and meat products)

Incoming and outgoing goods documents

7.2.2 Use of QS certification mark

⇒ [K.O.] 7.2.1 Labelling of marketed QS products

Scheme participants are entitled to use the QS certification mark once they have been permitted to do so by QS (via QS scheme agreement).

Use of the certification mark is only permitted in accordance with the **style guide**. Scheme participants may only market goods that are packaged ready for sale to final consumers and labelled with the QS certification mark to QS scheme participants. Marketing to non-QS scheme participants is not permitted.

Please refer to the following supporting documents:

- Explanatory note Use of the QS certification mark for composite products
- Style guide for the QS certification mark
- Working aid for meat and meat products: Labelling of QS goods

7.3 Traceability and origin of goods

7.3.1 [K.O.] Traceability method

The batch sizes produced must be defined in order to ensure traceability. In doing so, the traceability should be ensured up to at least the fattener group of a given day or shift. The labelling and recording system must be comprehensible to third parties and ensure that QS products can be clearly identified, and commodity flows are traceable and plausible at all times. Scheme participants must set up traceability systems and procedures in accordance with **Reg. (EC) No. 178/2002.**

Compliance with the provisions of **Reg. (EC) No. 1825/2000**, Article 4 is compulsory when forming beef batches and maintaining the labelling and recording system. For pork and poultry meat, Articles 4 and 5.3 of **Reg. (EC) No. 1337/2013** must be complied with. National regulations must also be compiled with.

Scheme participants must implement traceability systems that ensure traceability data is submitted to QS within 24 hours of being contacted. For auditing purposes, internal traceability processes should be designed to enable the relevant information to be compiled within four hours.

The following customer and supplier information is relevant according to **Reg. (EU) No. 931/2011** and within the scope of the QS scheme:

- Name, address and telephone number of the food company from which the food was dispatched
- Name and address of the consignor (owner), if this is not the food company from which the food was dispatched
- Name and address of the food company to which the food is dispatched
- Name and address of the consignee (owner), if this is not the food company to whom the food is dispatched
- QS ID and/or location number (provided the identification numbers are issued within the scope of the QS scheme)
- Type and quantity of the products delivered, with a clear article reference to raw materials, semi-finished products and final products
- Dispatch date, delivery date and/or slaughter date (the latter is only relevant for the slaughter/deboning stage)
- Batch number (if generated during the production process)

At the slaughtering/deboning stage, the VVVO numbers (registration numbers according to the German Livestock Transport Regulation) and, if available, the name and address of the livestock owner whose animals have been slaughtered must be shared with QS in a standard, structured, machine-readable format.

Products in which QS goods are known to be used, but which are not labelled as QS goods, must also be taken into account for traceability purposes.

Batch creation, traceability system

7.3.2 [K.O.] Traceability check

The labelling and recording system implemented at the plant must enable products to be clearly identified as QS products and goods to be traced based on a production or outgoing goods sample at any given time in accordance with **Reg. (EC) No. 178/2002** and taking into account the requirements from 7.3.1. This also applies to all ingredients, spices, additives and auxiliary materials as well as primary packaging materials and labels.

The labelling and registration system is tested at least once a year (approx. every 12 months) downwards (from the end product to the raw material) and upwards (from the raw material to the end product) All relevant flows of goods are taken into account. The test includes a plausibility check of the quantities (quantity balancing). The test must be documented and the results must be presented in a plausible manner.

Traceability check

7.3.3 [K.O.] Quantity comparison

There must be a plausible relationship between the quantity of purchased QS goods or non-QS goods and the quantity of produced and/or stored QS goods or non-QS goods. The relevant data and receipts must be available and comprehensibly processed in the internal system, taking into account:

- Quantities recorded on incoming goods documents (e.g. delivery notes, incoming goods inspections)
- Quantities recorded on outgoing goods documents (e.g. delivery notes)
- Quantities recorded in stock (internal and external storage premises)
- Allocation of article master data for raw materials and final products (e.g. specifications)
- Specified tolerances (offcuts, losses)
- Defined quantity units (for plausible allocation)
- Outsourced processes (freezing, thawing, repackaging and others)

Products in which QS goods are known to be used, but which are not labelled as QS goods, must also be taken into account in the quantity comparison.

Incoming goods documents and outgoing goods documents as well as goods quantity in cold/frozen storage

7.3.4 [K.O.] QS eligibility of delivery check

Plants delivering QS goods must be clearly identifiable as scheme participants with eligibility of delivery in the QS database at the time of delivery. Similarly, if a plant is delivering pre-packaged food products for delivery to final consumers, it must examine the customer's approval in the QS database upon delivery.

Documented procedure for querying eligibility of delivery in the QS database

7.4 Goods separation

7.4.1 [K.O.] Separation and identification of QS/non-QS products

A comprehensible system for separating, labelling and batching QS goods and non-QS goods must be available and guaranteed throughout all production stages at the plant. If no QS goods are present at the plant yet, the goods separation procedure must be outlined appropriately.

Any mix-up of QS products and non-QS products must be avoided. All employees working with the products must operate in a way that ensures no mix-ups can occur.

System for separating QS goods from non-QS goods

VLOG add-on module "Without genetic engineering”

The VLOG add-on module is published separately as a document.

8 Definitions

8.1 Explanation of symbols

K.O. Criteria are labelled with **[K.O.]**.

References to related documents are highlighted in **bold text.**

This sign means: Written evidence must be kept. Next to this sign, there is also a list of documents that can be used as evidence. All inspection and documentation systems (including digital) that prove the requirements are met, can be used.

⇒ References to other sections of the guideline are indicated by this sign.

Notes are identified by ***Note*** *in italics.*

8.2 Abbreviations

CCP	Critical Control Point
HACCP	Hazard Analysis and Critical Control Points
K.O.	Knock Out
BBE	Best-Before Date
QUID	Quantitative Ingredient Declaration
VVVO	German Livestock Transport Regulation

8.3 Terms and definitions

- Outsourced processes

  In the QS scheme, outsourced processes are defined as partial or complete production, storage and/or retail/distribution processes that are commissioned by the participating company. If products are to be promoted using the QS certification mark according to the QS style guide, it is mandatory for these companies to participate in the QS scheme.

- Transportation

  The entire transport process from the origin to the destination, including unloading, storing and loading at intermediate locations.

- CCP (Critical Control Point)

  A point, procedure, workflow or work step at/during which an inspection can and needs to be performed in order to prevent or eliminate a food safety risk or minimise it to an acceptable level.

- HACCP (Hazard Analysis and Critical Control Point)

  A system that identifies, evaluates and controls risks pertinent to food safety.

- HACCP concept

  Documentation in accordance with HACCP principles to ensure the control of risks pertinent to food safety.

- QS products

  Goods that are produced and/or marketed at a QS-certified plant in line with the QS scheme requirements are considered to be QS products.

- QUID

  QUID (Quantitative Ingredient Declaration) describes the quantity labelling of food ingredients in percentages.

- Red meat

  The term ‘red meat’ incorporates beef, veal and pork.

- Standard work instructions (according to Regulation (EC) No. 1099/2009)

  A set of written rules designed to ensure that a specific task or regulation is performed or implemented in a uniform manner. According to recital 27 of the Regulation, the protection of animals depends mainly on how the activities are carried out and reliable results can only be achieved if operators develop tools to assess the effect of stunning. Risk-related standard operating procedures should therefore be drawn up for all stages of the production process. These should include clear objectives, responsibilities, procedures, measurable criteria and procedures for monitoring and recording. The key parameters for each stunning procedure should be set in such a way as to ensure that all animals subject to the procedure are adequately stunned.

- White meat

  The term ‘white meat’ incorporates chicken, turkey and duck.

- Mechanically separated meat according to Annex I No. 1.14 of Regulation (EC) No. 853/2004 of 29 April 2004 laying down specific hygiene rules for food of animal origin:

  Mechanically separated meat is a product obtained by mechanically separating the meat adhering to meat-bearing bones after deboning or to poultry carcasses in such a way that the structure of the muscle fibres is dissolved or altered.

- Mechanically de-tenoned meat (synonymous with 'Baader meat')

  Mechanical separation of connective tissue, tendons and cartilage from the meat portion.

A list of general terms and definitions can be found in the **General Regulations Guideline.**

9 Annex

Annex Additional module "Convenience"

The annex is published as excerpt.

Revision Information Version 01.01.2026

Criterion	Changes	Date of change
2.1.5 Commissioning service providers	**Editorial revision** **New:** The client must require the commissioned logistics company to allow inspections by the client's certification body and/or by QS in individual cases. **Clarification:** The exemption for sporadic commissioning only applies to logistics companies who receive a maximum of twelve individual contracts within a calendar year.	01.01.2026
2.2.1 **[K.O.]** Conducting self-assessments	**Adaptation:** Carcass inspection. Addition of Listeria to Table 2.	01.01.2026
2.3.4 Foreign matter management	**Addition:** One document has been added to the reference to further documents.	01.01.2026
2.3.6 Pest monitoring/control	**Addition:** One document has been added to the reference to further documents.	01.01.2026
2.7.1 General rules of conduct and staff hygiene	**Addition:** Points on personal hygiene have been added.	01.01.2026
3.1.2 Standard work instructions	**Addition:** Key parameters have been added to the list.	01.01.2026
3.3.1 Stunning system	**Addition:** One document has been added to the reference to further documents	01.01.2026
4.3.17 **[K.O.]** Salmonella monitoring	**Addition:** Reference to further documents	01.01.2026
4.3.19 Turkey slaughter: Participation in AIV monitoring programme	Requirement is suspended.	01.01.2026
5.2.6 **[K.O.]** Raw material selection minced meat	**NEW:** new requirement.	01.01.2026
5.3.3 **[K.O.]** Packaging material	**Adaptation:** Individual measures in accordance with Regulation (EU) No. 10/2011 **Addition:** Documents have been added to the reference to further documents.	01.01.2026

Criterion	Changes	Date of change
5.3.6 **[K.O.]** Recipes/specifications	**Addition:** Mechanically separated meat (according to Chapter 8 'Definitions'), pig spinal cord may not be marketed as QS goods. The product must comply with the respective requirements/traditional market perception of the country of destination. In Germany, the German guidelines for meat and meat products apply	01.01.2026
5.4.5 **[K.O.]** Temperature recording and monitoring	**Adaptation:** Defrosting processes must be defined, monitored and adhered to.	01.01.2026
5.5.5 **[K.O.]** Temperature recording and monitoring	**Adaptation:** Freezing processes must be defined, monitored and adhered to.	01.01.2026
6.1 Cleaning areas and material storage	**Adaptation:** Chapter heading changed from "Wash facilities and material stores" to "Cleaning areas and material storage".	01.01.2026
6.1.1 Container washing	**Adaptation:** Chapter heading changed from "Wash facilities" to "Container washing".	01.01.2026
6.3.2 Cleaning and disinfection	**Addition:** A reference to further documents has been added.	01.01.2026
7.1.7 Claims and complaints	**Adaptation:** Chapter heading changed from "complaint management" to "claims and complaints".	01.01.2026
7.2.1 **[K.O.]** Labelling of marketed QS goods	**Explanation:** Clarification of the regulations for the marketing of QS goods.	01.01.2026
8.3 Terms and definitions	**Addition**: The terms "mechanically separated meat" and "mechanically de-tenoned meat" were defined.	01.01.2026

Guideline
Slaughtering/Deboning

QS Qualität und Sicherheit GmbH
Managing Director: Dr. A. Hinrichs

Schwertberger Straße 14, 53177 Bonn
T +49 228 35068 -0
F +49 228 35068 -10
E info@q-s.de

Photos: QS

q-s.de