

UNECE STANDARD

**HORSE MEAT
CARCASSES AND CUTS**

2011 EDITION



UNITED NATIONS
New York and Geneva, 2011

NOTE

Working Party on Agricultural Quality Standards

The commercial quality standards developed by the United Nations Economic Commission for Europe (UNECE) Working Party on Agricultural Quality Standards help facilitate international trade, encourage high-quality production, improve profitability and protect consumer interests. UNECE standards are used by Governments, producers, traders, importers and exporters, and other international organizations. They cover a wide range of agricultural products, including fresh fruit and vegetables, dry and dried produce, seed potatoes, meat, cut flowers, eggs and egg products.

Any member of the United Nations can participate, on an equal footing, in the activities of the Working Party. For more information on agricultural standards, please visit our website <www.unece.org/trade/agr>.

The new Standard for Horse Meat - Carcasses and Cuts is based on document ECE/TRADE/C/WP.7/2011/5, reviewed and adopted by the Working Party at its sixty-seventh session.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations Secretariat concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Mention of company names or commercial products does not imply endorsement by the United Nations.

All material may be freely quoted or reprinted, but acknowledgement is requested.

Please contact us at the following address with any comments or enquiries:

Agricultural Standards Unit
Trade and Timber Division
United Nations Economic Commission for Europe
Palais des Nations
CH-1211 Geneva 10, Switzerland
E-mail: agrstandards@unece.org

ACKNOWLEDGEMENTS

UNECE would like to acknowledge the contributions of the following delegations during the preparation of this publication: Argentina, Australia, China, European Union, France, Netherlands, Poland, Russian Federation and United States of America.

UNECE would also like to acknowledge the special contribution of the delegation of the Russian Federation for the publication of the first edition of this standard and for providing the photographs in this edition.

Contents

	<i>Page</i>
1. Introduction	4
1.1 UNECE standards for meat products	4
1.2 Scope	4
1.3 Application	5
1.4 Application	5
2. Mandatory requirements	5
3. Purchaser-specified requirements.....	6
3.1 Additional requirements	6
3.2 Species	6
3.3 Product/cut.....	6
3.4 Refrigeration.....	6
3.5 Production history.....	7
3.5.1 Traceability	7
3.5.2 Equine category	7
3.5.3 Production system.....	8
3.5.4 Feeding system.....	8
3.5.5 Slaughter system	9
3.5.6 Post-slaughter system.....	9
3.6 Fat limitations and evaluation of fat thickness in certain cuts	9
3.6.1 Fat thickness.....	9
3.6.2 Trimming and evaluating fat thickness	10
3.7 Horse meat quality classification systems	11
3.8 Weight ranges of carcasses and cuts	11
3.9 Packing, storage and transport	12
3.9.1 Description and provisions.....	12
3.9.2 Packing code	12
3.10 Labelling information to be mentioned on or included in the labels of marketing units of meat	13
3.11 Provisions concerning conformity-assessment requirements	14
4. UNECE Code for Purchaser Requirements for Horse Meat	15
4.1 Definition of the code	15
4.2 Example	16
5. Carcasses and cut descriptions	17
5.1 Multilingual index of products	17

5.2	Horse side skeletal diagram	20
5.3	Standard horse primal cuts flow chart	23
5.4	Horse meat cuts.....	23
5.5	Boneless horse meat manufacturing bulk packs definition.....	37
5.6	Standard horse meat primal cuts muscle reference	38
5.6.1	Lateral/medial view carcass structure	38
5.6.2	Alphabetical list of muscle names.....	38
5.7	Meat quality standards.....	40
5.7.1	Meat and fat colour and pH.....	40
Annexes		
Annex I:	Codification system.....	41
Annex II:	Addresses	46

1. Introduction

1.1 UNECE standards for meat products

The purpose of UNECE standards for meat products is to facilitate trade by recommending an international language for trade between buyers and sellers. The language describes meat items commonly traded internationally and defines a coding system for communication and electronic trade. The texts will be updated regularly. Meat industry members who believe that additional items are needed or that existing items are inaccurate or no longer being traded are encouraged to contact the ECE secretariat.

The text of this publication has been developed under the auspices of the ECE Specialized Section on Standardization of Meat. It is part of a series of standards for meats which ECE has developed or is planning to develop.

The following table contains the species for which UNECE standards exist or are in different stages of development and their code for use in the UNECE meat code (see chapter 4).

For further information please visit the ECE website at <www.unece.org/trade/agr>.

Annex I contains a description of the GS1/UCC system, which contains a specific application identifier for the implementation of the UNECE code.

<i>Species</i>	<i>UNECE species code (data field 1)</i>
Bovine (beef)	10
Bovine (veal)	11
Porcine (pork)	30
Ovine (sheep)	40
Carpine (goat)	50
Llama	60
Alpaca	61
Chicken	70
Turkey	71
Horse meat (equine)	80

1.2 Scope

This standard recommends an international language for raw (unprocessed) horse (equine) carcasses and cuts marketed as fit for human consumption. It provides purchasers with a variety of options for meat handling, packing and conformity assessment that conform to good commercial practice for meat and meat products intended to be sold in international trade.

The appropriate legislative requirements of food standardization and veterinary control must be complied with to market horse carcasses and cuts across international borders. The standard does not attempt to prescribe those aspects which are covered elsewhere. Throughout the standard, such provisions are left for national or international legislation or for the requirements of the importing country.

The standard contains references to other international agreements, standards and codes of practice that have the objective of maintaining the quality after dispatch and of providing guidance to Governments on certain aspects of food hygiene, labelling and other matters that fall outside the scope of this standard. *Codex Alimentarius Commission Standards, Guidelines, and Codes of Practice* should be consulted as the international reference for health and sanitation requirements.

1.3 Application

Contractors are responsible for delivering products that comply with all contractual and specification requirements and are advised to set up a quality control system designed to assure compliance.

For assurance that items comply with these contract requirements, buyers may choose to use the services of an independent, unbiased third party to ensure product compliance with a purchaser's specified options. The standard includes illustrative photographs of carcasses and selected commercial parts/cuts to make it easier to understand the provisions and to ensure that it can be widely used in international trade.

1.4 Adoption and publication history

Following the recommendation of the Specialized Section, the Working Party on Agricultural Quality Standards adopted this text at its sixty-seventh session (Reference: ECE/TRADE/C/WP.7/2011/5).

UNECE Standards for meat undergo a complete review three years after publication. Following the review, new editions are published as necessary. Changes requiring immediate attention are published on the UNECE website at: <www.unece.org/trade/agr/standards.htm>.

2. Mandatory requirements

All meat must originate from animals slaughtered in establishments regularly operated under the applicable regulations pertaining to food safety and inspection.

Carcasses/cuts must be:

- Intact, taking into account the presentation
- Free from visible blood clots or bone dust
- Free from any visible foreign matter (e.g. dirt, wood, metal particles)¹
- Free of offensive odours
- Free of obtrusive bloodstains

¹ When specified by the purchaser, meat items will be subject to metal particle detection.

- Free of unspecified protruding or broken bones
- Free of contusions
- Free from freezer-burn²
- Free of spinal cord (except for whole unsplit carcasses)

Cutting, trimming, and boning of cuts shall be accomplished with sufficient care to maintain cut integrity and identity and to avoid scores in the lean. Ragged edges shall be removed close to the lean surfaces. Except for cuts that are separated through natural seams, all cross-sectional surfaces shall form approximate right angles with the skin surface. Minimal amounts of lean, fat, or bone may be included on a cut from an adjacent cut. For boneless cuts, all bones, cartilage, and visible surface lymph glands shall be removed.

3. Purchaser-specified requirements

The following subsections define the requirements that can be specified by the purchaser together with the codes to be used in the UNECE equine code (see chapter 4).

3.1 Additional requirements

Additional purchaser-specified requirements, which are either not accounted for in the code (e.g. if code 9, “other”, is used) or that provide additional clarification on the product or packing description, shall be agreed between buyer and seller and be documented appropriately.

3.2 Species

The code for equine in data field 1 as defined in section 1.1 is 80.

3.3 Product/cut

The four-digit product code in data field 2 is defined in chapter 5.

3.4 Refrigeration

Meat may be presented chilled, frozen or deep-frozen. Depending on the refrigeration method used, tolerances for product weight should be agreed between buyer and seller. Ambient temperatures should be such throughout the supply chain as to ensure uniform internal product temperatures as follows:

² Freezer-burn is localized or widespread areas of irreversible surface dehydration indicated, in part or all, by changes from original colour (usually paler), and/or tactile properties (dry, spongy).

<i>Refrigeration code (data field 4)</i>	<i>Category</i>	<i>Description</i>
0	Not specified	
1	Chilled	Internal product temperature maintained at not less than 1.5° C or more than +7° C at any time following the post-slaughter chilling process
2	Frozen	Internal product temperature maintained at not exceeding -12° C at any time after freezing
3	Deep-frozen	Internal product temperature maintained at not exceeding -18° C at any time after freezing
4–8	Codes not used	
9	Other	

3.5 Production history

3.5.1 Traceability

The requirements concerning production history that may be specified by the purchaser require traceability systems to be in place. Traceability requires a verifiable method of identification of equine animals, carcasses, cartons and cuts at all stages of production. When a traceability procedure is used, it should be established by a conformity assessment body mentioned in section 3.11.

3.5.2 Equine category

<i>Category code (data field 5)</i>	<i>Category</i>	<i>Description</i>
0	Not specified	No specific category specified.
1	Horse meat from stallions	Stallion (uncastrated male). Developed sexual organs. Age: over 30 months.
2	Horse meat from mares	Mare. Age: over 36 months.
3	Horse meat from young stallions	Young stallion (uncastrated male). Age: under 30 months.
4	Horse meat from geldings	Gelding (young castrated male). Age: under 36 months.
5	Horse meat from young mares	Young mare. Age: under 36 months.
7	Horse meat from foals	Foal. Age 6 to 12 months
8	Not specified	
9	Miscellaneous	

3.5.3 Production system

The purchaser may specify a production system. In any case the production has to be in conformity with the regulations in force in the importing country. If no such regulation exists, the regulation of the exporting country shall be used.

<i>Production system code (data field 6)</i>	<i>Category</i>	<i>Description</i>
0	Not specified	
1	Intensive	Production methods using limited pasturing, stabling and feeding aimed at fast growth of the livestock
2	Extensive	Production methods using relatively unlimited access to natural fodder for most of the life of the livestock
3	Organic	Production methods meeting international standards or national standards if they are more stringent
4–8	Codes not used	
9	Miscellaneous systems	

3.5.4 Feeding system

The purchaser may specify a feeding system. In any case the feeding has to be in conformity with the regulations in force in the importing country. If no such regulation exists, the feeding system shall be agreed between buyer and seller.

<i>Feeding system code (data field 7 (a))</i>	<i>Category</i>	<i>Description</i>
0	Not specified	
1	Pasture	Feeding system based on pasture plus some grains
2	Forage fed	Feeding system based on feeding of forage
3–8	Codes not used	
9	Other	May be used for descriptions of any type of feeding system agreed between the purchaser and the seller

Note 1. The purchaser may request from the seller a list of forage mixtures and ingredients given to the animals (in feed or as medicines).

3.5.5 Slaughter system

<i>Slaughter system code (data field 8)</i>	<i>Category</i>	<i>Description</i>
0	Not specified	
1	Conventional	Stunning prior to bleeding
2	Kosher	Appropriate ritual slaughter procedures used
3	Halal	Appropriate ritual slaughter procedures used
4–8	Codes not used	
9	Miscellaneous	Any other accepted method of slaughter must be agreed between buyer and seller

3.5.6 Post-slaughter system

<i>Post-slaughter processing codes (data field 9)</i>	<i>Category</i>	<i>Description</i>
0	Not specified	
1	Specified	Post-slaughter system specified as agreed between buyer and seller
2–9	Codes not used	

Note 1. Removal of spinal cord and other high-risk material: Specific market requirements will define the requirements for removal of the spinal cord and nervous and lymphatic tissues. The requirements for spinal cord removal will specify at what processing stage the carcass or cut must have the spinal cord removed. If removal is required, it must be removed in full.

Note 2. The following list describes some common post-slaughter processes that may be agreed between buyer and seller. These requirements are not included in the UNECE coding for horse meat:

- Dressing specification
- Electrical stimulation
- Method of carcass suspension
- Neck stringing
- Chilling regimes
- Maturation process

3.6 Fat limitations and evaluation of fat thickness in certain cuts

3.6.1 Fat thickness

The purchaser can specify the maximum fat thickness of carcasses, sides and cuts. Allowable fat limitations are as follows:

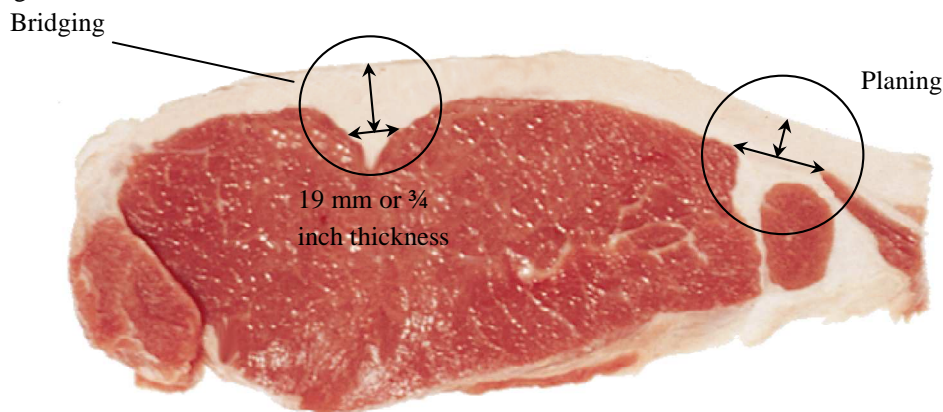
<i>Fat thickness code (data field 10)</i>	<i>Category</i>
0	Not specified
1	Peeled, denuded, surface membrane removed
2	Peeled, denuded
3	Practically fat-free (75% lean meat with subcutaneous fat removed)
4	Maximum fat thickness 3 mm or as specified
5	Maximum fat thickness 6 mm or as specified
6	Maximum fat thickness 13 mm or as specified
7	Maximum fat thickness 25 mm or as specified
8	Specified chemical composition of muscle tissue
9	Other categories

3.6.2 Trimming and evaluating fat thickness

Trimming of external fat shall be accomplished by smooth removal along the contour of underlying muscle surfaces. Bevelled fat edges alone do not substitute for complete trimming of external surfaces when required. Fat thickness requirements may apply to surface fat (subcutaneous and/or exterior fat in relation to the item) and to seam (intermuscular) fat (marbling), as specified by the purchaser. Two definitions are used to describe fat trim limitations:

- Maximum fat thickness at any one point. Evaluated by visually determining the area of a cut which has the greatest fat depth and measuring the thickness of the fat at that point.
- Average (mean) fat thickness. Evaluated by visually determining and taking multiple measurements of the fat depth of areas only where surface fat is evident. Average fat depth is determined by computing the mean depth in those areas.

Figure 1



Actual measurements of fat thickness (depth) are made on the edges of cuts by probing or scoring the overlying surface fat in a manner that reveals the actual thickness and accounts for any natural depression or seam that could affect the measurement. When a natural depression occurs in a muscle, only the fat above the portion of the depression which is more than 19 mm (0.75 inch) in width is considered (known as bridging; see figure 1). When a seam of fat occurs between adjacent muscles, only the fat above the level of the involved muscles is measured (known as planing; see figure 1).

However, when fat limitations are specified for cuts that are peeled/denuded³ or peeled/denuded, surface membrane removed,⁴ the bridging method shall be used for evaluating fat above a natural depression in a muscle and fat occurring between adjacent muscles.

3.7 Horse meat quality classification systems

The coding system makes it possible for the purchaser to specify which classification system is to be used.

<i>Horse meat quality classification system code (data field 11)</i>		
<i>Category</i>	<i>Description</i>	
0	Not specified	
1	Specified clearly	Additional information on the classification systems of specific countries can be received from the corresponding standardization agencies.

3.8 Weight ranges of carcasses and cuts

<i>Weight range code (data field 12)</i>		
<i>Category</i>	<i>Description</i>	
0	Not specified	
1	Specified	Range required
2–9	Codes not used	

³ Peeled/denuded – The term “peeled” implies surface fat and muscle separation through natural seams so that the resulting cut’s seamed surface (“silver” or “blue tissue”) is exposed with remaining “flake” fat not to exceed 1.0 inch (2.5 cm) in the longest dimension and/or 0.125 inch (3 mm) in depth at any point. The term “denuded” implies all surface fat is removed so that the resulting cut’s seamed surface (“silver” or “blue tissue”) is exposed with remaining “flake” fat not to exceed 1.0 inch (2.5 cm) in any dimension and/or 0.125 inch (3 mm) in depth at any point.

⁴ Peeled/denuded, surface membrane removed – When the surface membrane (“silver” or “blue tissue”) is required to be removed (skinned), the resulting cut surface shall expose at least 90 per cent lean with remaining “flake” fat not to exceed 0.125 inch (3 mm) in depth.

3.9 Packing, storage and transport

3.9.1 Description and provisions

The primary packaging is the primary covering of a product and must consist of food grade materials. The secondary packaging contains products packaged in their primary packaging. During storage and transport, the meat must be packaged to the following minimum requirements:

Carcasses and quarters

- Chilled with or without packaging
- Frozen/deep-frozen and packed to protect the products

Cuts-chilled

- Individually wrapped (I.W.)
- Bulk packaged (plastic or wax-lined container)
- Vacuum-packed (VAC)
- Modified atmosphere packaging (MAP)
- Other

Cuts-frozen/deep frozen

- Individually wrapped (I.W.)
- Bulk packaged (plastic or wax-lined container)
- Vacuum-packed (VAC)
- Other

The conditions of storage before dispatch and the equipment used for transportation shall be appropriate to the physical and in particular the thermal condition of the meat (chilled, chilled in a modified atmosphere, frozen, or deep-frozen) and shall be in accordance with the requirements of the importing country. Attention is drawn to the provisions of the UNECE Agreement on the International Carriage of Perishable Foodstuffs and on the Special Equipment to be Used for Such Carriage (ATP) (ECE/TRANS/165).

3.9.2 Packing code

<i>Packing code (data field 13)</i>	<i>Category</i>
0	Not specified
1	Carcasses, half carcasses and quarters – without packaging
2	Carcasses, half carcasses and quarters – with packaging
3	Cuts – individually wrapped (I.W.)
4	Cuts – bulk packaged (plastic or wax-lined)

<i>Packing code (data field 13)</i>	<i>Category</i>
	container)
5	Cuts – vacuum-packed (VAC)
6	Cuts – modified atmosphere packaging (MAP)
7–8	Codes not used
9	Other

3.10 Labelling information to be mentioned on or included in the labels of marketing units of meat

Without prejudice to the national requirements of the importing countries, the following table contains information that must be listed on product labels (noted with an “x”) used for unpackaged carcasses, quarters and cuts and for pre-packed or packaged meat products.

<i>Labelling information</i>	<i>Unpackaged carcasses, quarters and cuts</i>	<i>Packaged or packed meat</i>
Health stamp	x	x
Slaughter number or batch number	x	x
Slaughter date	x	
Packaging date		x
Name of the product		x
Use-by information as required by each country		x
Storage methods: chilled, frozen, deep frozen		x
Storage conditions		x
Details of packer or retailer		x ^a
Quantity (number of units)		x ^a
Net weight		x ^a

^a This information can also be provided in accompanying documentation.

Producers may at their own initiative include other information on goods labels. Any such information must be subject to monitoring. Some examples of such information include:

- Lean and fat colour
- Slaughter and post-slaughter systems
- Classification/grade

- Slaughter systems
- Characteristics of the livestock, production and feeding systems

3.11 Provisions concerning conformity-assessment requirements

Purchasers may request that a third party assess the product's conformity with indicators defined by them or with standards and/or animal identification. Individual conformity assessments or combinations thereof may be selected as follows:

Quality/grade/classification conformity assessment (quality): A third party examines and certifies that the product meets the quality level requested. An authoritative third-party certifying body and the quality grade standard to be used must be designated as noted in 3.1.

Trade standard conformity assessment (trade standard): A third party examines the product and certifies that it meets the purchaser-specified options as specified in this trade standard, except for quality level. The name of the third-party certifying authority must be designated as noted in 3.1. Optionally, the purchaser may indicate specific purchaser-specified options to be certified after the name of the third party certifying authority.

Animal or batch identification conformity assessment (animal/batch ID): A third party certifies that the product meets specified requirements. The name of the third-party certifying authority and the requirements must be designated as noted in 3.1.

<i>Conformity assessment code (date field 14)</i>	<i>Category</i>
0	Not specified
1	Quality/grade/classification (quality) conformity assessment
2	Trade standard conformity assessment
3	Animal/batch identification (animal/batch ID) conformity assessment
4	Quality and trade standard conformity assessment
5	Quality and animal/batch ID conformity assessment
6	Trade standard and animal/batch ID conformity assessment
7	Quality, trade standard and animal/batch ID conformity assessment
8	Code not used
9	Other categories

4. UNECE Code for Purchaser Requirements for Horse Meat

4.1 Definition of the code

The UNECE Code for Purchaser Requirements for Horse Meat has 15 fields and 20 digits (3 digits not used) and is a combination of the use codes defined in chapter 3.

Annex II contains a description of the GS1/UCC system with an identifier for the introduction of UNECE codes.

<i>Field number</i>	<i>Name</i>	<i>Section</i>	<i>Code range</i>
1	Species		
2	Product/cut		
3	Field not used		
4	Refrigeration		
5	Category		
6	Production system		
7 (a)	Feeding system		
7 (b)	Field not used		
8	Slaughter system		
9	Post-slaughter system		
10	Fat thickness		
11	Horse meat quality classification system		
12	Weight range		
13	Packing		
14	Conformity assessment		

4.2 Example

The following example describes a chilled, vacuum-packed, bone-in loin cut with a maximum fat thickness of 3 mm, from a forage-fed, organically-produced stallion slaughtered according to the conventional method.

This item has the following UNECE code: **80815000113201040050**

<i>Field number</i>	<i>Name</i>	<i>Requirement</i>	<i>Code value</i>
1	Species	Horse meat	80
2	Product/cut	Bone-in loin cut	8150
3	Field not used	-	00
4	Refrigeration	Chilled	1
5	Category	Stallion	1
6	Production system	Organic	3
7 (a)	Feeding system	Forage-fed	2
7 (b)	Field not used	-	0
8	Slaughter system	Conventional	1
9	Post-slaughter system	-	0
10	Fat thickness	Maximum fat thickness 3 mm	4
11	Horse meat quality classification system	-	0
12	Weight range	-	0
13	Packing	Vacuum packed	5
14	Conformity assessment	-	0

5. Carcasses and cut descriptions

5.1 Multilingual index of products

<i>English</i>	<i>Item</i>	<i>Page</i>	<i>French</i>	<i>Russian</i>	<i>Spanish</i>	<i>Chinese</i>
<i>Bone-in</i>			<i>Avec Os</i>	<i>С костями</i>	<i>Con hueso</i>	带骨牛肉
Carcass	8000			Целая туша		
Side	8001			Полутуша		
Hindquarter	8100			Задняя четвертина		
Pistola hindquarter	8170			Задняя четвертина – пистолетный отруб		
Butt and rump	8110			Тазобедренный отруб		
Butt and rump/shank-off	8120			Тазобедренный отруб без голяшки		
Butt	8130			Тазобедренный отруб короткий		
Butt/shank-off	8131			Тазобедренный отруб короткий без голяшки		
Forequarter	8140			Передняя четвертина		
Forequarter and flank	8180			Передняя четвертина без спинной части с пашиной		
Neck-end	8141			Зарез		
Neck	8142			Шейный отруб		
Loin with neck	8185			Спинно- поясничный отруб с шейным отрубом		
Loin	8150			Спинно- поясничный отруб		
Ribs-prepared	8151			Спинной отруб		
Chuck square cut	8186			Подлопаточный квадратный отруб		

<i>English</i>	<i>Item</i>	<i>Page</i>	<i>French</i>	<i>Russian</i>	<i>Spanish</i>	<i>Chinese</i>
Shortloin	8152			Поясничный отруб		
Hindshank	8111			Задняя голяшка		
Flank and navel	8143			Пашина и завиток		
Brisket navel plate	8144			Завиток		
Brisket point	8145			Грудинка		
Shoulder	8160			Лопаточный отруб		
Shoulder/shank-off	8161			Лопаточный отруб без передней голяшки		
Foreshank	8162			Передняя голяшка		
Brisket rib plate & diaphragm crus	8146			Реберный отруб с ножкой диафрагмы		
Brisket rib plate	8147			Реберная часть без диафрагмы		
Brisket	8148			Реберный отруб с завитком и грудинкой		
<i>Boneless</i>			<i>Sans Os</i>	<i>Без костей</i>	<i>Sin hueso</i>	<i>剔骨牛肉</i>
Butt and rump/shank-off	8220			Тазобедренный отруб без голяшки		
Butt/shank-off	8230			Тазобедренный отруб короткий без голяшки		
Silverside	8221			Наружная часть тазобедренного отруба		
Eye round	8223			Полусухожильная мышца		
Outside flat	8224			Двуглавая мышца бедра		
Heel muscle	8225			Нижняя часть тазобедренного отруба		
Rump	8226			Верхняя часть тазобедренного		

<i>English</i>	<i>Item</i>	<i>Page</i>	<i>French</i>	<i>Russian</i>	<i>Spanish</i>	<i>Chinese</i>
				отруба		
Eye of rump	8227			Средняя ягодичная мышца		
Rump cap	8228			Глубокая ягодичная мышца		
Tri-tip	8229			Поверхностная ягодичная мышца		
Inside	8231			Внутренняя часть тазобедренного отруба		
Inside/cap-off	8232			Внутренняя часть тазобедренного отруба без верхушки		
Inside cap	8233			Верхушка внутренней части тазобедренного отруба		
Thick flank	8234			Боковая часть тазобедренного отруба		
Eye of knuckle	8235			Прямая мышца бедр		
Knuckle cover	8236			Широкая латеральная мышца		
Knuckle undercut	8237			Широкая промежуточная мышца		
Tenderloin	8240			Вырезка		
Tenderloin/side strap off	8241					
Neck	8242			Шейный отруб		
Neck top	8243			Жал		
Loin	8250			Спинно- поясничный отруб		
Ribs-prepared	8251			Спинной отруб		

<i>English</i>	<i>Item</i>	<i>Page</i>	<i>French</i>	<i>Russian</i>	<i>Spanish</i>	<i>Chinese</i>
Boneless chuck square cut	8286			Подлопаточный квадратный отруб		
Shortloin	8252			Поясничный отруб		
Hindshank	8211			Задняя голяшка		
Flank	8244			Пашина		
Thin flank	8245			Тонкая часть пашины		
Internal flank plate	8246			Внутренняя часть пашины		
Shoulder/shank-off	8260			Лопаточный отруб без передней голяшки		
Blade bolar	8261			Трехглавая мышца		
Chuck tender	8263			Предостная мышца		
Blade oyster	8264			Заостная и дельтовидная мышцы		
Blade undercut	8265			Внутренняя часть лопаточного отруба		
Shoulder clod	8266			Плечевая часть лопаточного отруба		
Foreshank	8262			Передняя голяшка		
Diaphragm	8248			Диафрагма		
Brisket rib plate	8247			Реберный отруб		

5.2 Horse side skeletal diagram

<i>Number</i>	<i>Latin name</i>
1	arcus costarum
2	Atlas
3	axis s. epistropheus
4	carliago xuphoidea

<i>Number</i>	<i>Latin name</i>
5	conchae nasalis
6	condylus lateralis
7	costae asternales
8	costae sternales
9	Mandibulus
10	os brachii s. humerus
11	os ethmodale
12	os femoris
13	os frontale
14	os hyoideum
15	os ilium
16	os incisivum
17	os interparietale
18	os ischii
19	os lacrimale
20	os maximalla
21	os metacarpi tetrum
22	os metatarsi secundum et quartum
23	os metatarsi tertium
24	os nasale
25	os occipitale
26	os palatinum
27	os parietale
28	os pterygoideum
29	os pubis
30	os sesamoideum phalangis primae
31	os sesamoideum phalangis tertiae
32	os sphenoidale
33	os sternum
34	os temporale

<i>Number</i>	<i>Latin name</i>
35	os zygomaticum
36	ossa antebrachii radius
37	ossa antebrachii ulna
38	ossa capri
39	ossa cruris fibula
40	ossa cruris tibia
41	ossa cruris
42	ossa metacarpi secundum et quatum
43	ossa tarsi
44	patella
45	phalange prima
46	phalanx secunda
47	phalanx tercia
48	radius
49	scapula
50	trochanter tertius
51	tuber caicanei
52	tuber coxae
53	tuber sacrale
54	ulna
55	vertebrae caudales
56	vertebrae cervicales
57	vertebrae lumales
58	vertebrae sacrales
59	vertebrae thoracales
60	vomer
<hr/>	
Caudal	
Dorsal	
Cranial	
Ventral	
<hr/>	

5.3 Standard horse primal cuts flow chart

5.4 Horse meat cuts

Carcass (8000)

A carcass is bone-in, and is obtained after slaughter and removal of skin, extraction of internal organs and removal of the head and legs.

Side (8001)

A carcass is split into sides along the spinal column while maintaining the integrity of the spinal cord.

To be specified:

- Diaphragm retained or removed
- Kidney retained or removed
- Suet retained or partially or completely removed
- Definition of a standard procedure for washing carcasses required
- Tenderloin retained or removed

Hindquarter (8100)

Hindquarter is prepared from a carcass side (8001) by the separation of the hindquarter and forequarter by a cut along the specified rib, at right angles to the vertebral column.

To be specified:

- Number of ribs (0–18) required
- Diaphragm retained or removed
- Kidney retained or removed
- Suet retained, partially or completely removed

8112: 1 rib

8113: 2 rib

8114: 3 rib

8115: 4 rib

8116: 5 rib

8117: 6 rib

8118: 7 rib

8119: 8 rib

8121: 9 rib

8122: 10 rib

8123: 11 rib

8124: 12 rib

8125: 13 rib

8126: 14 rib

8127: 15 rib

8128: 16 rib

8129: 17 rib

8132: 18 rib

Pistola hindquarter (8170)

Pistola hindquarter is prepared from a carcass side (8001) starting by a cut following the natural seam between the muscles of the ventral part on the corresponding muscle of the hindquarter, then by a parallel cut to vertebral column (about 75mm from longissimus dorsi) and by an horizontal cut along the specified rib.

To be specified:

- Number of ribs in the cut (0–18)
- Diaphragm retained or removed
- Kidney retained or removed
- Suet retained or partially or completely removed
- Length of the specified rib from the muscle tissue
- Tenderloin retained or removed
- Specified rib length from eye muscle
- Flank steak retained

8171: 1 rib

8172: 2 rib

8173: 3 rib

8174: 4 rib

8175: 5 rib

8176: 6 rib

8177: 7 rib

8178: 8 rib

8179: 9 rib

8180: 10 rib

8181: 11 rib

8182: 12 rib

8183: 13 rib

8184: 14 rib

8185: 15 rib

8186: 16 rib

8187: 17 rib

8188: 18 rib

Forequarter and flank (8180)

The forequarter and flank is prepared from a carcass side (8001) after the removal of a pistola hindquarter (8170) from the side.

To be specified:

- Number of ribs required (0–18)
- Diaphragm retained or removed
- Rib length distance from eye muscle
- Flank steak, inside skirt and internal flank plate retained

Butt and rump (8110)

The butt and rump are obtained from the hindquarter (8100) by first removing the tenderloin (8240) as a single piece from the abdominal surface of the lumbar vertebrae and the side of the iliac bone. The cut is made starting at the point where the last lumbar and first sacral vertebrae join; it passes cranially to the coxal tubers and continues to the abdominal section of the flank.

Butt and rump/shank-off (8120)

The butt and rump/shank-off is obtained from the butt and rump (8110) by removing the shank at the bottom of the femur (between the femur and the tibia).

Boneless butt and rump/shank-off (8220)

The boneless butt and rump/shank-off is obtained by deboning the butt and rump/shank-off (8120), removing the sacral, pubic, pelvic bones and femur. The cut consists of the outer, upper, inner, lower and side parts.

Butt (8130)

The butt is obtained from the butt and rump (8110). The cut begins at the subiliac lymph node and continues cranially to the hip joint and to the sciatic lymph node. The lower edge follows the stifle joint parallel to the base of the tibia.

To be specified:

- Superficial inguinal and subiliac lymph node retained or removed

Butt/shank-off (8131)

The butt/shank-off is obtained from the butt (8130) by separating the shank (8111) at the lower edge of the femur (between femur and tibia).

To be specified:

- Superficial inguinal and subiliac lymph node retained or removed

Boneless butt/shank-off (8230)

The boneless butt/shank-off is obtained by deboning the butt/shank-off (8131), removing the pelvic bone and the femur.

Silverside (8221)

The silverside is prepared from boneless butt and rump/shank-off (8220). It is situated lateral/caudal to the femur bone and attached to the os coxae (aitchbone) and is removed by following the natural seam between the thick flank and the inside from the calcaneal tuber to the ligament of the stifle joint, and further in the direction of the last three sacral vertebrae, sacrosciatic ligament and the anterior surface of the ischial tuberosity. The attached cartilage from the aitchbone is removed.

To be specified:

- Achilles tendon retained or removed
- Popliteal lymph node retained or removed
- Fat retained or removed
- M. gastrocnemius retained or removed
- M. gluteus superficialis retained or removed

Eye round (8223)

The eye round (M. semitendinosus) is prepared from the silverside (8221) by following the natural seam between the M. biceps femoris and the M. semitendinosus. The eye round lies behind the biceps and is located on the hip in a lateral-caudal position. It has an oblong, rounded shape.

To be specified:

- Fat retained or removed
- Connective tissue retained or removed

Outside flat (8224)

The outside flat (M. biceps femoris) is prepared from the silverside (8221) by following the natural seam between the two muscles: M. biceps femoris and M. semitendinosus. The biceps is the biggest muscle of the leg; it takes almost the entire outer (lateral) surface of the caudal part of the femur.

To be specified:

- Fat retained or removed
- Connective tissue retained or removed
- M. gluteus superficialis retained or removed

Heel muscle (8225)

The heel muscle is prepared from the boneless butt and rump/shank-off (8220). The heel muscle consists of the M. gastrocnemius and the M. flexor superficialis, which are separated from the silverside by removal from the M. biceps femoris. The natural surface membrane which retains the natural shape must be retained.

To be specified:

- Connective tissue retained or removed
- Fat retained or removed
- M. flexor superficialis retained or removed

- Maximum length of tendon retained

Rump (8226)

The rump is prepared from the boneless butt and rump/shank-off (8220) by removing the butt (8130) and flank (8244) by the cut running from the greater trochanter towards the sacroiliac ligament. It represents the gluteus group, separated from the ilium.

The surface membrane that maintains the natural shape of the muscles and subcutaneous fat are retained /can be retained The cut can be divided into the gluteus medius, gluteus profundus and gluteus superficialis and tensor *fasciae latae*.

To be specified:

- M. tensor fasciae latae retained or removed

Eye of rump (8227)

The eye of rump (M. gluteus medius) is prepared from the rump (8226) by the removal of all muscle groups. It starts at the wing of the ilium and extends to the trochanter.

To be specified:

- Connective tissue retained or removed

Rump cap (8228)

The rump cap (M. gluteus profundus) is prepared from rump (8226) by following the natural seam. It starts at the lateral surface of the ischium and ends in the middle trochanter.

To be specified:

- Connective tissue retained or removed

Tri-tip (8229)

The tri-tip (M. gluteus superficialis) is flat and triangular. It is prepared from rump (8226) along the natural seam. It starts from the gluteal fascia, hip and aitchbone and is attached on the third trochanter of the femur. It covers the gluteus medius.

To be specified:

- Fat cover retained or removed
- Connective tissue retained or removed

Thick flank (8234)

Thick flank is M. tensor fasciae latae (triangle shape muscle) separated from the rump (8226)

To be specified:

- Connective tissue retained or removed
- Fat retained or removed

Inside (8231)

The inside is prepared from the boneless butt and rump/shank-off (8220). The inside is situated caudal and medial to the shin bone and attached to the os coxae (aitchbone). It is removed by following the natural seam from the bottom of the femur towards the tuber of the ischium and sacrosiatic ligament. It consists of the semimembranosus and causing

muscles, fused with the sartorius and the pectinate muscles and slender muscle that covers all the muscles from the medial side. The pizzle butt, fibrous tissue and inguinal lymph node and surrounding fat are removed.

To be specified:

- Fat retained or removed
- Inside cap retained or removed
- Sartorius retained or removed
- Pectinae retained or removed
- Obturator retained or removed
- Connective tissue retained or removed
- Femoral blood vessels retained or removed

Inside/cap-off (8232)

The inside/cap-off is prepared from the inside (8231) after removal of the M. gracilis along the natural seam. Fat deposits are removed entirely.

To be specified:

- M. pectineus and M. sartorius retained or removed
- Connective tissue retained or removed

Inside cap (8233)

The boneless inside cap consists of the M. gracilis muscle removed from the inside (8231) along the natural seam.

To be specified:

- Connective tissue retained or removed
- Fat deposits retained or removed
- M. pectineus and M. sartorius retained or removed

Thick flank and knuckle (8234)

Thick flank is tensor of fascia latae and quadriceps femoris is knuckle. The thick flank is prepared from the boneless butt and rump/shank-off (8220). It is located in front of the femur and consists of the quadriceps femoris and tensor fasciae latae. It is removed by cutting from the patella to the greater trochanter of the femur. The patella, joint capsule and surrounding connective tissue are removed. It consists of the rectus femoris, vastus lateralis and vastus intermedius and vastus medialis.

To be specified:

- Connective tissue retained or removed
- Fat retained or removed

Eye of knuckle (8235)

The eye of knuckle (M. rectus femoris) is prepared from the thick flank (8234) by separating along the natural seam. It starts with a tendon in the iliac fossa, continues through the glenoid cavity and ends at the patella.

To be specified:

- Fat retained or removed
- Connective tissue retained or removed

Knuckle cover (8236)

The knuckle cover (*M. vastus lateralis*) is prepared from the thick flank (8234) by separating along the natural seam. It starts on the lateral surface of the proximal half of the femur and ends at the patella.

To be specified:

- Fat retained or removed
- Connective tissue retained or removed

Knuckle undercut (8237)

The knuckle undercut (*M. vastus intermedius* and *medialis*) is prepared from the thick flank (8234) by separating along the natural seam. It starts on the dorsal surface of the femur and ends at the patella.

To be specified:

- Connective tissue retained or removed

Tenderloin (8240)

The tenderloin (*M. iliopsoas*) is prepared from the hindquarter (8100) and is removed in one piece from the ventral surface of the lumbar vertebrae and the lateral surface of the ilium.

To be specified:

- Fat retained or removed
- Connective tissue retained or removed
- *M. iliacus* (adjacent to *M. psoas major*) retained or removed
- *M. psoas minor* and *M. quadratus lumborum* retained or removed

Tenderloin/side strap off (8241)

The tenderloin (8240) is further trimmed by the removal of the side strap (*M. psoas minor*).

Forequarter (8140)

The forequarter is prepared from a side (8001) by the separation of the forequarter and hindquarter by a cut along the specified rib at the corresponding vertebra and at right angles to the vertebral column through to the ventral portion of the flank.

To be specified:

- Number of ribs required (5 to 18 ribs)
- Diaphragm retained or removed

8153: 5 ribs

8154: 6 ribs

8155: 7 ribs

8156: 8 ribs

8157: 9 ribs

8163: 10 ribs

8164: 11 ribs

8165: 12 ribs

8166: 13 ribs

8167: 14 ribs

8168: 15 ribs

8169: 16 ribs

8171: 17 ribs

Neck-end (8141)

The neck-end is prepared from a forequarter (8140). The front edge passes through the line of removal of the head, before the first cervical vertebra; the back edge passes between the second and third cervical vertebrae.

Neck (8142)

The neck is removed from a side (8001) by a straight cut parallel to the first rib and through the junction of the last cervical and first thoracic vertebrae.

To be specified:

- Ligamentum nuchae retained or removed
- Neck-end retained or removed

Boneless neck (8242)

The boneless neck is prepared from a bone-in neck (8142). Bones, cartilage and exposed tendons are removed. The ligamentum nuchae is removed unless otherwise specified.

To be specified:

- Ligamentum nuchae retained or removed
- Neck-end retained or removed

Neck top (8243)

The neck top is prepared from the upper half of the boneless neck (8242). Fat and muscle tissue with partial inclusion of ligamentum nuchae are separated along the neck muscle.

Loin with neck (8185)

The loin is prepared from a side (8001) along the lines: front from the atlas, back -between the last (sixth) lumbar and first sacral vertebrae along the anterior (cranial) edge of the ilium, lower - 75mm from M. longissimus dorsi (eye muscle) and parallel to the body of the vertebrae.

To be specified:

- Spinous process retained or removed
- Rib length distance from eye muscle

- Tip of scapular and associated cartilage retained or removed
- Cap muscle (M. trapezius) retained or removed
- Ligamentum nuchae retained or removed
- Supraspinous ligament retained or removed
- Tenderloin retained or removed

Loin (8150) without neck

The loin is prepared from a side (8001) along the lines: front – between the specified thoracic vertebra and the corresponding rib, back – between the last (sixth) lumbar and first sacral vertebrae along the anterior (cranial) edge of the ilium, lower – 75 mm from the body of the vertebrae and parallel to the vertebral body.

To be specified:

- Number of rib required
- Spinous process retained or removed
- Rib length distance from eye muscle
- Tip of scapular and associated cartilage retained or removed
- Cap muscle (M. trapezius) retained or removed
- Ligamentum nuchae retained or removed
- Supraspinous ligament retained or removed
- Tenderloin retained or removed

Boneless loin without neck

Boneless loin is prepared from the loin (8150) all the bones are removed (vertebrae and the corresponding parts of the ribs).

To be specified:

- Number of ribs required
- Supraspinous ligament retained or removed
- Cap muscle (parts of M. trapezius and latissimus dorsi) retained or removed
- M. multifidus retained or removed
- Ligamentum nuchae retained or removed
- Tenderloin retained or removed
- Connective tissue retained or removed
- M. iliocostalis retained or removed

Ribs-prepared (8151)

The ribs-prepared is produced by the division of the loin without neck into ribs-prepared and shortloin between the first lumbar and the last thoracic vertebrae, continuing the cut through the back edge of the last rib. It can also be prepared from the forequarter or hindquarter along the lines: front – between the specified thoracic vertebrae and the corresponding parts of the ribs, back – between the first lumbar and the last thoracic

vertebrae, continuing the cut through the back edge of the last rib, lower – 75mm from M. longissimus dorsi (eye muscle) and parallel to the body of the vertebrae

To be specified:

- Number of ribs required
- Spinous process retained or removed
- Tip of scapular and associated cartilage retained or removed
- Rib length distance from the vertebral body
- Cap muscle (M. trapezius and latissimus dorsi) retained or removed
- Ligamentum nuchae retained or removed
- Part of tenderloin retained or removed

Boneless ribs-prepared (8251)

Boneless ribs-prepared is prepared by boning of the ribs-prepared (8151) while the meat is cut along the spinous processes of vertebrae and vertebrae removed.

To be specified:

- Number of ribs required
- Intercostal muscles retained or removed
- Supraspinous ligament retained or removed
- M. multifidus retained or removed
- M. iliocostalis retained or removed
- Cap muscle (M. trapezius and latissimus dorsi) retained or removed
- Connective tissue retained or removed

Chuck square cut (8186)

Chuck square cut is produced by the division of the rib prepared between the specified ribs (from 4th to 6th)

To be specified:

- Number of ribs required (4, 5 or 6)
- Spinous process retained or removed
- Tip of scapular and associated cartilage retained or removed
- Rib length distance from eye muscle
- Ligamentum nuchae retained or removed

Boneless chuck square cut (8286)

The boneless chuck square cut is prepared by boning of the chuck square cut (8186) with the meat cut along the spinous processes of vertebrae and with the vertebrae removed.

To be specified:

- Number of ribs required (4, 5 or 6)
- Spinous process retained or removed

- Tip of scapular and associated cartilage retained or removed
- Rib length distance from eye muscle
- Ligamentum nuchae retained or removed
- Connective tissue retained or removed

Shortloin (8152)

The shortloin is produced by the division of the bone-in loin (8150) into the ribs-prepared and the shortloin between the first lumbar and the specified thoracic vertebrae, continuing the cut through the back edge of the specified rib; the lower limit lower is 75mm from *M. longissimus dorsi* (eye muscle) and parallel to the body of the vertebrae.

To be specified:

- Spinous process retained or removed
- Fat retained or removed
- Connective tissue retained or removed

Boneless shortloin (8252)

The boneless shortloin is prepared by boning of the bone-in shortloin (8152) with the meat cut along the spinous processes of vertebrae and with the vertebrae removed.

To be specified:

- Supraspinous ligament retained or removed
- *M. multifidus* retained or removed
- Corresponding part of the *gluteus medius* retained or removed
- Iliocostal retained or removed

Hindshank (8111)

The hindshank is prepared from the butt and rump (8110) by following the lower edge of the femur (between the femur and tibia). It includes groups of the limb flexor and extensor muscles.

To be specified:

- Kneecap and surrounding connective tissue retained or removed
- Joint capsule and surrounding connective tissue retained or removed

Boneless hindshank (8211)

The boneless hindshank is prepared by boning of the bone-in shank (8111). It includes groups of flexor and extensor muscles of the hind limbs.

To be specified:

- Tendon/ligament retained or removed

Flank and navel (8143)

The flank and navel is produced from a hindquarter (8100) as a layer of meat lying below the loin, starting from the superficial inguinal lymph node, following the contour of the

hips, to the border with the last lumbar vertebra, then rounding the last rib and the contour of the rib cartilage to the sternum.

To be specified:

- Superficial fascia of the *M. obliquus externus abdominis* retained or removed
- Gland and fat deposits under the *M. obliquus externus abdominis* retained or removed
- Connective tissue retained or removed
- *M. cutaneus trunci* retained or removed
- Fat deposits under *M. obliquus externus abdominis* retained or removed

Flank (8244)

The flank is produced from a hindquarter (8100) as a layer of meat lying below the loin from the superficial inguinal lymph node, following the contour of the hips, to the border with the last lumbar vertebra, then rounding the last rib to the ventral surface.

To be specified:

- Superficial fascia of the *M. obliquus externus abdominis* retained or removed
- Gland and fat deposits under the *M. obliquus externus abdominis* retained or removed
- Connective tissue retained or removed
- *M. cutaneus trunci* retained or removed
- Fat deposits under *M. obliquus externus abdominis* retained or removed

Thin flank (8245)

The thin flank is prepared from the flank (8244). It is a flat, lean, fleshy portion of the rectus abdominis muscle (*M. rectus abdominis*) with the serous membrane and connective tissue separated from the muscle. It starts from the cartilage of 4–9 ribs on the ventral surface of the sternum, ends on mons pubis and the crest, and passes on the side of the white line of the abdomen.

Internal flank plate (8246)

The internal flank plate is prepared from the flank (8244) and is the thickest portion of the *M. obliquus internus abdominis*. It starts at the external angle of the ilium and ends at the white line of the abdomen and rib arc. All visual fat is removed.

Brisket navel plate (8144)

The brisket navel plate is prepared from the layer of meat resulting from the separation of the flank and navel. The resulting layer of meat is cut into a thin section – the brisket navel plate.

Brisket point (8145)

The brisket point is produced from the forequarter (8140) along the junction of true and false ribs, starting with the first segment of the sternum through the costal cartilages to the eighth rib.

Shoulder (8160)

The shoulder is separated from a side (8001) by the circular cuts along fascias: from the outer (lateral) side – as a semicircle on the upper (dorsal) edge of the scapular cartilage, from the inner (medial) side – by following the natural seam between the front limbs and ribs.

Shoulder/shank-off (8161)

The shoulder/shank-off is produced from the shoulder (8160) after the removal of the shank (8162) at the line passing between the humerus and the bones of the forearm.

Boneless shoulder/shank-off (8260)

The boneless shoulder/shank-off is produced by the boning of the shoulder/shank-off (8161), with the blade-bone and humerus removed. The resulting cut is divided, with retention of the integrity of the muscles and the natural surface membrane, into the following parts:

- Blade bolar
- Blade oyster
- Chuck tender
- Shoulder clod
- Blade undercut

Blade bolar (8261)

The blade bolar (*M. triceps brachii*) is produced from the boneless shoulder/shank-off (8260) by separating the meat filling the triangular space between the humerus and ulna, with retention of the integrity of the muscles and the natural surface membrane that preserves the natural shape of the muscles. It is wedge-shaped and includes a large portion of the triceps group of muscles.

To be specified:

- *M. latissimus dorsi* retained or removed

Chuck tender (8263)

The chuck tender (*M. supraspinatus*) is produced from the boneless shoulder/shank-off (8260). It is a conical-shaped muscle lying in front of the scapular spine; it begins in the fossa of the scapula and ends in the lump of the humerus.

Blade oyster (8264)

The blade oyster (the accreted *M. infraspinatus* and *M. deltoideus*) is produced from the boneless shoulder/shank-off (8260). It is located on the outer (lateral) side of the blade, behind the blade spine.

Blade undercut (8265)

The blade undercut is produced from the boneless shoulder/shank-off (8260). It is located on the medial surface of the blade bone and consists of *M. subscapularis* and *M. teres major*.

To be specified:

- *M. serratus ventralis* retained or removed

Shoulder clod (8266)

The shoulder clod is produced from the fore part of the boneless shoulder/shank-off (8260). It consists of *M. cleidobrachialis*, *M. biceps brachii*, and *M. brachialis*.

Foreshank (8162)

The foreshank is produced from the shoulder (8160). It is separated by the line passing between the humerus and the bones of the forearm through the distal end to the humerus. It must include the radius/ulna and their respective flexor/extensor muscles.

To be specified:

- Olecranon and carpus joint separated

Boneless foreshank (8262)

The boneless foreshank is produced by boning the foreshank (8162). It includes flexor/extensor muscles of the forelimbs.

To be specified:

- Sinews/tendons removed or retained

Brisket rib plate and diaphragm crus (8146)

The brisket rib plate and diaphragm crus is prepared from a forequarter (8140) by cutting with a circular saw across the rib edges parallel to the vertebral column at the distance of 75 mm from the vertebral bodies, starting from the eighteenth rib, down to the first rib. The front edge follows the contour of the costal cartilage to the sternum. Then the cut is divided using a band saw in half into the lower and upper parts, starting from the middle of the first rib and approximately parallel to the upper edge of the cut. Fascia superficialis is removed unless otherwise specified.

To be specified:

- Number of ribs required (1–18)
- Fascia superficialis removed or retained
- *M. latissimus dorsi* removed or retained
- Fat cover removed or retained

Brisket rib plate (8147)

The brisket rib plate is prepared from the brisket rib plate and diaphragm crus (8146) after removal of the diaphragm crus at the lower base of the ribs. Fascia superficialis is removed unless otherwise specified.

To be specified:

- Number of ribs required (1–18)
- Fascia superficialis removed or retained
- *M. latissimus dorsi* removed or retained
- Fat cover removed or retained

Diaphragm (8248)

The diaphragm is the transverse abdominal muscle (*M. transversus abdominis*) and is located on the inside of the abdominal wall of the hindquarter (8100), extending from the last rib to the brisket. Parts of the peritoneum and fat are removed.

To be specified:

- Hindquarter and/or forequarter included
- Membrane covering retained or removed

Boneless brisket rib plate (8247)

The boneless brisket rib plate is prepared from the brisket rib plate (8147) or from the brisket rib plate and diaphragm crus (8146). Fat located medial to the pectoral muscles is removed. White fibrous tissue on the ventral edge is removed.

To be specified:

- Number of ribs removed (1–18)
- Intercostal muscles removed or retained
- Diaphragm removed or retained
- Peritoneum removed or retained

Brisket (8148)

The brisket is prepared from a forequarter (8140) by cutting with a circular saw across the rib edges parallel to the vertebral column at a distance of 75 mm from the vertebral bodies, starting from the eighteenth rib, down to the first rib, inclusive. Fascia superficialis is removed unless otherwise specified.

To be specified:

- Number of ribs required (1–18)
- Fascia superficialis removed or retained
- *M. latissimus dorsi* removed or retained
- Fat cover removed or retained

5.5 Boneless horse meat manufacturing bulk packs definition

Manufacturing bulk packs are generally made up of the following combinations:

- Primal or portions of primal cuts
- Residual trimming from primal cut preparation
- Boneless forequarter or hindquarter

Manufacturing packs are generally prepared to a specified lean content assessed visually or tested chemically and expressed as a percentage of lean meat of the pack.

5.6 Standard horse meat primal cuts muscle reference

5.6.1 Lateral/medial view carcass structure

5.6.2 Alphabetical list of muscle names

- 0001 *M. adductor femoris*
- 0002 *M. anconaeus*
- 0003 *M. biceps brachii*
- 0004 *M. biceps femoris*
- 0005 *M. brachialis*
- 0006 *M. brachiocephalicus*
- 0007 *M. deltoideus*
- 0008 *M. extensor carpi obliquus*
- 0009 *M. extensor carpi radialis*
- 0010 *M. extensor carpi ulnaris*
- 0011 *M. digitorum communis*
- 0012 *M. extensor digitorum longus*
- 0013 *M. flexor carpi radialis*
- 0014 *M. flexor digitorum lateralis*
- 0015 *M. flexor digitorum superficialis*
- 0016 *M. gemelli*
- 0017 *M. gluteus superficialis*
- 0018 *M. gluteus medius*
- 0019 *M. gluteus profundus*
- 0020 *M. gracilis*
- 0021 *M. iliacus*
- 0022 *M. intertransversarius*
- 0023 *M. latissimus dorsi*
- 0024 *M. longissimus cervicis*
- 0025 *M. longissimus capitis*
- 0026 *M. longus colli*
- 0027 *M. masseter*
- 0028 *M. multifidus cervicis*
- 0029 *M. multifidus dorsi*
- 0030 *M. obliquus capitis caudalis*
- 0031 *M. obliquus capitis cranialis*
- 0032 *M. obturator externus*

- 0033 *M. obturator internus*
- 0034 *M. omohyoideus*
- 0035 *M. pectineus*
- 0036 *M. pectoralis ascendens*
- 0037 *M. pectoralis descendens*
- 0038 *M. pectoralis profundus*
- 0039 *M. pectoralis transversus*
- 0040 *M. psoas major*
- 0041 *M. psoas minor*
- 0042 *M. quadratus femoris*
- 0043 *M. quadratus lumborum*
- 0044 *M. quadriaps femoris*
- 0045 *M. rectus capitis dorsalis major*
- 0046 *M. rectus capitis dorsalis minor*
- 0047 *M. rectus capitis versalis major*
- 0048 *M. rectus capitis lateralis*
- 0049 *M. rhomboideus*
- 0050 *M. sacrococcygeus dorsalis*
- 0051 *M. sacrococcygeus lateralis*
- 0052 *M. sartorius*
- 0053 *M. scalenus*
- 0054 *M. semimembranosus*
- 0055 *M. semispinalis capitis*
- 0056 *M. semitendinosus*
- 0057 *M. serratus dorsalis caudalis*
- 0058 *M. serratus dorsalis cranialis*
- 0059 *M. serratus ventralis cervicis*
- 0060 *M. serratus ventralis thoracis*
- 0061 *M. spinalis*
- 0062 *M. splenius*
- 0063 *M. sternocephalicus*
- 0064 *M. sternothyreoideus*
- 0065 *M. sternohyoideus*
- 0066 *M. tensor fasciae antibrachii*
- 0067 *M. tensor fasciae latae*
- 0068 *M. trapezius cervicalis*

0069 *M. trapezius thoracis*

0070 *M. triceps brachii*

Other structures

0101 atlantal lymph node

0102 ischiatic lymph node

0103 ligamentum nuchae

0104 periosteum

0105 prescapular lymph node

0106 scapula

0107 scapula cartilage

0108 subiliac lymph node

Note: The inclusion of four digit numbers shown in the index is for bar coding requirements. Muscle illustration numbers on the following pages are shown numerically.

5.7 Meat quality standards

Meat and fat are assessed by qualified assessors and compare the meat and fat colour on the eye muscle area of the horse carcass side quartered from the fifth to the thirteenth rib.

Such procedures are carried out using the meat and fat colour standards below.

5.7.1 Meat and fat colour and pH

Normally, lean meat and fat, depending on the specific species, demonstrates a characteristic colour and pH. Any specific requirements regarding colour and pH need to be agreed between buyer and seller and are not provided for in the coding system.

Annex I

Codification system

1. Purpose of the GS1 system

The GS1 system is widely used internationally to enhance communication between buyers and sellers and third-party conformity assessment entities. It is an identification and communication system standardized for use across international borders. It is managed by GS1 Global Office, together with national GS1 member organizations around the world.

The system is designed to overcome the limitations of using company, industry or country-specific coding systems and to make trading more efficient and responsive to trading partners. The use of the GS1 standards improves the efficiency and accuracy of international trade and product distribution by unambiguously identifying trade items, services, parties, and locations. GS1 identification numbers can be represented by data carriers (e.g. bar code symbols) to enable electronic reading whenever required in the trading process.

GS1 standards can be used in Electronic Data Interchange (EDI) and the GS1 Global Data Synchronization Network (GDSN). Trading partners use EDI to electronically exchange messages regarding the purchase and shipping status of product lots. Trading partners use GDSN to synchronize trade-item and party information in their back-end information systems. This synchronization supports consistent global product identification and classification, a critical step towards efficient global electronic commerce.

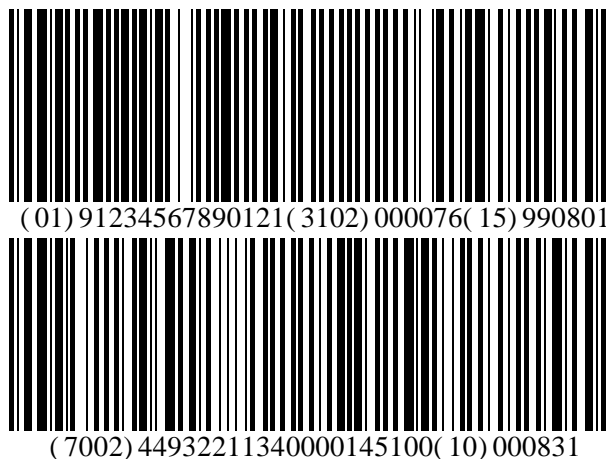
2. Use of the UNECE code in the GS1 system

GS1 uses application identifiers as prefixes to identify the meaning and format of the data that follow it. It is an open standard, which can be used and understood by all companies in the international supply chain, regardless of the company that originally issued the codes.

The UNECE purchase specification code defined in section 4.1 has been assigned the GS1 application identifier (7002) to be used in conjunction with a Global Trade Item Number (GTIN) and represented in the GS1-128 bar code symbology. This allows the UNECE code information to be included in GS1-128 bar code symbols on shipping containers along with other product information (see examples 1 and 2).

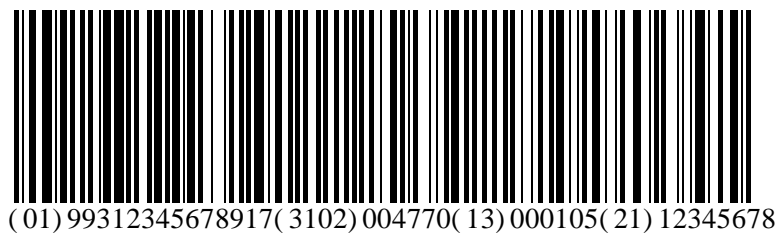
UNECE meat-cut definitions are also being proposed for use by suppliers as an attribute of the GDSN global product classification system. In this way, suppliers can use the UNECE meat-cut code to globally specify the cut of each product GTIN in the GDSN. Once defined by the supplier, all interested buyers will know the exact UNECE cut of each product published in the GDSN (see example 3).

Example 1:



- (01) Global Trade Item Number (GTIN)
- (3102) Net weight, kilograms
- (15) Use-by date
- (7002) UNECE purchase specification code
- (10) Batch number

Example 2:

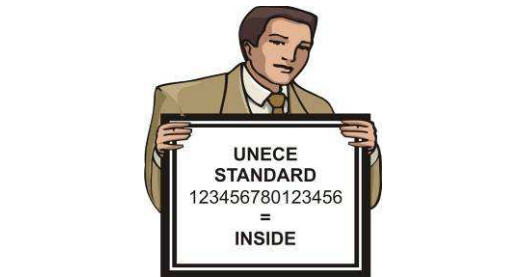


- (01) Global Trade Item Number (GTIN)
- (3102) Net weight, kilograms
- (13) Slaughter/packing date
- (21) Serial number

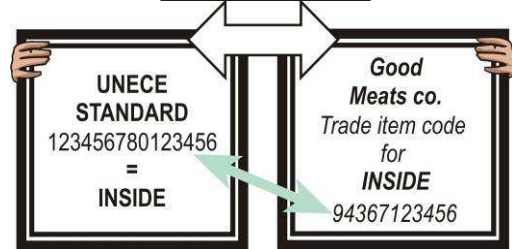
Other data, such as the UNECE code, refrigeration, grade and fat depth can be linked to the GTIN via Electronic Data Interchange (EDI) messages.

3. Application of the system in the supply chain

(1) Customers order, using the UNECE standard and the coding scheme.



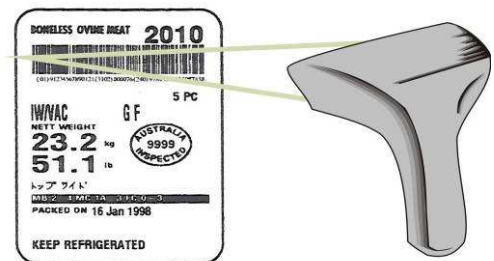
(2) On receipt of the order, the suppliers translate the UNECE codes into their own trade item codes (i.e. Global Trade Item Number).



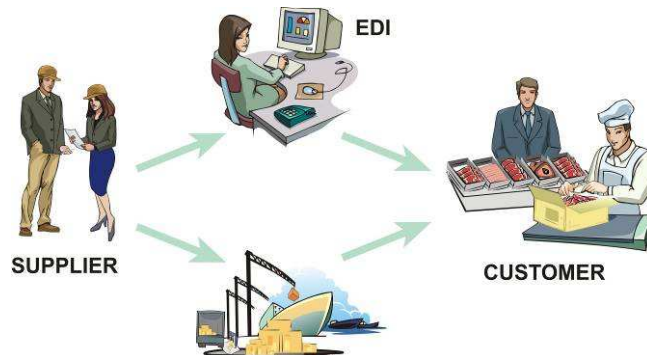
(3) Suppliers deliver the order to the customers. The goods are marked with the GS1-128 bar code symbol.



(4) Customers receive the order and the GS1-128 bar code symbol scanned, thus allowing for the automatic update of commercial, logistics and administrative processes.



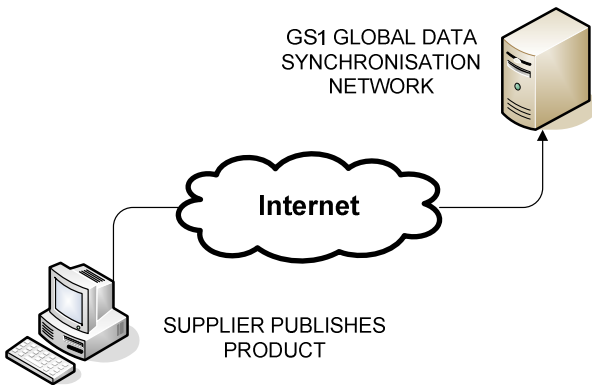
(5) The physical flow of goods, marked with GS1 standards, may be linked to the information flow using Electronic Data Interchange (EDI) messages.



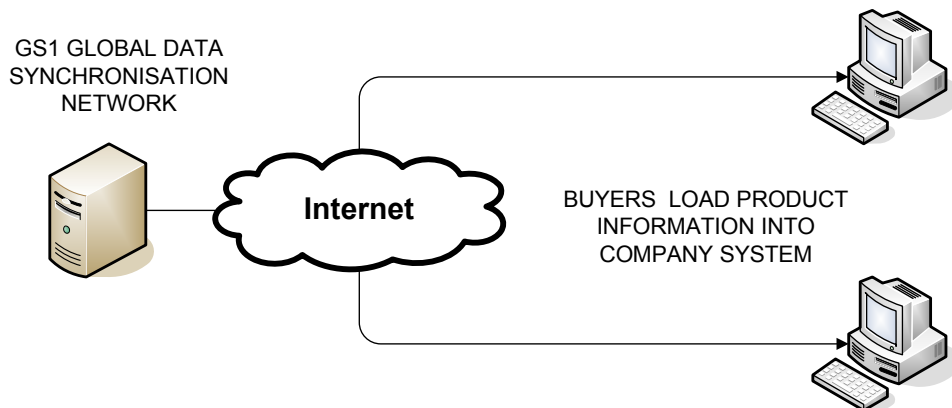
Example 3:

4. Use of UNECE meat-cut definitions in the GDSN

(1) Suppliers publish or update information about a product in the GDSN and use the appropriate UNECE meat-cut definition to define the meat cut of the product using the GDSN meat cut attribute.



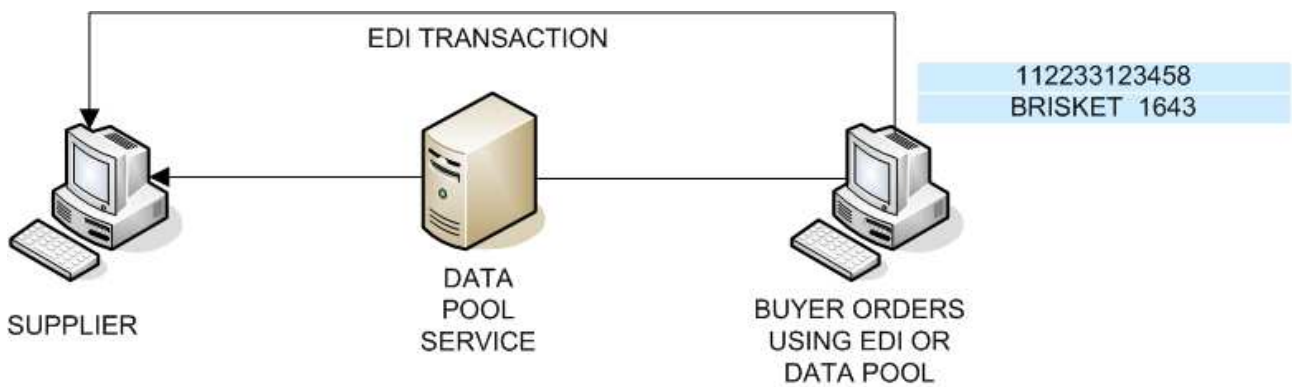
(2) Interested buyers use the UNECE meat cut and other product information published in the GDSN to synchronize product information in their own information systems.



(3) Buyers use UNECE meat-cut information in their information systems to identify by GTIN which products they wish to order.



(4) Buyers use product GTIN and related information to order product from supplier using EDI or GDSN-compatible data pool service providers.



Annex II

Addresses

United Nations Economic Commission for Europe

Agricultural Standards Unit
Palais des Nations
CH – 1211 Geneva 10
SWITZERLAND
Tel: +41 22 917 1234
Fax: +41 22 917 0629
e-mail: agristandards@unece.org
<http://www.unece.org/trade/agr/>

AUS-MEAT Ltd

Unit 1 / 333 Queensport Road North
Murarrie
Queensland 4172
AUSTRALIA
Tel: +61 7 33 61 92 00
Fax: +61 7 33 61 92 22
E-mail: ausmeat@ausmeat.com.au
<http://www.ausmeat.com.au/>

France

Direction générale de la consommation, de la
concurrence et de la répression des fraudes
Cité Administrative,
Bd de la Liberté - CS92104
Rennes Cédex 9
CP 35021
FRANCE
Tel: +33 2 99 29 76 00
Fax: +33 2 99 29 80 05
E-mail: alain.boismartel@dgccrf.finances.gouv.fr

GS1 International

Blue Tower
Avenue Louise, 326
BE 1050 Brussels
BELGIUM
Tel: +32 2 788 7800
Fax: +32 2 788 7899
<http://www.gs1.org/contact/>

Poland

Poland
Ministry of Agriculture and Rural Development
30 Wspolna St.
00-930 Warsaw
POLAND
Tel: +48 22 623 20 61
Fax: +48 22 623 23 00
e-mail: joanna.trybus@minrol.gov.pl
integracja@ijhar-s.gov.pl

United States Department of Agriculture (USDA)

Agricultural Marketing Service
Livestock and Seed Program
1400 Independence Ave., S.W.
Washington D.C. 20250 0249
UNITED STATES
Tel: +1 202 720 5705
Fax: +1 202 720 3499
e-mail: craig.morris@ams.usda.gov
www.ams.usda.gov

China

National Center of Meat Quality and
Safety Control
Nanjing Agricultural University
1 Weigang St.
210095 Nanjing
CHINA
Tel: +86 25-84395376
Fax : +86 25-84395939
E-mail : ghzhou@njau.edu.cn
<http://www.meat-food.com>

**All Russian Research Institute for the
Meat Industry**

Talalikhina 26
109316 Moscow
RUSSIAN FEDERATION
Tel: +7 495-676-9511
Fax: +7 495-676-9551
E-mail : vniimp@orc.ru
