

中国标准化协会标准 CAS
STANDARDS OF CHINA ASSOCIATION 238-2014
FOR STANDARDIZATION

农场动物福利要求 肉牛

Farm Animal Welfare Requirements: Beef Cattle

2014-12-17 发布



CAS 238-2014

索引号
CAS 238-2014 (C)

该标准版权为中国标准化协会所有。除了用于国家法律或事先得到中国标准化协会文字上的许可外，不许以任何形式再复制该标准。
中国标准化协会地址：北京市海淀区增光路 33 号中国标协写字楼
邮政编码：100037 电话：68481778 68486206 传真：68485356
网址：www.china-cas.org 电子信箱：cas@china-cas.org

前 言

中国标准化协会（CAS）是组织开展国内、国际标准化活动的全国性社会团体。制定中国标准化协会标准（以下简称：中国标协标准），满足企业需要，推动企业标准化工作，这也是中国标准化协会的工作内容之一。中国境内的团体和个人，均可提出制、修订中国标协标准的建议并参与有关工作。

中国标协标准按《中国标准化协会标准管理办法》进行管理，按CAS 1.1—2001《中国标准化协会标准结构及编写规则》的规定编制。

中国标协标准草案经向社会公开征求意见，并得到参加审定会议的75%以上的专家、成员的投票赞同，方可作为中国标协标准予以发布。

使用中国标准化协会标准的单位，应按现行国家有关规定办理标准备案，并对技术内容负责。

本标准首次制定。

附录A为资料性附录。

在本标准实施过程中，如发现需要修改或补充之处，请将意见和有关资料寄给中国标准化协会，以便修订时参考。

引 言

0.1 总则

为了保障动物源性食品的质量、安全和畜牧养殖业的良性可持续发展，填补我国农场动物福利标准的空白，特制定本标准。

本标准基于国际先进的农场动物福利理念，结合我国现有的科学技术和社会经济条件，规定了农场动物健康福利生产及加工要求。

本标准对农场动物福利要求中肉牛的养殖、运输、屠宰及加工全过程要求。

0.2 基本原则

动物福利五项基本原则是农场动物福利系列标准的基础。

- a) 为动物提供保持健康和精力所需要的清洁饮水和饲料，使动物免受饥渴；
- b) 为动物提供适当的庇护和舒适的栖息场所，使动物免受不适；
- c) 为动物做好疾病预防，并给患病动物及时诊治，使动物免受疼痛和伤病；
- d) 保证动物拥有避免心理痛苦的条件和处置方式，使动物免受恐惧和精神痛苦；
- e) 为动物提供足够的空间、适当的设施和同伴，使动物得以自由表达正常的行为。

农场动物福利要求 肉牛

1 范围

本标准规定了肉牛的福利养殖、运输、屠宰及加工要求。

本标准适用于肉牛的养殖、运输、屠宰及加工全过程的动物福利管理。

2 规范性引用文件

下列文件对于本文件的应用是必不可少的。凡是注日期的引用文件,仅注日期的版本适用于本文件。凡是不注日期的引用文件,其最新版本(包括所有的修改单)适用于本文件。

GB 2707 鲜(冻)畜肉卫生标准

GB 2761 食品安全国家标准 食品中真菌毒素限量

GB 2762 食品安全国家标准 食品中污染物限量

GB 2763 食品安全国家标准 食品中农药最大残留限量

NY/T 388 畜禽场环境质量标准

NY/T 1168 畜禽粪便无害化处理技术规范

NY/T 5027 无公害食品 畜禽饮用水水质

3 术语

下列术语适用于本文件。

3.1

动物福利

为动物提供适当的营养、环境条件,科学地善待动物,正确地处置动物,减少动物的痛苦和应激反应,提高动物的生存质量和健康水平。

3.2

农场动物

为了食物生产,毛、绒、皮加工或者其他目的,在农场环境或类似环境中培育和饲养的动物。

3.3

农场动物福利

农场动物在养殖、运输、屠宰过程中得到良好的照顾,避免遭受不必要的惊吓、痛苦、疾病或伤害。

3.4

环境富集

对农场动物的圈舍进行有益的改善。即在单调的环境中提供必要的材料或设施,供其探究玩耍,满足动物表达其生物习性和心理活动的需要,使动物的心理和生理均达到健康状态。

3.5

异常行为

当牛的心理或生理自然属性未得到满足或受到伤害时,所表现的一类重复且无明显目的的行为。

CAS 238-2014

3.6

人道屠宰

减少牛的应激、恐惧、痛苦和肢体损伤的宰前处置和屠宰方式。

3.7

放牧生产系统

肉牛在放牧场所自由活动，可以自主选择饲草、饮水和庇护场所的养殖系统。

3.8

舍饲生产系统

肉牛在棚舍集中饲养，完全依赖于人类每天提供基本需要，如饲料、饮水和圈舍的养殖系统。

3.9

半舍饲生产系统

兼有舍饲系统和放牧系统的肉牛养殖系统。

4 饲喂和饮水

4.1 饲喂

4.1.1 牛场选择的饲料和饲料原料应满足国家有关法律法规及标准要求（参见附录 A）。

4.1.2 牛场应有供方饲料的原料成分及含量的书面记录；若自行配料时，应保留饲料配方及配料单，饲料原料来源应可追溯。

4.1.3 牛场应根据牛群品种特性、年龄、体重和生理需求等，提供符合其营养需要的日粮，并且达到维持良好身体状况的需要量。

4.1.4 牛场不得使用变质、霉败或被污染的饲料原料和禁止使用的动物源性饲料。

4.1.5 宜为牛只提供不少于 60%的纤维饲料。

4.1.6 牛场采用料槽饲喂时，应保证足够的饲喂空间（不小于 1.1 倍肩宽），以供牛群同时进食。饲喂方式应尽量减少牛的争抢。

4.1.7 牛场应避免饲料类型和饲喂量的突然改变，如需变更应逐步过渡，过渡期应在 10 天以上，并密切观察牛只的消化及体况反应。

4.1.8 采用放牧生产系统，应充分考虑草地载畜量和牛只的营养需求，合理分配草场资源以满足每头牛的营养需要；在冬春季节，应适量补饲。

4.1.9 饲喂设备的设计、安装和维护应考虑减少饲料被污染的风险。

4.1.10 牛场应保持饲喂设备的清洁，防止残余饲料的腐败变质。

4.1.11 牛场应采取措施防止饲料贮藏过程中的污染和腐败变质。

4.1.12 牛场不应使用以促生长为目的非治疗用抗生素，不得使用激素类促生长剂；对于加药饲料的使用应明确标识并记录。

4.1.13 肉牛上市前应严格执行休药期的相关规定。

4.2 饮水

- 4.2.1 除主治兽医师要求外，牛场应每天连续向所有牛提供充足、清洁、新鲜的饮用水。饮用水质应符合 NY/T 5027 的要求。
- 4.2.2 饮用水空间应满足至少 10% 的牛可同时饮水。
- 4.2.3 水槽的位置应远离地面倾斜处和低洼处，且不应造成垫料区域的潮湿或污染。
- 4.2.4 采用放牧生产系统，应保证充足、干净、新鲜饮用水的供水设施或水源地。若使用天然水源，应对潜在疾病风险进行评估。
- 4.2.5 应对设置在草场上的供水设施或水源地区域采取保护措施。饮用水槽周围的区域应加强管理，宜为水槽设置防护挡板。
- 4.2.6 所有饮水设备均应保持清洁，供水系统应定期维护和消毒。
- 4.2.7 牛场应储备足够的饮用水或有紧急供水措施，以便冰冻或干旱等原因造成正常供水中断时应急使用。
- 4.2.8 冬季宜为牛群供应温水。
- 4.2.9 在饮水中需添加药物或抗应激剂时，应使用专用设备，并做好添加记录。

5 养殖环境

5.1 牛舍及设施

- 5.1.1 牛场建设应满足国家相关法律法规和标准的要求（参见附录 A）。
- 5.1.2 牛场建设的规划设计，应考虑总面积、养殖数量、年龄、体重、采食空间、饮水空间、垫料面积等与动物福利相关的要求。
- 5.1.3 牛场的路面应定期维修，以免牛蹄部损伤。
- 5.1.4 牛舍内通道应便于牛无障碍通过，避免或减少直角转弯的盲区。
- 5.1.5 牛舍内地面应为防滑材料或做防滑处理，以防牛滑倒损伤。
- 5.1.6 牛舍内地面、墙壁、围栏应易于清洗、消毒或必要时更换。与牛体接触面，应避免尖锐的边缘和突出，以防止对牛的伤害。
- 5.1.7 牛舍及舍内、外设施设备应使用无毒无害的材料。
- 5.1.8 牛场内的电器设备、电线、电缆应符合相关规范，且有防止牛接近和啮齿类动物啃咬的措施。
- 5.1.9 应为放牧生产系统中的牛，提供自然遮蔽物或设立遮荫棚，以便牛只在极端天气下得到庇护。
- 5.1.10 牛场应建立废弃物无害化处理设施，并保证其正常运转。
- 5.1.11 牛场应设有弱、残、伤、病牛特别护理区，并与其它牛舍隔开。

5.2 饲养密度

应提供足够的空间，使所有的牛只可同时卧息。

5.2.1 采用舍饲及半舍饲生产系统养殖时，牛只的最小空间需要量见表1。

表1 牛只最小空间需要量

体重 (kg)	最小活动面积 (m ²)	最小卧息面积 (m ²)	最小总面积 (m ²)
<100	1.5	1.8	3.3
100-300	2.5	2.5	5.0
300-500	3.5	2.5	6.0
500-700	5.5	2.5	8.0
>700	7.0	3.0	10.0

5.3 卧息区域/地面

- 5.3.1 应为牛提供干燥、舒适的躺卧区域。
- 5.3.2 牛舍内使用的垫料应及时补充并定期更换，保持其清洁、干燥、舒适。
- 5.3.3 非垫料区地面应进行水泥硬化或铺上漏缝地板。
- 5.3.4 使用水泥硬化时，应做好防滑处理，并向排污区稍有倾斜。
- 5.3.5 使用漏缝地板时，其间隙和板条宽度应适宜，以防牛蹄部受到伤害。

5.4 温湿度与通风

- 5.4.1 牛场应保持适宜的牛舍温度，不应过冷或过热，以避免牛产生应激反应。
- 5.4.2 牛舍应有效通风，使舍内相对湿度低于80%，并避免高湿、冷凝水和贼风。
- 5.4.3 牛舍应保持良好的空气质量，舍内可吸入粉尘和氨气浓度应符合NY/T 388规定。
- 5.4.4 放牧生产系统环境中，应根据牛品种、年龄、适应性以及可预见的气候条件和自然遮蔽物等，对放牧场气候环境、温度和空气流动进行评估。

5.5 照明

- 5.5.1 牛舍应配备足够的照明设备（固定或便携的），设备应能正常运行并定期检查和维护。
- 5.5.2 舍饲生产系统宜采用自然光照。采用人工照明时，强度为20-100LUX。至少6个小时的连续黑暗或低水平光照以便牛休息。
- 5.5.3 若当地自然光照或自然黑暗的时长较短时，连续光照和黑暗的时长可作适当调整。

5.6 产犊环境

- 5.6.1 牛场应为待产母牛提供洁净、舒适的分娩牛舍和产床。
- 5.6.2 产房应有充足的垫料。
- 5.6.3 分娩牛舍、兽医室和隔离舍的设计应与其它牛舍隔开，以便于卫生防疫管理。
- 5.6.4 分娩区应有足够的空间和保护措施，方便助产。每100头牛应提供至少5头牛的分娩空间。
- 5.6.5 冬季分娩，应为犊牛提供补充热源，以保证其适宜的温度。

5.7 公牛栏

- 5.7.1 公牛栏宜设在公牛能看、听、嗅到其它牛及其活动的场所。
- 5.7.2 牛场应为成年公牛提供单栏，栏内垫料卧息区面积不小于 16m^2 ；大型公牛的卧息区面积，每 60kg 体重应不小于 1m^2 。
- 5.7.3 活动和交配区总面积应不小于 25m^2 。
- 5.7.4 牛场应为在公牛栏工作的人员提供适宜的束缚设备和逃生通道等安全措施。

5.8 犊牛栏

- 5.8.1 犊牛栏使用的材料应避免犊牛产生冷、热应激反应。
- 5.8.2 牛场应根据犊牛的日龄和品种，为犊牛提供大小适宜的犊牛栏。
- 5.8.3 牛场应为犊牛提供干燥、舒适的垫料床，不应对犊牛进行牵引或束缚。
- 5.8.4 犊牛栏的安置应使犊牛能够看到、听到隔壁犊牛栏内的犊牛。
- 5.8.5 犊牛栏应建在排水良好、有遮蔽物的场所。
- 5.8.6 犊牛最迟 6 周之前应从犊牛栏中转出。

5.9 围栏/隔断

- 5.9.1 牛场安装的围栏与饲喂隔断不应对牛造成皮肤划伤或头颈部夹卡等伤害。
- 5.9.2 牛场使用的电围栏应为安全电击，不应使牛产生过度不适。
- 5.9.3 应适时检查和维护所有围栏和隔断。

5.10 粪污处理

- 5.10.1 牛场应按 NY/T 1168 的要求及时处理粪污，避免污染环境，防止疾病传播。
- 5.10.2 牛场应有效隔离厩肥堆，防止牛触及。

5.11 环境富集与行为

- 5.11.1 为减少牛异常行为的发生，牛场宜提供必要的材料满足环境富集的要求。
- 5.11.2 牛场宜提供牛相互表达和交流情感的空间。
- 5.11.3 宜为母牛和犊牛提供相处的条件，以满足母牛天性表达。
- 5.11.4 牛场宜采用放牧的养殖方式，以满足牛群的生物习性。
- 5.11.5 应记录牛的异常行为，对于重复出现的情况，牛场应予以分析，及时采取改善饲养管理和环境控制的措施。

6 养殖管理

6.1 人员能力

- 6.1.1 牛场管理者应接受有关动物福利知识的培训，掌握动物健康和福利方面的专业知识，了解本标准的具体内容，且能在其管理过程中熟练运用。

6.1.2 牛场饲养人员应接受有关动物福利基础知识的培训，掌握动物健康和福利养殖方面的基本知识及本标准的具体内容，且能在其操作过程中有效运用。

6.2 繁殖

6.2.1 小母牛应达到性成熟后方可配种。公牛的选择应考虑母牛的品种、体型大小、年龄以及公牛初生重和难产度等，以降低母牛难产或患其他疾病的风险。

6.2.2 胚胎移植、人工授精以及妊娠检测应由兽医师或受过专业培训的人员操作，以保证母牛和胎儿的健康。

6.2.3 待产母牛应在预产日前 5d~7d 转入产房。

6.2.4 牛场工作人员应每日至少检查分娩母牛和犊牛 2 次。

6.2.5 牛场工作人员应每日至少检查公牛 2 次。

6.3 断奶

6.3.1 应确保犊牛出生后尽早获得足量的牛初乳。

6.3.2 犊牛哺乳时间不少于 8 周。

6.3.3 断奶时间尽可能与转群、运输、日粮更换等生产关键点错开，以免引起犊牛应激或死亡。

6.3.4 宜采用渐进式断奶方式，以降低犊牛断奶应激和痛苦。

6.4 阉割

6.4.1 不宜对牛实施阉割。

6.4.2 确定需要阉割的犊牛，应在 1 月~3 月龄实施，宜使用止痛剂，以减少牛的应激和痛苦，超过 3 月龄阉割时应使用止痛剂。

6.4.3 牛场应细心观察和照顾被阉割的犊牛，发现异常及时处理。

6.4.4 操作人员应受过专门培训，操作熟练、迅速，并能鉴别阉割并发症。

6.5 去角

6.5.1 不宜对牛实施去角。

6.5.2 确需去角的犊牛，应在 7 日龄~30 日龄实施，宜使用止痛剂，超过 30 日龄去角时应使用局部麻醉或止痛剂。

6.5.3 确需去角的犊牛，宜采用电烙铁法去角。犊牛去角后 24 小时内，应每小时观察 1 次，发现异常及时处理。

6.5.4 操作人员应受过专门培训，操作熟练、迅速，并能鉴别去角并发症。

6.6 标识

6.6.1 标识牛时，应采用让牛无痛或短暂性痛苦的方法，宜在光线较暗的区域进行。

6.6.2 标识牛时，应使用无毒无害的材料。

6.6.3 操作人员应受过专门培训，操作熟练、迅速，以减少牛的痛苦。

6.7 其它

6.7.1 牛场应根据牛的年龄、性别、有无犄角等因素进行分群。

6.7.2 牛群应保持相对稳定，减少混群。必须混群时，宜每次两头以上同时转群，应提供较大的活动空间，细心观察，以降低牛的应激和伤害。

6.7.3 牛场应对进行隔离治疗的伤病牛每天至少进行两次检查。

6.7.4 牛场对治疗无效的牛，应征求兽医的处理意见，必要时实施人道宰杀。

6.7.5 牛场应识别可能对动物福利造成不利影响的自然灾害、极端天气等各种紧急情况，并制定应对的方案。

6.7.6 宜利用听觉或视觉方法驱赶牛群，不应使用棍棒、皮鞭、电棒等粗暴手段驱赶。

6.7.7 不应刺戳牛眼、鼻、乳房、阴囊、肛门等敏感的部位。

6.7.8 应尽量减少牛在分栏圈内的时间和拥挤程度，以免引起牛应激或造成伤害。

6.7.9 牛场应控制牛群通过门、通道、拐角等狭窄区域的流量，以免造成牛伤害。

7 健康计划

7.1 牛场应制定符合法律法规要求的兽医健康计划，内容应至少包括：

- 生物安全措施；
- 疫病防控措施；
- 药物使用及残留控制措施；
- 病死牛及废弃物的无害化处理措施；
- 其他涉及动物福利与健康的措施等。

7.2 牛场应定期对健康计划的实施情况进行检查，并适时进行该计划的更新或修订。

8 运输

8.1 运输方应满足国家有关法律法规及标准要求（参见附录 A）。

8.2 运输相关人员

8.2.1 司机和押运人员应具备运输牛的经验，并接受过基本的兽医知识、伤病牛的管理和动物福利有关知识的培训。

8.2.2 司机应平稳驾驶运输车辆，并对牛在运输过程中的状况进行有效监控。

8.3 装卸

8.3.1 应尽量减少牛混群装载，伤病的牛不应进行装载运输。

8.3.2 应使用适当的装卸设备，尽可能采取水平方式装卸牛。无法避免的坡道应尽量平缓（坡度不宜超过 20 度），应采取防滑的措施及安全围栏。

8.3.3 装卸牛的过程应以最小的外力实施，尽可能引导牛自行走入或走出运输车辆，不得采取粗暴的方式驱赶。

8.3.4 牛到达目的地后应及时卸载。

8.4 运输容量

8.4.1 运输牛的车辆应保证牛可自然站立，并且顶部有通风的空间。牛头部最高点距顶棚至少保留：小牛为 10cm，成年牛为 20cm。

8.4.2 运输牛的装载密度见表 2。

表 2 运输牛的装载密度

重量(kg)	每只牛占用面积 (m ²)
50-110	0.3~0.4
110-200	0.4~0.7
200-325	0.7~0.95
325-550	0.96~1.30
550-770	1.30~1.60
>770	>1.60

8.5 运输前准备

8.5.1 运输牛的车辆宜有防晒遮雨的顶棚，地板宜铺有足量的垫料。

8.5.2 牛在运输前应能随时得到饮水。

8.5.3 在装车前 4 小时内，不得给牛喂食。

8.6 运输

8.6.1 牛应就近屠宰，尽量减少运输和等待时间。连续运输牛的时间不宜超过 8 小时。

8.6.2 运输车辆所有与牛接触的表面、装载坡台和护栏等，不应存在可能造成牛伤害的锋利边缘或突起物。运输工具各部分构造应易于清洁和消毒。

8.6.3 运输车辆应有一定的防护措施，避免牛摔倒或其他行为可能引起的伤害。

8.6.4 应尽量避免在极端天气进行牛运输。运输牛当日气温高于 25℃或低于 5℃时，应采取适当措施，减少因温度过高或过低引起牛的应激反应。

8.6.5 运输过程中若出现牛的伤害或死亡，应分析原因并立即采取措施以防止更多伤害和死亡的发生。

9 屠宰

9.1 屠宰企业应满足国家有关法律法规及标准要求（参见附录 A）。

9.2 屠宰企业应指定专人负责制定和实施人道屠宰的规定。该负责人应接受过有关动物福利知识和本标准的培训。

9.3 无特殊情况，对运输过程中造成伤残的牛，屠宰企业应及时实施宰杀，尽量减少其痛苦。

9.4 待宰栏（棚）

9.4.1 屠宰企业应为待宰的牛提供充足的饮水，必要时提供饲料。禁水时间不得超过 3 小时，禁食时间不得超过 24 小时。

9.4.2 屠宰场宜提供待宰棚，防止太阳直晒和遮挡风雨，并有足够的空间。

9.4.3 屠宰企业应将待宰栏中具有攻击性的牛与其他牛分开。

9.4.4 宰前检查照明不宜低于 220 LUX。

9.5 屠宰设备

9.5.1 用于牛致昏和宰杀的设备应安全、高效和可靠。

9.5.2 屠宰设备在使用前后应进行彻底清洁与消毒。

9.5.3 屠宰企业应由专人每天对屠宰设备至少检查一次，使其处于良好状态。

9.5.4 屠宰企业应设有备用的屠宰设备。

9.5.5 屠宰企业应为在屠宰线工作的人员提供适宜的束缚设备和逃生通道等安全措施。

9.6 宰前处理

9.6.1 宰前处理应按规定的流程实施，尽量减少牛的痛苦和不必要的刺激。

9.6.2 待宰栏通道及地面应做防滑处理。通道应有足够的空间，光线适宜，无反光物、障碍物及尖锐的直角。

9.6.3 应避免采用粗暴的方式驱赶牛。

9.6.4 进入致昏设备前的牛体应得到有效清洁，减少应激反应。

9.6.5 宜采取 S 弯道等措施，尽量避免牛通过视觉、听觉和嗅觉接触到正在屠宰或已死亡的动物。

9.7 屠宰方式

9.7.1 屠宰企业应采取人道屠宰方式，尽量减少牛的痛苦和不适。

9.7.2 屠宰的致昏方式应使牛瞬间失去知觉和疼痛感直至宰杀工序完成。

9.7.3 如因宗教或文化原因不允许在屠宰前使牛失去知觉，而直接屠宰的，应在平和的环境下尽快完成宰杀过程。

9.7.4 宰杀用刀具应锋利，其刺入的位置与角度等应能达到放血快速和完全的要求，保证牛迅速死亡。

9.7.5 切断牛的动脉后，至少在 30 秒内不得有任何进一步的修整程序，直到所有脑干反射停止。

10 分割加工

10.1 加工企业应满足国家有关法律法规及标准要求（参见附录 A）。

10.2 用于加工动物福利分割牛肉产品的原料牛胴体，应来自养殖和屠宰过程均符合本标准要求的牛场和屠宰企业。

10.3 加工企业应区分动物福利分割牛肉产品与常规产品的加工过程，以避免产品的混淆。

CAS 238-2014

10.4 动物福利分割牛肉产品的质量安全应符合GB 2707、GB 2761、GB 2762 和GB 2763等相应的国家食品安全标准要求，肉牛养殖中的禁用物质不得检出。

11 记录与可追溯

11.1 牛的福利养殖、运输、屠宰、加工全过程应予以记录，并可追溯。

11.2 牛场的种牛档案应永久保存。其余养殖、运输、屠宰、加工全过程的所有记录应至少保存三年。

附 录 A
(资料性附录)
相关法律法规和标准

中华人民共和国动物防疫法
 中华人民共和国畜牧法
 兽药管理条例
 畜禽规模的养殖法案防治案例
 畜禽规模养殖污染防治条例
 农业部公告第 168 号 饲料药物添加剂使用规范
 GB 2707 鲜(冻)畜肉卫生标准
 GB 12694 肉类加工厂卫生规范
 GB 13078 饲料卫生标准
 GB 16548 病害动物和病害动物产品生物安全处理规程
 GB 16549 畜禽产地检疫规范
 GB 16567 种畜禽调运检疫技术规范
 GB 18596 畜禽养殖业污染物排放标准
 GB 18393 牛羊屠宰产品品质检验规程
 GB/T 19477 牛屠宰操作规程
 GB/T 19525.1 畜禽环境术语
 GB/T 19525.2 畜禽场环境质量评价准则
 GB/T 20014.6 良好农业规范 第 6 部分: 畜禽基础控制点与符合性规范
 GB/T 20014.7 良好农业规范 第 7 部分 牛羊控制点与符合性规范
 GB/T 21495 动植物油脂 具有顺, 顺 1, 4-二烯结构的多不饱和脂肪酸的测定
 NY 5030 无公害食品 畜禽饲养兽药使用准则
 NY 5032 无公害食品 畜禽饲料和饲料添加剂使用准则
 NY 5126 无公害食品 肉牛饲养兽医防疫准则
 NY/T 388 畜禽场环境质量标准
 NY/T 676 牛肉等级规格
 NT/Y 815 肉牛饲养标准
 NY/T 1167 畜禽场环境质量及卫生控制规范
 NY/T 1178 牧区牛羊棚圈建设技术规范
 NY/T 1339 肉牛育肥良好管理规范
 NY/T 1446 种公牛饲养管理技术规程
 NY/T 5128 无公害食品 肉牛饲养管理准则
 NY/T 5339 无公害食品 畜禽饲养兽医防疫准则
 英国防止虐待动物协会肉牛福利标准 (RSPCA welfare standards for beef cattle)
 加拿大防止虐待动物协会肉牛的福利标准 (Standards for the Raising and Handling of Beef Cattle)

本标准起草工作组构成：

主要起草单位： 中国农业国际合作促进会动物福利国际合作委员会

方圆标志认证集团有限公司

中国农业科学院北京畜牧兽医研究所

吉林省标准化研究院

世界农场动物福利协会

珲春市吉兴牧业有限公司

陕西秦宝牧业股份有限公司

内蒙古杭锦旗游牧人养殖专业合作社

主要起草人： 翟虎渠、许尚忠、沈贵银、王培知、席春玲、李旒、冯晓红、
王天羿、高雪、顾宪红、周尊国、阿永玺、王桂芝、郭金发、
张丽、汪小溪、王润东

GAS 238-2014

ICS 65.020.30; 67.120

B45

关键词：动物福利、农场动物、肉牛

STANDARDS OF CHINA ASSOCIATION CAS
FOR STANDARDIZATION 238-2014

Farm Animal Welfare Requirements: Beef Cattle

First edition
2014-12-17



Reference number
CAS 238-2014(E)

CAS 238-2014

This standard is developed by China Association for Standardization Copyright belongs to China Association for Standardization. All rights reserved. It must not be copied in any form except when it is used in the national laws or used with the permission in word from China Association for Standardization.

China Association for Standardization
No.33 Zengguang Road, CAS Building, Haidian District, Beijing China
Post code:100037
Tel:86-10-68481778 86-10-68486206 Fax:86-10-68485356
Web: www.china-cas.org E-mail: cas@china-cas.org

Foreword

China Association for Standardization (CAS) is a nationwide public organization that organizes and carries out activities about domestic and international standardization. Developing CAS Standard to meet the needs of enterprises and promote the work of enterprise standardization is one of CAS' work contents. Both groups and individuals at home can offer the suggestion on developing or revising CAS standard, and participate in the relevant work.

CAS standard is managed according to "Management Rules for the Standards of CAS", and developed on the basis of CAS 1.1—2001 "*Rules for the structure and drafting of standards of CAS*".

The draft of CAS Standard is open to the society for suggestion. Only with the vote of more than 75 percent experts and members who attend the Meeting can the draft be issued as the CAS Standard.

Organizations adopting CAS Standard should apply the registration of standard in accordance with the current national relevant rule and are in charge of the technical content.

It is the first time to issue the standard.

The annex A is informative annex.

In the process of implementing the standard, please mail the opinion and relevant materials to CAS or China Health Care Association if you find something to be revised or complemented.

Introduction

0.1 General Principle

The Standard is set to ensure the quality and safety of animal products, promote the sustainable development of livestock husbandry industry, and to fill in the gap of farm animal welfare standards in China.

Developed on the basis of international advanced farm animal welfare concept and the existing science and technology condition as well as social and economic status in China, the Standard sets the requirements on farm animal health and welfare during production and processing.

The Standard is one of the Farm Animal Welfare Requirements series that sets requirements on the whole process of beef cattle rearing, transport, slaughter and processing.

0.2 Fundamental Principle

The Farm Animal Welfare Requirements series are based upon the “Five Freedoms”:

- a) Freedom from hunger and thirst by ready access to fresh water and a diet to maintain full health and vigour.
- b) Freedom from discomfort by providing an appropriate environment including shelter and a comfortable resting area.
- c) Freedom from pain, injury or disease by prevention or rapid diagnosis and treatment.
- d) Freedom from fear and distress by ensuring conditions and care which avoid mental suffering.
- e) Freedom to express normal behavior by providing sufficient space, proper facilities and company of the animal’s own kind.

Farm Animal Welfare Requirements: Beef Cattle

1 Scope

The Standard sets welfare requirements on beef cattle production, transportation, slaughtering and processing.

The Standard is applicable to the management of the whole process of beef cattle production, transportation, slaughtering and processing.

2 Normative References

The following documents are essential for the application of the Standard. For any dated reference, only the dated version applies to this standard. For any undated reference, the latest version (including all amendments) applies to the Standard.

GB 2707	Hygienic Standard for Fresh (Frozen) Meat
GB 2761	National Food Safety Standards of Mycotoxins Limits in Food
GB 2762	National Food Safety Standards of Contaminants Limits in Food
GB 2763	National Food Safety Standards of Maximum Pesticides Residue Limits in Food
NY/T 388	Environmental Quality Standard for the Livestock and Poultry Farm
NY/T 1168	Technical Requirement for Non-hazardous Treatment of Animal Manure
NY/T 5027	Drinking Water Requirement for Pollution-free Livestock Production

3 Terminology

The following terms are applicable to the Standard.

3.1 Animal Welfare

Animal welfare means provision of adequate nutrition and environment to animals, treat them in scientific ways and handle them properly to reduce their pain and stress, so as to ensure their good life quality and health.

3.2 Farm Animal

Animals being bred or reared on farms or similar circumstances for food production, hair, down and skin processing, or other purposes.

3.3 Farm Animal Welfare

CAS 238–2014

Farm animals must be properly cared during rearing, transport and slaughtering to protect them from unnecessary fear, distress, disease or injury.

3.4 Environmental Enrichment

Environmental enrichment is the addition of resources or facilities to provide necessary ambient stimuli in livestock housing to allow natural behaviors and psychological activities so that animals can reach a physical and psychological health balance.

3.5 Abnormal Behavior

The involuntary stereotyped behavior developed when cattle cannot express natural physical and psychological needs freely or when they are suffering.

3.6 Humane Slaughter

Pre-slaughter handling and slaughter methods that reduce stress, fear, pain and injuries of cattle to a minimum.

3.7 Free-range Production System

The system in which beef cattle can move freely on grazing field and choose their feed, water supply and shelter.

3.8 Housed Production System

The system in which cattle are farmed in barns, entirely depend on the provision of feed, water supply and barns by people.

3.9 Semi-barn System

The beef cattle production system that includes both barn system and grazing system.

4 Food and Water

4.1 Food

4.1.1 All feedstuffs and raw materials must comply with relevant state laws and regulations (see Annex A).

4.1.2 Producers must obtain a written record of constituents of compound feeds and feed supplements from the suppliers. When producers mix their own feed, a specific note or feed plan detailing the constituents of the feed must be available, the origin of feed must be traceable.

4.1.3 Feedstuff must be provided to meet the nutritional needs of cattle and are appropriate to specific breeds, age, weight and physical needs in sufficient quantity to maintain them in good health.

4. 1. 4 Any spoiled, moldy, contaminated and homologous ingredient is strictly prohibited in feedstuff.

4. 1. 5 Fibrous food should make up at least 60% of the diet.

4. 1. 6 For ration feeding in troughs, there must be enough feeding space (i.e. 1.1 times shoulder width) allowing all cattle to be fed at the same time. Cattle must be fed in ways that minimize bullying.

4. 1. 7 Sudden changes in the type and quantity of food must be avoided. Gradual transition must be adopted if there is any change needed. The transition period must be more than 10 days with careful observation on digestion and body condition of cattle.

4. 1. 8 Where free-range production system is used, the pasture resource must be rationally allocated to meet the nutritional needs of each cattle, taking account of the grazing capacity of pasture and the nutritional requirements of cattle. Appropriate feedstuff supplement must be provided in winter and spring.

4. 1. 9 Feeding facilities must be designed, installed and maintained properly to minimize the potential feedstuff contamination.

4. 1. 10 Feeding facilities must be kept clean at all times to prevent the surplus feedstuff from putrefaction.

4. 1. 11 Measures must be taken to prevent the feed from contamination and putrefaction at storage.

4. 1. 12 Antibiotics must not be used for growth accelerating purposes. Growth hormones are prohibited. Any medicated feed must be clearly labeled and recorded.

4. 1. 13 Relevant provisions of the withdrawal period must be strictly implemented before the cattle go to the market.

4. 2 Water

4. 2. 1 All cattle must have continuous access to an adequate supply of clean, fresh drinking water each day, except being required by the vet in charge. Drinking water quality must comply with NY/T 5027 Standard.

4. 2. 2 Drinking space must be sufficient for at least 10% of the herd to drink at the same time.

4. 2. 3 Troughs must be installed away from the sloping area and low-lying area, and not causing humidity or fouling to the bedding area.

4. 2. 4 Water supply facilities or water sources must be provided to ensure sufficient fresh, clean water supply in free-range system. Potential disease risk must be evaluated if natural water sources are being used.

4. 2. 5 Protection measures must be taken to protect the water suppliers or water sources on pasture. The area around the water troughs must be well managed and aprons should be constructed if necessary.

GAS 238–2014

4. 2. 6 All the water facilities must be maintained clean. Water supply system must be maintained and sterilized on regular basis.

4. 2. 7 The farms must have sufficient drinking water storage or contingency water supply system in case of normal water supply shut down because of cold weather or drought.

4. 2. 8 Warm water should be provided for cattle in winter.

4. 2. 9 When medicine and anti-stress agent need to be added into drinking water, special equipment must be used and records must be taken.

5 Environment

5.1 Buildings and Facilities

5. 1. 1 All constructions on the farm must be in accordance with applicable state laws and regulations (see Annex A).

5. 1. 2 The key points of overall space coverage, herd size, age, weight, feeding, drinking and bedding space relating to animal welfare must be included in the planning and design of constructions.

5. 1. 3 Floors must be maintained regularly to prevent foot damage.

5. 1. 4 Passageways must be constructed to allow cattle to pass freely. Quarter turn blind-ended passageways must be minimized or prevented.

5. 1. 5 Floors must be constructed with non-slip material or be maintained skip resistant to reduce the risk of slipping and damage.

5. 1. 6 Floors and walls must be easily cleansed and disinfected. Provisions must be made to avoid surfaces that cattle come in contact with contain sharp edges or features that are likely to cause injury.

5. 1. 7 There must be no features of the environment and materials of the production system that are toxic or hazardous.

5. 1. 8 All electrical installations must be properly earthed and set up in accordance with relevant regulations, inaccessible to cattle and safeguarded from rodents.

5. 1. 9 Natural shelter or covers must be provided in free-range system to protect cattle in extreme weather.

5. 1. 10 Establishment for the safe disposal of all wastes systems is required to ensure regular and proper operations.

5. 1. 11 Farms must have special care areas for weak, maimed, injured and sick cattle and be separable from other cattle pens.

5.2 Space Allowances

5.2.1 Adequate space must be provided to allow all cattle to lie down at the same time.

5.2.2 The minimum space allowances for cattle in housed production system and semi-barn system are as Table 1:

Table 1 The minimum space allowances

Live weight (kg)	Minimum space (m ²)	Minimum lying space (m ²)	Minimum total space (m ²)
<100	1.5	1.8	3.3
100-300	2.5	2.5	5.0
300-500	3.5	2.5	6.0
500-700	5.5	2.5	8.0
>700	7.0	3.0	10.0

5.3 Lying Area/Floors

5.3.1 Dry and comfortable lying area must be provided.

5.3.2 Bedding materials must be topped and replaced regularly to maintain the barn in clean, dry and comfortable condition.

5.3.3 Areas without bedding coverage must use cement or slatted floors.

5.3.4 Cement floors must be slip resistant and gently sloped to provide drainage.

5.3.5 When concrete slatted floors are used, the width of the openings must be suitable to avoid foot damage.

5.4 Thermal Environment, Humidity and Ventilation

5.4.1 Efforts must be made to ensure the internal environment at a comfortable level that is not too hot or too cold to protect cattle from cold and heat stress.

5.4.2 The housing must be effectively ventilated to ensure the relative humidity lower than 80% and avoid high humidity, condensation and harmful wind.

5.4.3 The housing must be maintained in good air quality, the level of inhalable dust and concentration of ammonia must comply with NY/T 388 standards.

5.4.4 Where free-range production system is used, environmental temperature and air movement of the pasture must be assessed according to cattle breeds, age, adaptation level, foreseeable climatic conditions and natural shelter.

5.5 Lighting

5.5.1 In all cattle housing, adequate lighting, whether fixed or portable, must be available to enable them to be thoroughly inspected at any time.

5.5.2 When housed production system is used, natural lighting should be provided. Where artificial light is used, the intensity must be between 20-100LUX. A period of at least 6 hours continuous darkness or low level lighting must be provided.

5.5.3 The continuous lighting and darkness period may be adjusted to correspond with local natural daylight duration.

5.6 Calving Environment

5.6.1 Calving cows must be settled into clean, comfortable calving housing and calving crates before parturition.

5.6.2 Adequate bedding materials must be provided in calving crates.

5.6.3 Calving housing, veterinary room and isolation housing must be designed so that they are separable from normal cattle housing for epidemic prevention purposes.

5.6.4 Calving crates must be allocated with adequate space and protection facilities for smooth calving. A minimum of five calving places must be provided per 100 cattle.

5.6.5 When calving in winter, calves must be provided with additional heat to ensure them with appropriate temperature.

5.7 Bull Pens

5.7.1 Bull pens should be sited to allow the bull to see,hear and smell of other cattle and their general activities.

5.7.2 Bulls must be settled in individual accommodations with a bedded sleeping area of not less than 16m². For large-size bulls, the sleeping area must not be less than 1m² for each 60kg body weight.

5.7.3 The movement and service area must not be less than 25m².

5.7.4 Bull pens must be facilitated with proper restraining devices and escape routes.

5.8 Calf Pens

5.8.1 The material for calf pens must be able to prevent the calves from cold and heat stress.

5.8.2 Calves must be provided with pens of appropriate size according to their age and breed.

5.8.3 Dry and comfortable bedding materials must be provided in the pens. Dragging or tethering of calves is prohibited.

5.8.4 The setting of the pens must ensure calves to see and hear other calves in neighboring pens.

5.8.5 Pens must be constructed in well-drained and sheltered spot.

5.8.6 Calves must be removed out of pens no later than 6 weeks' old.

5.9 Fencing/partition

5.9.1 All fencing and feeding partitions must be designed to avoid any risks to cattle, such as skin scratch or trapping the head and neck of cattle.

5.9.2 Where electric fence is used, electric shock must be controlled at safe level to avoid causing excessive discomfort to cattle.

5.9.3 All fencing and partitions must be inspected and maintained appropriately.

5.10 Disposal of Waste

5.10.1 Animal waste must be treated in time according to the requirements set forth by NY/T 1168 to prevent environmental pollution and disease spread.

5.10.2 Muckheaps must be effectively insulated to prevent access by cattle.

5.11 Environmental Enrichment and Animal Behavior

5.11.1 Adequate materials should be provided to prevent abnormal behaviors.

5.11.2 Adequate space should be provided for cattle to express normal behavior and emotion to other ones.

5.11.3 Cows and calves should be provided with conditions that allow them to stay together to meet cows' maternal need.

5.11.4 Free-range production system should be adopted to satisfy the habitual nature of cattle.

5.11.5 Abnormal behaviors must be recorded. If abnormal behaviors develop repeatedly, a program of analysis and modification must be pursued to improve management and environment control.

6 Management

6.1 Staff Competency Requirements

6.1.1 Managers must be thoroughly trained, skilled and competent in animal husbandry and animal welfare, understand the detailed content of this requirement and are able to implement them in practice.

CAS 238–2014

6. 1. 2 Stockmen must be trained, skilled and competent in basic animal husbandry and animal welfare, understand the general content of this requirement and are able to use them effectively in practice.

6. 2 Breeding

6. 2. 1 Heifer may be mated after reaching sexual maturity. When choosing bulls, the breed, body size, age of the heifer, the born weight and dystocia rate must be taken into account, in order to reduce the risks of dystocia and other diseases of the cow.

6. 2. 2 Embryo transfer, artificial insemination and pregnancy test must be performed by veterinarian or professionally trained personnel to ensure the health of dam and calves.

6. 2. 3 Calving cows must be moved into calving crates at 5-7 days before the expected calving date.

6. 2. 4 Calving cows and calves must be inspected at least twice every day.

6. 2. 5 Bulls must be inspected at least twice every day.

6. 3 Weaning

6. 3. 1 Calves must be ensured to have adequate colostrum as soon as possible after they are born.

6. 3. 2 Calves must be fed with milk for at least 8 weeks after birth.

6. 3. 3 The weaning time should be differed from other crucial times like mixing, transport or change of ration to avoid causing stress or death to calves.

6. 3. 4 Gradual weaning should be followed in order to reduce the stress and distress of calves.

6. 4 Castration

6. 4. 1 Cattle should not be castrated.

6. 4. 2 If it is very necessary for calves to be castrated, it must be conducted within 1 to 3 months after birth and analgesia should be used to reduce the stress and pain. Analgesia must be used for castration of calves over 3 months old.

6. 4. 3 Castrated calves must be carefully monitored and taken care of, and treated in time if abnormal situation appears.

6. 4. 4 Operators must be professionally trained and are competent to perform the operation skillfully and quickly; they are also required to be able to identify complications.

6. 5 Dehorning

6. 5. 1 Dehorning should not be performed.

6. 5. 2 If it is very necessary for calves to be dehorned, it must be conducted within 7 to 30 days after birth and analgesia should be used. Local analgesia or anesthesia must be provided to calves being dehorned after 30 days' old.

6. 5. 3 If it is very necessary to dehorn the calves, soldering iron method should be adopted. Observation must be taken every hour within 24 hours after the operation, so that abnormal events can be discovered and measures can be taken in time.

6. 5. 4 Operators must be well trained, competent to operate skillfully and quickly and be able to identify dehorning complications.

6. 6 Marking

6. 6. 1 Cattle must be marked in ways that cause no pain or temporary pain, it should be performed in low lighting area.

6. 6. 2 Materials used for marking must be non-toxic or hazardous.

6. 6. 3 Operators must be well trained and competent to operate skillfully and quickly to avoid causing unnecessary suffering to cattle.

6. 7 Other Condition

6. 7. 1 Cattle must be separated in groups according to their features like age, sex, the presence or absence of horns.

6. 7. 2 Cattle herd must be kept in relative stable groups and reduce mixing. If mixing is inevitably needed, cattle should be moved with more than 2 heads stay together at one time. Adequate space and carefully observation must be provided to reduce the stress and distress of cattle.

6. 7. 3 Isolated sick or injured cattle must be inspected at least twice every day.

6. 7. 4 For the cattle failed with treatment, humane culling should be performed when necessary with vet's advice.

6. 7. 5 Producers must be competent to identify emergency circumstances like natural hazard and extreme weather that may bring harm to animal welfare and develop contingency plans accordingly.

6. 7. 6 Cattle should be driven with appropriate auditory or visual methods. Sticks, whips and electric goads must not be used to drive cattle.

6. 7. 7 Cattle must not be poked at sensitive region like eyes, nose, udders, scrotums and anus, etc.

6. 7. 8 Duration and density in the waiting lairage must be reduced to avoid stress and distress of cattle.

6.7.9 The flow at narrow zones like gates, passageways and corners must be controlled to prevent injury of cattle.

7 Health Planning

7.1 Producers must develop veterinary health and welfare plan compliance with legal and regulatory requirements, at least including:

- biosecurity;
- disease prevention;
- drug use and residual control;
- treatment of dead cattle and waste;
- other measures related to animal welfare and health.

7.2 Producers must check implementing situation of health plan regularly, renew and amend it in time.

8 Transport

8.1 Cattle carrier must meet the relevant national laws, regulations and Standards (see also Annex A).

8.2 Relevant Transporters

8.2.1 Driver and personnel in charge of cattle transport must be able to demonstrate their competence in handling cattle when loading, unloading and while in transit, have basic veterinary knowledge, able to handle and manage injured animals and have received training in animal welfare.

8.2.2 Vehicles must be driven slowly and steadily. Effective monitoring must be taken during transportation.

8.3 Loading/unloading

8.3.1 Cattle must be managed to minimize mixing for transportation. Casualty animals must not be transported.

8.3.2 Appropriate equipment must be used at handling. Efforts must be made to load and unload cattle at horizontal level. Inevitable ramp must be maintained as flat as possible, the grade should be no more than 20 degrees, with slip-resistant measures and security fences.

8.3.3 Loading and unloading process must be conducted with a minimum force and able to encourage cattle to move in or out of vehicles initiatively. Violent driving is prohibited.

8.3.4 Cattle must be unloaded immediately at the destination.

8.4 Transport Space Allowance

8.4.1 The height of transport vehicles must allow cattle to stand in a natural position and have ventilating space on the top. The minimum headroom for calves must be 10cm and adult cattle must be 20cm.

8.4.2 The minimum space allowances during transport are as Table 2:

Table 2 Space allowances during transport

Weight (kg)	Area per head(m ²)
50-110	0.3~0.4
110-200	0.4~0.7
200-325	0.7~0.95
325-550	0.96~1.30
550-770	1.30~1.60
>770	>1.60

8.5 Preparation for Transport

8.5.1 Transport vehicles should be facilitated with covers to protect cattle from sunlight and rain. The floor should be covered with sufficient bedding materials.

8.5.2 Cattle must have water access at any time before transport.

8.5.3 No feed provided 4 hours before transport.

8.6 Transport

8.6.1 Cattle must be slaughtered as close as possible to the point of rearing to minimize the duration of transport and waiting. Cattle should not be continuously transported for more than 8 hours.

8.6.2 There must not be sharp edges or protrusions on all surfaces, loading platforms and guardrails of vehicles that in contact with cattle. Each part of the vehicles must be designed for easy cleaning and disinfection.

8.6.3 Vehicles must have protective measures to avoid injuries caused by falling or other behaviors.

8.6.4 Transport during extreme weather must be prevented as much as possible. When the temperature is higher than 25°C or below 5°C, appropriate measures must be taken to reduce stress caused by high or low temperature.

8.6.5 If any injury or death happens during transport, causes must be analyzed and immediate measures must be taken to avoid further injuries and more deaths.

9 Slaughter/killing

9.1 Slaughtering enterprises must meet the relevant national laws, regulations and Standards (see also Annex A).

9.2 Slaughtering enterprises must appoint a person responsible for the formulation and implementation of the human slaughter provisions, who must be well trained on animal welfare and the Standard.

9.3 Injured cattle during transportation must be slaughtered immediately to avoid unnecessary distress, except for special circumstances.

9.4 Waiting Lairage

9.4.1 Slaughterhouses must provide adequate water for the cattle and provide feed when necessary. Water deprivation must not exceed 3 hours and fasting must not exceed 24 hours.

9.4.2 The slaughterhouse should provide waiting lairage with adequate space to prevent cattle from direct sunlight and adverse weather conditions.

9.4.3 Cattle that are likely to be aggressive must be separated from others at waiting lairage.

9.4.4 The illumination during antemortem inspection should not be lower than 220 LUX.

9.5 Slaughter Equipment

9.5.1 The equipment used for stunning and killing must be safe, effective and reliable.

9.5.2 All slaughter equipment must be thoroughly and appropriately cleaned and disinfected before and after use.

9.5.3 Slaughter equipment must be checked at least once daily by specialized personnel to ensure it is in working order.

9.5.4 Reserve equipment for the stunning and killing must be allocated.

9.5.5 Proper restraining facilities and escape route must be allocated for the safety of the people who perform slaughter practice.

9.6 Pre-slaughter Handling

9.6.1 Pre-slaughter handling must be carried out according to regulatory procedures to avoid unnecessary stimulus or distress.

9.6.2 Flooring in waiting lairage and passageways must be non-slip. All passageways must have adequate space and appropriate lighting, avoiding projections, obstacles and sharply angled bends.

9.6.3 Violent driving is prohibited.

9.6.4 Effective cleaning must be carried out before the cattle walk into stunning facilities to reduce stress.

9.6.5 S-shape passageway should be adopted to prevent cattle from contact with animals being slaughtered or dead ones by senses of vision, hearing or smell.

9.7 Slaughter/killing Methods

9.7.1 Slaughter must be carried out in a humane method that minimizes suffering and discomfort of cattle.

9.7.2 Stunning must ensure the sudden loss of consciousness and pain and maintain that state until the point of death.

9.7.3 If cattle have to be slaughtered directly without rendered unconscious before slaughter because of religious or cultural reasons, the slaughter process must be kept as quick as possible under peaceful circumstance.

9.7.4 Slaughter knives must be sharp. The position and angle of sticking must meet the requirement of rapid and complete blood loss from the cattle to ensure the quick death of the cattle.

9.7.5 After cutting off the blood vessels, there must be no further trimming procedure on the cattle for at least 30 seconds in any case until all brainstem reflexes ceased.

10 Processing

10.1 Processing companies must comply with relevant national laws, regulations and standards (see also Annex A).

10.2 Raw materials for processing must come from farms as well as slaughterhouses that their farming and slaughter process meet the requirements of this standard.

10.3 Processing companies must effectively separate the processing procedures for animal welfare friendly beef products with regular ones to prevent mixing up.

10.4 Quality of processed animal welfare friendly beef products must meet the national food safety standards of GB 2707, GB 2761, GB 2762 and GB 2763. Banned substances must not be detected from the products.

11 Records and Traceability

11.1 The whole process of rearing, transport, slaughter and processing must be recorded and traceable.

11.2 All records of beef cattle, including rearing, transport, slaughter and processing, must be kept at least for 3 years, except for breeders' that must be kept permanently.

Annex A

(Informative Annex)

Related Regulations and Standards

Animal Epidemic Prevention Law of People's Republic of China
 Animal Husbandry Law of People's Republic of China
 Veterinary Management Case
 Scale Livestock Farming Prevention Act Case
 Scale Livestock Farming Pollution Prevention Regulations
 Feed Additive Use Norms—No. 186 Announcement of Ministry of Agriculture
 GB 2707 Hygienic standard for fresh (frozen) meat of livestock
 GB 12694 Meat processing plant hygiene norms
 GB 13078 Feed hygiene standards
 GB 16548 Animals and animal products, biological diseases safe handling procedures
 GB 16549 Animal origin and quarantine norms
 GB 16567 Breeding animal transport and quarantine technical specifications
 GB 18596 Emission standards for livestock husbandry industry
 GB 18393 Code for product quality inspection for cattle or sheep in slaughtering
 GB/T 19477 Operating procedures of cattle slaughtering
 GB/T 19525.1 Livestock environment terminology
 GB/T 19525.2 Environmental quality evaluation criteria for farms
 GB/T 20014.6 Good agricultural practice. Part 6: Livestock base control points and compliance criteria
 GB/T 20014.7 Good agricultural practice. Part 7: Cattle and sheep control points and compliance criteria
 GB/T 21495 Animal and vegetable fats with cis, cis 1,4 - diene structure determination of unsaturated fatty acids
 NY 5030 Guidelines for the use of veterinary drugs on pollution-free livestock
 NY 5032 Guidelines for feed and feed additives use to pollution-free livestock
 NY 5126 Guidelines for veterinary epidemic prevention of pollution-free beef cattle
 NY/T 388 Environmental quality standard for the livestock and poultry farm
 NY/T 676 Beef quality grading
 NT/Y 815 Feeding standard of beef cattle
 NY/T 1167 Environment quality and sanitary control requirement for the livestock and poultry farms
 NY/T 1178 Technical code for construction of cattle and sheep housing in pasturing area
 NY/T 1339 Beef cattle finishing good management practice
 NY/T 1446 Guideline on feeding and management of breeding bulls
 NY/T 5128 Guidelines for husbandry management of pollution-free beef cattle
 NY/T 5339 Guidelines for veterinary epidemic prevention of pollution-free livestock
 RSPCA welfare standards for beef cattle
 BCSPCA Standards for the Raising and Handling of Beef Cattle

Drafting team of this standard

Main drafting organizations

ICCAW of CAPIAC

China Quality Mark Certification Group

Institute of Animal Sciences of CAAS

Jilin Provincial Institute of Standards

Compassion in World Farming

Hunchun Jixing Animal Husbandry Co., Ltd.

Shaanxi Kingbull Animal Husbandry Co., Ltd.

Inner Mongolia Hangjinqi Youmuren Animal Husbandry Professional Cooperatives

Drafting team

Zhai Huqu, Xu Shangzhong, Shen Guiyin, Wang Peizhi, Xi Chunling, Li Ni,

Feng Xiaohong, Wang Tianyi, Gao Xue, Gu Xianhong, Zhou Zunguo,

Ayongxi, Wang Guizhi, Guo Jinfa, Zhang Li, Wang Xiaoxi, Wang Rundong

GAS 238-2014

ICS 65.020.30; 67.120
B45

Key words: animal welfare, farm animals, beef cattle
