



泰森中国
TYSON CHINA

肉鸡饲养手册

Broiler Management Guide

Feb, 2012



Version NO.:TSC-2012.0.1

前言

Preface

本手册适用于泰森中国自建肉鸡场和合作农户鸡场，为饲养员、技术员、场长及其他相关的技术管理人员提供统一的操作规范和指导。本手册的有关内容主要针对地面平养。网上平养和笼养也可以参考。而且本手册会根据实际情况不断更新，请使用该手册的人特别留意。如果有任何疑问，请直接咨询泰森中国活禽部。

主要参考文献：《科宝商品肉鸡饲养管理手册》（科宝公司）、《艾维茵500肉鸡饲养管理指南》（BPBC公司）、《育雏基本知识手册》（科宝公司）等。

主要编写和翻译人员：泰森中国活禽全体成员。

本手册版本号：TSC-2012.0.1

This program will be applied to Tyson China company owned farms and growers to provide the guidance to stockmen, technicians, farm managers and other related managers. The program mainly deals with floor growing, and could also be used as a reference for net and cage growing. It will be updated according to the actual conditions. Please pay special attention to any update during the application. If there is any doubt, please contact Tyson China Live Production Team.

The main reference: *Broiler Management Guide*(COBB), *AV 500 Broiler Management guide* (BPBC), *Brooding Fundamentals Guide*(COBB), etc.

Main compiler: Tyson China Live Production Teams

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肉鸡饲养管理“八字”方案
正确观察鸡群的方法：进鸡舍时不要打扰鸡群，将会看到所有的鸡均匀的分散在整个鸡舍，有的鸡在吃料、有的在喝水、有的在玩耍、有的在睡觉、有的在“说话”。这样的鸡群才是健康正常的鸡群，否则，我们需要立即查找原因： 料？水？通风（空气）？光照？温度？湿度？应激？防疫（生病）？ ---这就是我们的“肉鸡管理八字方案”！

料：饲料管理			
关注点：料位要充足，分布均匀，料盘不能倾斜。夏天注意控制热应激、粉料。每日不可以断料。每日检查自动控制开关，料线末端安装引诱灯（5W）。			
注意生产日期			
季节		推荐的使用期限	
夏季（4月1日-9月30日		< 14天	
冬季（10月1日-3月31		< 21天	
饲料的品质：现场人员要特别注意饲料的外观，如颜色、颗粒、干湿度、异味和外包装。若有异样，立刻取样检测并汇报。			
料料处理：在完全使用自动料线后，如果料盘里有粉料存在，每天可以在13:00-15:00之间将自动电源关闭2小时，以便尽量吃净料盘底部的粉料。			
袋装换料：3天换料完毕(30%、70%、100%)			
记录：			
每天固定的钟点记录24小时饲料消耗量。记录每天喂料的品种和生产批号！			
换料时机：			
日龄	料种	预计采食量	换料说明
0-14	510	0.51	按料量换料
15-28	511	1.60	按料量换料
29-35	512	1.18	出栏前5天换
36-42	513	1.33	
提醒：鸡群不健康时，首先是采食量会下降，所以要要对每日的采食增减特别注意！			

光：光照管理
要点： 小鸡要有足够的亮度刺激采食。每天的关灯时间一定要在同一钟点！
注意事项： 1、鸡舍光照要均匀一致，2、鸡只体重达到160克以上时才开始延长黑暗期。3、在出栏前要减少黑暗期。4、如果遇到应激或其它需要增加采食的情况，可以延长采光刺激采食。5、请不要在一天中最冷的时间段处于黑暗期。6、不要间断式给光！7、雏鸡过强的光照会引起啄癖。

防：防疫管理
防疫的核心，就是“ 生物安全 ”！生物安全的核心，就是减少接触病原体的机会和降低病原体的数量！
日常工作： 1、减少一切人员、车辆和物品的流动和接触，2、反复的清洗清洁，3、消毒，4、废弃物的安全处置。
其它： 1、注意观察每次的免疫反应；2、注意22-26日龄观察球虫病；3、注意腿病发生率的统计；4、每日观察粪便和解剖。

水：饮水管理
正常的水料比：20℃时为2:1,26℃时为2.5:1
水线的高度： 0日龄乳头高9-10cm.0-3日龄乳头与小鸡眼睛同高。以后每周调整高度2次，至第5周末鸡喙沿与水平呈65度角。
乳头的 出水量： 第1周在20-27ml/分钟，以后为：(周龄×7+35)ml/分钟。
操作： 每周采用带压水冲洗水线2次。并检查冲洗的水质干净程度，必要时用弱酸浸泡水线。每天检查进水管水压（正常在2-3kg/cm）。扩栏前必须将干净水放至末端，并清洁乳头。每年至少检测一次水质。
注意事项： 水线要水平直线，及时更换漏水乳头或堵塞的乳头。鸡只必须能在3米内找到饮水，且24小时不可断水！
记录： 每天固定的钟点记录24小时的饮水消耗量。

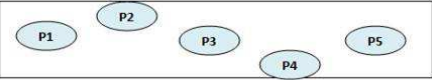


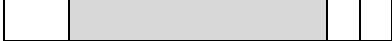
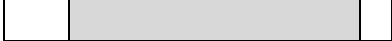




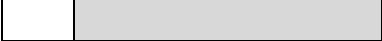
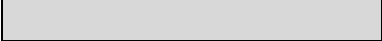
温：温度管理
体感温度： 鸡只感觉到的温度由 气温、风速、湿度和羽毛 情况综合影响。观察鸡群的分布状态是判断温度是否适宜的唯一依据。
肉鸡特点： 雏鸡7日龄内体温自我调节功能几乎没有，28日龄之前的体温调节能力也不强，对环境温度非常敏感。
要点： 1、育雏期间，如果湿度不够应适当提高舍温，2、夏季炎热时，14-28日龄雏鸡也可以利用风速降温，但要特别注意过分强烈的风冷效应，3、每天都要注意昼夜温差、鸡舍前后温差，风速变化引起的温差等，4、高温高湿的极端天气下，只能依靠风速降温，5、热应激时会导致维生素的需求量增加，应适当量补充、6、免疫后当天和第二天，可以适当提高舍温1-2度。7、在60%的湿度时，装箱的雏鸡环境温度26度最合适，放雏时的垫料温度32度最合适。

应：应激管理
当观察到鸡群不正常时，一定有应激存在！所有的不利因素都会给鸡带来致命的应激：例如，低温或高温、断料、断水、突然的响声、干燥、高温、高密度饲养、饲料改变、水质恶化、药物、疾病、缺氧、氨气或其它有害气体、潮湿的垫料、人的操作、环境的突然变化，等等。
我们要做的是： 1、尽量避免应激； 2、在不得不有应激时（如免疫），就想办法让应激反应最小！免疫时可以将温度在目标温度的基础上增加1摄氏度，增加空气湿度。

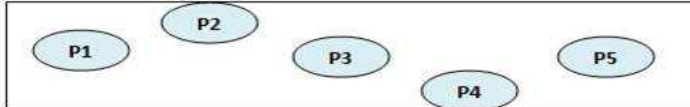










风：通风管理		
通风的 目的 ：保持良好的空气质量，带走多余的热量和风冷效应。		
良好空气质量 目标 ：		
氧气	>19.6%	
二氧化碳	<3000ppm	
一氧化碳	<10ppm	
氨气	<10ppm	
可吸入颗粒	<3.4mg/m ³	
相对湿度	45-65%	
只有当空气质量达不到上述要求时，我们才考虑最小通风模式！		
最小通风管理 ：正常为1.0-1.5m ³ /h/kg体重(0.6-0.9CFM/kg)，极端寒冷为0.8m ³ /h/kg(0.5CFM/kg)体重，优质为2-3m ³ /h/kg(1.2-1.8CFM/kg)体重。0-14天采取 8分钟 一个循环，15天以后 5分钟 一个循环。根据风机能力和最小通风要求计算出每个循环内开或关风机的秒数。		
冬季 负压管理 ：良好的负压管理能使鸡只的温度需求和通风需求获得平衡。不同宽度的鸡舍要求的负压不一样：		
鸡舍宽度	负压(Pa)	进风口风速(m/s)
12	10.0	4.00
15	15.0	5.00
18	21.5	6.35
鸡背风速 ：28日龄前羽毛尚未长齐，应特别注意风冷效应（会是正常的1-2倍）。一般0-14日龄鸡背0风速，15-21日龄不应超0.5米/秒，22-28日龄不应超0.8米/秒。夏季为了降温，鸡舍的设计风速最好能达到2.8米/秒以上。		
纵向通风 ：当鸡舍过热需要风冷效应时，即由过渡通风变为纵向通风。这时至少会有50%的纵向风机开启，侧墙进风口全部关闭。特别要注意水帘后端的通风死角！		
过渡通风 ：在横向（最小）通风和纵向通风之间采用，侧墙风机和部分纵向风机会启用，侧墙进风口开启。进风速度同最小通风。排风速度为每 2分钟 换完鸡舍空气。		
注意事项 ：鸡舍每个角落的空气质量都要正常。注意鸡舍的密封，尤其是冬季停用风机要密封好。如果风速不够，可以加装挡风帘增加风速。		

湿：湿度管理
湿度有时候比温度更重要。所有舒适温度的设置都是以一定的湿度为前提的。
加湿的方法： 进雏前可以喷湿垫料；可以洒水；可以喷雾。
减湿的方法： 加大通风，适当的提高舍温，加入干燥的新垫料等。

Broiler Program				
The correct way to observe the flock: when entering the house without disturbing the flock, you will see the birds scatter evenly along the whole house. They are eating,drinking,playing,talking or sleeping. Only like this situation, the flock is healthy. Otherwise we need to find the problems: feed, water, ventilation, lighting, temperature, humidity, stress and disease prevention.				
Feed Management			Water Management	
Focus: Sufficient feed, even distribution, the feeder should not be inclined. Avid heat shock and fine feed in summer. Check the automatic control switch daily. Install lights(5W) on feeders where sensor installed so as to attract birds.			Normal water/feed ratio: 2:1(20℃), 2.5:1(26℃)	
			Water Line Height: At first day,9-10cm from the nipple to floor.Nipples should be at eye level at the age of 1-3 days. Afte that, lift the nipples twice every week.And the end of 5 weeks of age,chicks can drink at an angle of 65 degree with the horizontal line.	
MFG Date: (Preferably first in first out, and consume before expiration date)			Flow Rate of Nipples: 20-27ml/min in the 1st wk. After that,it should be: (wks of age*7+35)ml/min. Test water quality every year.	
Season	Recommended Date (MFG-Consumption)		Operations: flush the water line twice with pressure pump. Check the water condition after flushing. If necessary, soak the water line with weak acid.Check the water pressure(normally 2-3kg/cm) .Let the water run to the ends of the waterline and clean nipples before spreadout. Test water quality at least once a year.	
Summer(Apr.-Sep.)	<14days		Precaution: Water line should be level, and change the nipples which are leaking or blocked in time. Water should be available within 3 meters sphere and should continuosely supply 24 hours per day.	
Winter(Oct.-Mar.)	<21days			
Feed Quality: Related staff on the farm should pay attention to physical change of feed, such as color,granules, moisture, smell and package. If there is abnormal feed, take samples to test immediately and report to Broiler Manager.			Record water consumption of 24 hours at the same time of each day.	
Fine Feed: After fully using automatica feeder line, if there is any fine feed in the pans, shut the power line for 2 horus at 13:00 to 15:00 each day to let chicks eat out the feed powder at the bottom of the feeder pans.				
Bag Feed Switch: in 3 days(30%, 70%, 100%)			Temperature Management	
Record daily feed consumption at the same time of the day and feed types and production batch.				
Feed Type Switch Time			Effective Temp.: Temperature the chicks actually feel depends on atmosphere temperature, wind speed, humidity and feather condition. Observe the distribution of the flock is the only tool to judge comfort condtion.	
Age	Type	Est. Consumption	Broiler Characteristic: They cannot adjust their body temperature before 7 days, and cannot fully adjust body temperature and be sensitive to environment temperature before 28 days of age.	
0-14	510	0.51		
15-28	511	1.60		
29-35	512	1.18		
36-42	513	1.33		
Notes: Pay special attention to daily feed consumption. Because the feed consumption will decrease when the flock is not healthy.				
Lighting Management				
Focus: Enough lighting intensity will stimulate chicks to consume feed. Turn off lights at the same time of the day.				
Tips: 1.uniform lighting intensity. 2.Start to increase the dark time after the birds achieve 160g. 3.Reduce dark time before selling. 4.You can increase lighting for feed intake when the birds are stressed or other condtions which require more feed consumption. 5. Never let the house in darkness in the coldest time of the day. 6. Light the house continually. 7. Strong lighting intensity will cause CANNIBALISM.				
Disease Prevention				
The core of prevention is bio-security! And the core of bio-security is to reduce the contact with pathogen and the dose of pathogen.				
Daily Work: 1. Minimize the unnecessary visitors, vehicles and goods. 2. Clean continuously .3.Disinfection 4. Disposal of wastes.				
Others: 1.Observe the reaction after vaccinations. 2.Observe the Coccidiosis at the age of 22 to 26 days.3. Record incidence of leg problems. 4.Observe feces and necropsy on a daily basis.				
Stress Management				
Stress must be there when you see the flock is abnormal. All the adverse factors will deady stress the birds, like too cold or hot temperature, feed and water lackage,sudden noise,high humidity or too thick rearing density, feed change, poor water quality, medication, diseases, hypoxia,ammonia or other harmful gas, wet litter, human operation, sudden change of environments.				
Tips: 1. Avoid stress as much as possbile. 2. When impossible to avoid stress, like vaccination, try to minimize it. For example, increase house temperature by 1℃, and increase RH.				
Ventilation Management				
Objective: Keep good air quality, and exhaust too much heat and wind chill effect.				
Good Air Quality Standard:				
Oxygen		> 19.6%		
carbon dioxide		< 3000ppm		
carbon monoxide		< 10ppm		
ammonia		< 10ppm		
inhaled particles		< 3.4mg/m ³		
RH		45-65%		
Only when air quality cannot meet the standard, we just start minimum ventilation.				
Minimum Ventilation: normal volume is 1.0-1.5m ³ /h((0.589-0.883CFM)/kg Wt. In extremely cold weathter, it should be 0.8m3/h((0.471CFM))/kg Wt. Ideally it is 2-3 m3/h(1.178-1.767CFM)/kg Wt. Apply 8min for one cycle at the age of 0 to 14 days. After that, apply 5 mins for one cycle. Calculate the time to start and close the fans based on fans' efficiency and mininum requirement.				
Negative Pressure Management in winter: Good management help birds to balance temperature requirement and ventilation. The negative pressures vary based on different width of the houses.				
Width	Negative pressure	wind speed at the inlets		
12	10.0	4.00		
15	15.0	5.00		
18	21.5	6.35		
Wind Speed at Chick Back: chicks still cannot grow full feathers before 28 days of age. So we should pay more attention to wind chill effect(which is twice or triple of nomal).No wind above the back of chicks of age of 0-14 days. Not over 0.5m/s at the age of 15 to 21days. Wind speed of the house should be 2.8m/s to lower temperature in Summer.				
Tunnel Ventilation: when the house is over heat, it will require wind chill effect. At this moment, half of the vent fans will be started and sidewall fans will close. Pay special attention to the dead angles behind the curtain.				
Transtitional Ventilation: used between minimum ventilaion and tunnel ventilation. Sidewall fans and partial vent fans will be used, and sidewall inlet will be open. The wind speed is the same as that of minimum ventilation. Exhaust air of the whole house in 2 minutes.				
Humidity Management				
Humidity is sometimes more important than temperature. Humidity is premise of temperature setting for Chick comfort zone.				
Increase Humidity: spray litter before chick arrival				
Decrease Humidity: increase ventilation and raise house temperature or add new dry litter.				

肉鸡饲养关键事项操作要点																	
接雏		称重		扩栏													
入雏前鸡舍内必备要点： 1. 所有设备运转正常，提前设置好控制器参数 2. 垫料平整，无杂物，夏季厚度5-8cm，冬季8-10cm。 3. 垫料温度达到32℃，并且均匀；密度24-30只/平方米。 4. 水位：水壶60只/个，且提前2小时灌水放入鸡舍预温。 育雏间水线同时使用，乳头高度与雏鸡眼睛平齐，且每个乳头上悬挂一滴水，乳头水流量20ml/min。 5. 料位：开食盘80只/个，育雏间铺置4条垫纸(约占鸡舍1/3宽度)，并撒饲料，育雏间料线同时使用，垫纸上人工一次性撒料20g/只。 接雏注意事项： 1. 提前与孵化场和车辆联络准确的到场时间。 2. 雏鸡到场后，检查雏车卫生、箱内温度、鸡群状态。 3. 查验票据，并登记数据。发现异常，拍照留档。 4. 整车在20-25分钟内卸完，不宜超过半小时。如果鸡舍有分隔栏，要分配好各栏鸡数。 5. 每车抽查10箱，查验雏鸡质量与数量，并记录。 6. 将雏鸡卸入鸡舍后，要教给其开水、开料。 7. 雏鸡从检雏到达鸡舍，同时供应水、料。 8. 检查入雏喙囊饱和度：3小时,6小时,12小时,每次检查200只，喙囊饱和和比例标准：3小时65%，6小时85%，12小时90%。		1. 称重时间： 雏鸡到达鸡舍时 每车称2盒 第07日龄，即整168小时 每栋称150-200只（5个点） 第14日龄，即整336小时 每栋称150-200只（5个点） 第21日龄，即整504小时 每栋称150-200只（5个点） 第28日龄，即整672小时 每栋称150-200只（5个点） 第35日龄，即整840小时 每栋称150-200只（5个点） 第42日龄，或出栏前1天 每栋称150-200只（5个点） 2. 称重地点：除首次称重外，每次称重均固定地点，如图  3. 称重方法：准备好称、隔网与称重记录，如上图所示选好地点，将隔栏隔好，并留有小口，然后称重人员走开从周围将鸡赶入隔栏内，封闭隔栏，逐只称重，并记录 4. 每次称重后，计算出均重与均匀度，对照标准，比较分析，如低于标准，分析原因，提出整改措施，改善实施 5. 均匀度计算方法：体重在平均只重的±10%范围内的鸡只数占总样本只数的百分比（%）。		1. 冬季（11-3月份） 0-3天  4-10天  11-15天  16-21天  22-28天  29-出栏  2. 夏季（4-10月份） 0-3天  4-10天  11-15天  16-出栏  注意事项： 每次扩栏前头一天要提前对扩栏区进行预温，扩栏前要将水、料、光照等准备好，扩栏后适当驱赶鸡群到新扩栏区，将每栏鸡数量均匀分开。扩栏的速度可以根据当地的气候适当调整。在温度满足需求的情况下，可以不限于本手册的扩栏指导。可以采取更激进的扩栏方法。													
采样		免疫和饮水给药		出栏													
1. 采样时间： 共3次：0d（在孵化厅采样）/21d/出栏前1天 2. 采样数量： 同日龄鸡舍固定选择其中1栋采样，每次20只。 若有外购鸡苗，肉鸡场须进行0日龄采样。 3. 采样方法： 0日龄雏鸡采样采取心脏采血，以后采血方式采用翅静脉采血，由鸡舍的不同部位随机抓鸡采血，每次采血1毫升，详细填写送检单；血样不可冻存，冬天切忌暴露于寒冷的室外，刚采的血样要放置于25-30℃ 1小时以利于析出血清。 血样不能立即送检时，要析出血清，置于冰箱冷冻保存（注意：冷冻只保存血清，特别要做好样品的标记） 4. 送检流程：鸡场-联络专人-检测单位 5. 检测项目与方法： <table><tr><th>项目</th><th>ND</th><th>H5+H9</th><th>IB</th><th>IBD</th><th>MG</th></tr><tr><th>方法</th><th>HI</th><th>HI</th><th>ELISA</th><th>ELISA</th><th>ELISA</th></tr></table> 注：以上阴影部分为紧急检测的增加项目 6. 检测结果分析： 检测结果出来后及时对其进行分析，改善不足之处。		项目	ND	H5+H9	IB	IBD	MG	方法	HI	HI	ELISA	ELISA	ELISA	1. 皮下注射： a. 注射器应严格消毒，剔除钝卷针头，针头长度一般以1.0-1.25cm为宜。 b. 接种前要校正注射剂量，并且在注射过程中定时校正连续注射器，杜绝出现滴漏、气泡出现。 c. 注射过程中，免疫200只鸡左右就要更换一次针头。 d. 在注射过程中，定时晃动疫苗瓶，以保证疫苗均匀 e. 注射疫苗前要将疫苗回温到25-30℃，并充分摇匀。 f. 疫苗分装不可打开瓶盖直接倾倒，以免污染（可用注射器抽注）。 g. 接种时，用手轻轻提起鸡的颈部皮肤，将针头从颈背1/3处向后平行进针，使疫苗注入皮下，皮肤与肌肉之间，注意勿伤及肌肉、血管、神经与骨头。发现漏免的及时补充。 2. 喷雾免疫： a. 使用疫苗稳定剂百喷。 b. 喷雾器应绝对清洁，一定不能有消毒剂或洗涤剂残留 c. 雾滴大小80-120μm，喷雾免疫时关闭通风，喷雾后5分钟恢复正常通风状态。 3. 点眼免疫： a. 使用疫苗稳定剂百滴。 b. 滴眼时，要固定要鸡，滴嘴从2-3厘米高度垂直滴入鸡的眼睛，待鸡眨眼将疫苗吸收后再放下鸡只。 c. 免疫时滴嘴不得接触眼球，以免损伤眼睛。 d. 免疫过程中，要始终保持滴嘴绝对垂直，以保证每滴疫苗的接种剂量恒定。 4. 饮水免疫 a. 使用疫苗稳定剂百潘加 b. 免疫前一天进行模拟测试，确定免疫的3小时饮水量。 c. 免疫前后两天禁止使用消毒剂 d. 开灯后进行免疫，一次完成。 5. 饮水给药： a. 饮水给药有集中给药和全天给药2种方式。一般采用集中给药和全天给药结合；根据鸡群的疾病/健康情况（饮水、吃料的状况）确定给药方法。 b. 集中给药要求4小时饮完。大约需要全天饮水的1/3-1/4水量。		1. 根据出栏计划，于出栏前4天采样化验药残。之后将不再用任何药物。 2. 计算好路途时间，安排8小时停食（从停食至挂鸡）不能停水。 3. 抓鸡前20分钟，将舍内水线、料线升起约1.5-1.8m。 4. 抓鸡前5分钟，将鸡舍内灯泡拆下，只留抓鸡处的灯泡防止由于亮度太大引起兴奋造成应激。 5. 鸡舍内出栏工作准备好后方可打开舍门开始抓鸡。 6. 抓鸡过程中，要不时对鸡群进行驱赶，防止鸡群拥挤扎堆致死。 7. 盯紧抓鸡队员，应双手抱鸡抓入笼中，禁止抓翅膀、腿头等，并且动作要轻柔。 8. 抓鸡队在卸空笼时要轻拿、轻放，禁止动作粗暴用空笼砸死鸡，抓鸡过程要快、轻、柔、稳、准，夏天每笼装6-8只，冬季每笼装8-10只，装车要快、柔。 9. 夏季高温时，要尽可能安排在晚上出栏，如白天出栏要有必要降温措施，如打水、风扇降温等；冬天出栏，毛鸡车要加盖篷布，防运输过程冻死鸡。 10. 如出现一舍有两天出栏时，第一天出栏后要立即将水线料线放下，且温度、通风、光照等恢复正常饲养状态。 11. 出栏过程中要时刻注意人员安全和物品安全，防偷盗。	
项目	ND	H5+H9	IB	IBD	MG												
方法	HI	HI	ELISA	ELISA	ELISA												

Broiler Management Essentials

Chick Placement	Weigh	Turn-out
Before Chick Placement: 1.Pre-test all equipment to guarantee smooth operation, pre-set controllers. 2.Litter should be flat without foreign material ,5-8cm/8-10(sum./win.) thick. 3.Litter temperature should be evenly at 32℃, chick density(24-30/m2) 4.Drinkers: 60chicks/bell drinker. Fill them and preheat in the house. Waterlines should be used at the same time during brooding. Nipples should be at eye level with one visible drop . Flow rate(20ml/min) 5. 80chicks/feeder lid.Also put 4 pieces of paper(each paper 1.2-1.5m width, 1/3 house width) around the brooding area for 20g feed/chick Chick Placement: 1. Liaison with the Hatchery for precise arrival timing. 2. Upon arrival, check truck conditions, chickbox temperature and flock conditon. 3.Check receipt and keep record. Take photos of any abnormality. 4. Unload one truck in 20 to 25min, but should not be over 30min. Distribute birds proptionally if there are pens. 5.Check randomly 10 boxes for chick quality and quantity, and record. 6..Train chicks to eat and drink immediately after placement. 7. Make chicks drink first if it takes above 4 hours from picking to arrival, and start feeding 2h after that.If not, start feeding and drinking at the same time. 8.Check crops at 3,6,12 hours. Each time with 200 chicks. Crop Full standard: 65% at 3h,85% at 6h, and 90% at 12h	1.Weighing Time: Chick arrival weigh 2 boxes each truck 7days weigh 150-200chicks/house at 5 spots 14days weigh 150-200chicks/house at 5 spots 21days weigh 150-200chicks/house at 5 spots 28days weigh 150-200chicks/house at 5 spots 35days weigh 150-200chicks/house at 5 spots 42days or 1 day before selling weigh 150-200chicks/house at 5 spots 2. Weighing spots: weight should be taken at the spots as illustrated below:  3. Weighing method: prepare scales,net and chart, select the spots like above. put the net and leave an open for gathering the around birds by workers. Close the net to weigh all the birds and record. 4. Caculate the average bodyweight and uniformity. Compare it with the standard chart. In case of failure to meet the standard, find out the reason and solution. 5. Uniformity: calculate the number of birds at bodyweight of ±10% either side of the average BW.,and calculate the percentage of the number in the whole sample number.	1. winter (November to March) 0-3days  4-10days  11-15days  16-21days  22-28days  29days to sell  2. summer (April to October) 0-3days  4-10days  11-15days  16-selling  Note: Preheat the area to open one day ahead at each time of migration during brooding and ensure suffieent water and feed supply with proper lighting. Drive the birds to move to newly open area and make sure proportional distribution of birds in each pen. Turn-out progress could be adjusted according to the actual climate conditions. If temperatures can meet the requirement, turn-out progress could not be limited to the direction above, and more speed progress is also permissive.

Sampling						Vaccination and Medication Through Water						Selling Process																	
1. sampling time: Three times totally: 0d（in hatchery）/21d/1day before selling						1. subcutaneous injection: a. Disinfect syringe strictly, and remove blunt needles. Needle length should be 1.0-1.25cm. b. Calibrate syringes before vaccination. And calibrate them during injection regularly to avoid leakage or bubbles. c. Change needles after injecting 200 birds continuously. d. Shake vials to keep vaccine even e. Warm vaccine to 25-30℃ and shake it even before vaccination. f.Subpackage of vaccine cannot be poured directly after opened to avoid contamination.Syringe can be used for drawing and injecting. g. Lift up the skin on the neck to creat a pocket between the skin and neck muscles. The site of injection should be at the 1/3 of the lower neck region on the dorsal mid line of the neck. Avoid injecting into bones. Re-vaccinate the birds that miss vaccination.						e.Sprayer nozzles should be 1m above the floor for spraying evenly.						1. Test chemical residual 4 days before selling the flock. After the sampling, no medicine is allowed to use.											
2.sampling quantity: Select one fixed house from the same ages for 20 samples.Take samples at the age of 0 day on the farm if there's any baby chicks bought from outside						2. Spray: a.Use vaccine stablizer b. Sprayers should be totally clean without any trace of disinfectants or c. Fog drop should be 80-120μm. Close ventilation for spray vaccination. d.Lighting in the house should be dim.						3. Eye drop: a.Use vaccine stablizer. b.Fix the bird and place one drop of vaccine into eyes from 2-3cm above the bird. Release the bird after the vaccine is absorbed. c.Avoid nozzle contacting eyes to cause damage to eyes. d.Keep nozzle vertical all the time during vaccination to ensure each drop will be the same.						2. Calculate the delivering time and withdrawal time for 8 hours, but water should be provided all the time.											
3. sampling method: Blood sampling from heart at DOC.Take 1 ml of blood samples randomly from wing veins in the future. Record detailed inforamtion. Samples should not be frozen. Keep blood samples under 25-30℃ for 1 houtu produce serum. Samples should be stored in fridge for producing sera before detection. Note: a. Only sera are allowed for freezing. b.Samples should be well labelled.						4. Drinking a.Use vaccine stablizer. b.Conduct simulation test one day before vaccination to determine c. Stop using disinfectants one day before or after the vaccination. d.The whole administration process will be finished one time after the house turns on lights.						4. Medication through water: a.There are mainly 2 methods: concentrated & whole day treatment. Normally concentrated method is used as major and supplementary with whole day watering medication. b.Drink out in 4 hours for concentrated administration with 1/3-1/4 of day long water consumption.						3. Lift feeder line and water line for 1.5-1.8m 20 mins before bird catching.											
4.Detection process:farm-sampling-Laboratory												4. Remove the bulbs 5 mins before bird catching. Only leave the bulbs for catching birds to avoid stress because of too high lighting intensity.																	
5. Test items and methods:												5. Start bird catching only when the preparations are well done.																	
<table><tr><td>Items</td><td>ND</td><td>H5+H9</td><td>IB</td><td>IBD</td><td>MG</td></tr><tr><td>Method</td><td>HI</td><td>HI</td><td>ELISA</td><td>ELISA</td><td>ELISA</td></tr></table> Emergency test was highlighted in gray color.						Items	ND	H5+H9	IB	IBD	MG	Method	HI	HI	ELISA	ELISA	ELISA							6. Drive away the birds during catching to avoid death because of crowd.					
Items	ND	H5+H9	IB	IBD	MG																								
Method	HI	HI	ELISA	ELISA	ELISA																								
6. Results and analysis for future improvement & corrections.												7. Monitor live haul crew for holding birds. It is forbidden to catch wings, legs and heads. Catching should be performed gently.																	
												8. Coops should be unloaded gently,and avoid killing birds because of rudeness. Catching should be performed gently,correctly. In summer, each coops/coop can hold 6-8chicks, while in winter 8-10chicks. The loading should be quick ,																	
												9. Arrange selling at night in hot summer as possible as you can. If sell/selling in the day, measures should be taken to lower the temperature, such as wet the house or use fans.Use tarpaulin in winter to avoid mortality because of chill stress during transportation.																	
												10. If one house will be finished in 2 days, lower the water line and feeding line to normal height after 1st selling. Maintain the temperature, ventilation and lighting																	
												11.During live haul, pay attention to the safety of workers and goods.																	
												Avoid stealing and cheating.																	

肉鸡饲养管理标准												
Broiler Management Standard												
日龄 Age	预计料量 Feed	累计料量 Acc. Feed	饲料种类 Feed Type	目标体重 Weight	日增重 Daily Gain	料肉比 Acc. FCR	目标温度 Target. Temp. (Apr.-Oct.)	目标湿度 Target Hum. (Apr.-Oct.)	目标温度 Target Temp. (Nov.-Mar.)	目标湿度 Target Hum. (Nov.-Mar.)	光照时间 Lighting Time	光照强度 Lighting Intensity
(DAYS)	(G/BIRD)	(G/B/DAY)	TYPE	G/BIRD	G/B/D		°C	%	°C	%	HRS	LUXE
0	5.0		J510	42.0			33.0	70-75	33.0	65-70	24h	40-60
1	12.0			48.5	6.5		32.5		32.5		23h	
2	16.0			59.4	10.9		32.2		32.2			
3	18.0			74.6	15.2		31.7		31.7			
4	20.0			93.9	19.3		31.3		31.3			
5	23.0			117.2	23.3		30.8		30.8			
6	26.0			144.4	27.2		30.4		30.4			
7	30.0	150.0		175.4	31.0	0.856	30.0		30.0			
8	35.4	185.4		210.0	34.6	0.884	29.8	65-70	29.8	60-65	22h	
9	40.7	226.1		248.0	38.1	0.912	29.6		29.6		20h	
10	46.1	272.2		289.5	41.5	0.941	29.4		29.4		18h	
11	51.8	324.0		334.2	44.7	0.970	29.3		29.3		16h	
12	57.6	381.6		382.1	47.8	1.000	29.1		29.1			
13	63.6	445.2		432.9	50.8	1.029	29.0		29.0			
14	69.6	514.8	486.6	53.7	1.059	28.7	28.7					
15	75.8	590.6	543.0	56.4	1.088	28.4	60-65		28.4			
16	81.9	672.5	602.0	59.0	1.118	28.1		28.1				
17	88.1	760.6	663.5	61.5	1.147	27.7		27.7				
18	94.3	854.9	727.4	63.9	1.176	27.4		27.4				
19	100.4	955.3	793.5	66.1	1.205	27.1		27.1				
20	106.5	1061.8	861.6	68.2	1.233	26.7		26.7				
21	112.5	1174.3	931.8	70.2	1.261	26.4		26.4				
22	118.4	1292.7	1003.8	72.0	1.289	26.1	60-65	26.1	50-60	18h	5-10	
23	124.2	1416.9	1077.5	73.7	1.316	25.8		25.7				
24	129.8	1546.7	1152.8	75.3	1.343	25.5		25.3				
25	135.3	1682.0	1229.5	76.8	1.369	25.2		24.9				
26	140.7	1822.7	1307.6	78.1	1.395	25.0		24.5				
27	145.8	1968.5	1386.9	79.3	1.421	24.7		24.1				
28	150.8	2119.3	1467.3	80.4	1.446	24.5		23.7				
29	155.5	2274.8	1548.6	81.3	1.471	24.3		55-60				23.3
30	160.1	2434.9	1630.7	82.1	1.495	24.0	22.9					
31	164.4	2599.3	1713.5	82.8	1.519	23.7	22.5					
32	168.5	2767.8	1796.9	83.4	1.543	23.4	22.1					
33	172.3	2940.1	1880.7	83.8	1.566	23.1	21.7					
34	175.9	3116.0	1964.8	84.1	1.589	22.8	21.4					
35	179.2	3295.2	2049.2	84.3	1.611	22.5	21.1					
36	182.3	3477.5	J512 /J513	2133.5	84.4	1.633	22.2	55-60	20.8	50-55		19h
37	185.2	3662.7		2217.8	84.3	1.655	21.8		20.5			20h
38	187.8	3850.5		2301.9	84.1	1.676	21.5		20.2			21h
39	190.1	4040.6	J513	2385.7	83.8	1.698	21.2		19.9			22h
40	192.2	4232.8		2469.0	83.3	1.719	20.9		19.6			23h
41	194.0	4426.8		2551.7	82.7	1.739	20.6		19.3			24h
42	195.6	4622.4		2633.7	82.0	1.760	20.4		19.0			
43	197.0	4819.4		2714.9	81.2	1.780	20.1	50-55	18.7	50-55		
44	198.1	5017.5		2795.1	80.2	1.801	19.8		18.4			
45	199.0	5216.5		2874.2	79.1	1.821	19.5		18.0			
46	199.7	5416.2		2952.1	77.9	1.841						
47	200.2	5616.4		3028.6	76.5	1.862						
48	200.5	5816.9		3103.6	75.1	1.882						
49	200.6	6017.5		3177.1	73.4	1.902						

BROILER VACCINATION PROGRAM									
Age (Days)	Vaccine spectrum	Strains	Vaccine type	Dose	Route	Vaccination equipment	Vaccine Brand	Company	Remarks
1 day (hatchery)	NDV	Ulster	Killed	Half	SQ injection	Biojector	Gallimmune ND 300ml (1000 doses)	Merial	Double Shot Machine
	Marek's+IBD	HVT+IBDV p2-gene	Killed	Full	SQ injection	Biojector	Vaxxitek (1000 doses)	Merial	Double Shot Machine
	A1	H9	Killed	Half	SQ injection	Syringe	A1 H9N2 250ml (500 doses)	Merial	Use in winter
	NDV+IBV	NDV VG/GA, IBV H120	Live	Full	Spray	Spray cabinet	Avinew+H120 (2000 doses)	Merial	
10-12 days	NDV+IBV	NDV LaSota, IBV Mass	Live	Full	Eyedrop	Eyedropper	ND Blen (2000 doses)	Merial	Applied combined via eye drop
	A1	H9	Killed	Half	SQ injection	Syringe	A1 H9N2 250ml (500 doses)	Merial	Use in winter
21 days	NDV	NDV VG/GA	Live	Full	Spray	Backpack sprayer	Avinew (2000 doses)	Merial	

When vaccinating via eyedrop, use vaccine stabilizer Opti-Vac (Animal science Products)

When vaccinating via drinking water, use vaccine stabilizer Vac-Pac Plus (Animal science Products)

Antibiotics in Hatchery: Gentamicyn pH 7 or Excenell/ Pfizer and chabges every 6 months

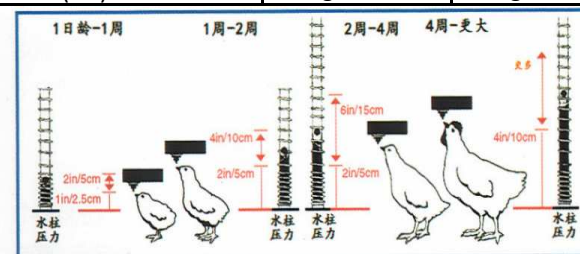
Use the fixed vaccination/medication vendor from countable company, like Merial, Pfizer, Lonman, Novatis etc.

This program will be updated accordingly.

BROILER SAMPLING PROGRAM							
Age	No. of serum samples	NDV	IBV	IBD	AI H5	AI H9	MG
1 day	20	HI	ELISA	ELISA	HI	HI	ELISA
21 days	20	HI	ELISA	ELISA	HI	HI	ELISA
Processing	20	HI	ELISA	ELISA	HI	HI	ELISA

风冷参数 The temperature reduction effecton								
注意: 此表适用于日龄超过28天, 已长成全部羽毛的鸡只。 Note:The table applies to birds older than 28 days fully feathered.								
温度°F Temp	温度°C Temp	相对湿度 Relative Humidity%	气流速度 (米/秒) Airspeed(m/s)					
			0 m/s	0.5 m/s	1.1 m/s	1.5 m/s	2.0 m/s	2.5 m/s
95	35	30%	35	31.6	26.1	23.8	22.7	22.2
		50%	35	32.2	26.6	24.4	23.3	22.2
		70%	38.3	35.5	30.5	28.8	26.1	25
		80%	40	37.2	31.1	30	27.2	25.2
90	32.2	30%	32.2	28.8	25	22.7	21.6	20
		50%	32.2	29.4	25.5	23.8	22.7	21.1
		70%	35	32.7	28.8	27.2	25.5	23.3
		80%	37.2	35	30	27.7	27.2	26.1
85	29.4	30%	29.4	26.1	23.8	22.2	20.5	19.4
		50%	29.4	26.6	24.4	22.8	21.1	20
		70%	31.6	30	27.2	25.5	24.4	23.3
		80%	33.3	31.6	28.8	26.1	25	23.8
80	26.6	30%	26.6	23.8	21.6	20.5	17.7	17.7
		50%	26.6	24.4	22.2	21.1	18.9	18.3
		70%	28.3	26.1	24.4	23.3	20.5	19.4
		80%	29.4	27.2	25.5	23.8	21.1	20.5
75	23.9	30%	23.8	22.2	20.5	19.4	16.6	16.6
		50%	23.9	22.8	21.1	20	17.7	16.6
		70%	25.5	24.4	23.3	22.2	20	18.8
		80%	26.1	25	23.8	22.7	20.5	20
70	21.1	30%	21.1	18.9	17.7	17.2	16.6	15.5
		50%	21.1	18.9	18.3	17.7	16.6	16.1
		70%	23.3	20.5	19.4	18.8	18.3	17.2
		80%	24.4	21.6	20	18.8	18.8	18.3

水质标准 Water Quality Standards		
污染物、矿物质或离子 Contaminant,Mineral Or Ion	平均值 Ave. Level	可接受上限值 Max. Accept Level
细菌/Bacteria		
细菌总量/Total Bacteria	0 CFU/ml	100 CFU/ml
大肠杆菌/Coliform Bacteria	0 CFU/ml	50 CFU/ml
酸度和硬度 Acidity And Hardness		
pH值/pH	6.8-7.5	6.0-8.0
总硬度/Total Hardness	60-180 ppm	110 ppm
天然出现元素 Naturally Elements		
钙/Calcium(Ca)	60 mg/L	
氯化物/Chloride(Cl)	14 mg/L	250 mg/ml
铜/Copper(Cu)	0.002 mg/L	0.6 mg/L
铁/Iron(Fe)	0.2 mg/L	0.3 mg/L
铅/Lead(Pb)	0 mg/L	0.02mg/L
镁/Magnesium(Mg)	14 mg/L	125 mg/L
硝酸盐/Nitrate	10 mg/L	25 mg/L
硫酸盐/Sulfate	125 mg/L	250 mg/L
锌/Zinc		1.5 mg/L
钠/Sodium(Na)	32 mg/L	50 mg/L



肉鸡场入雏检查评分表（RJFY201101.2）

养殖场名称:						养殖场地址:							
养殖者姓名:						鸡群批次:							
养殖者联系方式:						入雏日期:							
检查人:						检查日期:							
检查项目		合格		不合格		检查项目		合格		不合格			
1	场区整洁卫生	5	4	3	2	11	垫料质量合格数量充足	5	4	3	2		
2	鸡舍周边3米无杂草	5	4	3	2	12	水线已清洗已检修正常	5	4	3	2		
3	鸡场道路及两侧清洗清扫干净并消毒	5	4	3	2	13	料线、风机、水帘（包括水池）已清洗并检修调试正常	5	4	3	2		
4	防鸟防虫和灭鼠到位	5	4	3	2	14	鸡舍电路、灯线照明等正常无故障	5	4	3	2		
5	鸡场无上批鸡残留（鸡粪鸡毛垫料垃圾等）	5	4	3	2	15	鸡舍环控器调试正常（包括电控箱、传感器、报警器等）	5	4	3	2		
6	供电设备和备用发电机（包括油料、水、电瓶等）已检查保养	5	4	3	2	16	供暖设备已检修调试正常、燃料充足	5	4	3	2		
7	供水设施及储水池等已清洗检修正常	5	4	3	2	17	鸡舍完全密封到位、保温到位	5	4	3	2		
8	消毒设施正常（消毒盆、消毒池、消毒间、洗澡间、工作服、防护服、鞋帽手套等）	5	4	3	2	18	育雏栏和保温隔膜到位	5	4	3	2		
9	公共场所已经整理并消毒（库房、办公室、宿舍、卫生间、食堂等）	5	4	3	2	19	是否已按规定的程序消毒	5	4	3	2		
10	鸡舍冲洗干净彻底无任何死角	5	4	3	2	20	工人到位、育雏用品到位、安全设施到位、房屋道路围墙等已修好	5	4	3	2		
合格项数:						不合格项数:				总得分:			
备注及需要改进的地方:													
养殖者或场责任人签字:						日期:		泰森公司检查人员签字:				日期:	

备注：不合格项目数超过4个，或者总分低于85分，即判定为不合格，需要整改后经主管以上人员复检合格方可进鸡；总分低于80分的，需由助理经理组织集体复检。

Placement Inspection List (RJFY201101.2)

Farm Name:		Address:	
Contact Person:		Flocks NO.:	
Contact Number:		Placement Date:	
Inspector:		Inspection Date:	

Checking List		Qulified		Unqulified		Checking List		Qulified		Unqulified	
1	Clean the whole farm and keep tidy and well organized	5	4	3	2	11	Enough qulified litter	5	4	3	2
2	No weeds in 3 meters around chicken house	5	4	3	2	12	Water line cleaned and well maintained	5	4	3	2
3	Clean and disinfect roads, including roadside	5	4	3	2	13	Feeder line, fans, cooling pad(including water tank) cleaned and debugging test done	5	4	3	2
4	Wire bird and rodent control program	5	4	3	2	14	Electricity supply and lighting inspected and no breakdown	5	4	3	2
5	No remains from last flock (Manure,Feather and Litter,etc)	5	4	3	2	15	Controller debugging test (including electric cabinet, sensors & sensors)	5	4	3	2
6	Maintenance status of power supply equipmetn and backup generator (including oil,water,charger, etc)	5	4	3	2	16	Heating system inspected with sufficient fuel	5	4	3	2
7	Water supply and water tank are well cleaned and maintained	5	4	3	2	17	Good seal and insulation for chicken house	5	4	3	2
8	Disinfection device(disinfection basin,disinfection pool,disinfection room,shower room,uniforms,protection clothes,boots, caps and gloves, etc)	5	4	3	2	18	Whether brooding fences & plastic sheet for insulation at place	5	4	3	2
9	Public area are well disinfected and organized(warehouse,office,dorm,wash room,canteen, etc.)	5	4	3	2	19	Whether disinfection in accordance with the set procedure	5	4	3	2
10	Completely clean inside chicken houses with no dead angle	5	4	3	2	20	Wether labor, brooding material,safety devices,house,road, fencing walls ready	5	4	3	2

Total qulified items:		Total unqulified items:		Total Score:	
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Notes and Necessary Improvements & Reformation:

Farm manager sign:	Date:	Sign from Tyson company people:	Date:
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Note: if the total unqulified itmes are more than 4 or the total score is less than 85, then the result is unqulified. we need to do reformation,re-inspect conducted by supervisor and place birds after the result is qulified. If the total score is less than 80, the re-inspection should be lead by assistant manager.

生物安全检查日报表 Daily Bio-security checking list			
鸡场/Farm:		日期/Date:	
检查项目 Checking list		实况记录 Record (Y/N)	评价 (Qualified/Unqualified) (合格/不合格)
1	有非必要访客进场吗? Unnecessary Visitors inside?		
2	有人没有遵守72小时原则吗? Fulfillment of 72-hour rule?		
3	有人将手机带入生产区了吗? Any mobile inside production area?		
4	有人将其他小物品带入生产区了吗? Any other private goods inside production area?		
5	有人不遵守洗澡和更衣流程吗? Anyone breaks the procedure of showering and changing clothes?		
6	有人随意进出生产区吗? Anyone go in & out of production area freely?		
7	生产区24小时有隔离措施吗? Any 24-hour isolation procedure in production area?		
8	鸡场大门没有随时关闭吗? Farm gate closed at any time?		
9	手部消毒措施有时没被执行吗? Hand disinfection executed?		
10	脚踏消毒措施优势没有执行吗? Boots disinfection executed?		
11	饲养期间有工人离开鸡场吗? Within on flock, any labor leave the farm?		
12	物品进场没有消毒吗? Any good goes inside without disinfection?		
13	车辆没有消毒吗? Vehicle disinfected or not?		
14	司机既没有消毒又有下车了吗? Driver passed the same disinfection procedure? Get down inside production area?		
15	厂区没执行日常消毒程序吗? Daily disinfection procedure performed or not?		
16	消毒水没有按时添加或更换吗? Disinfectant changed or added timely?		
17	死鸡出场了吗? Any mortality goes out of farm?		
18	鸡场门口来过外来接触过禽类的车辆吗? Any truck contacted with poultry passed by?		
19	做了人员进出场登记吗? Whether people follow registration procedure at entrance & exit?		
20	做了车辆进出场登记吗? Whether trucks follow registration at entrance & exit?		
21	做了死鸡处理记录吗? Do the records for mortality birds?		
22	做了消毒剂使用(更换)记录吗? Keep records of disinfectant administration and exchange?		
23	生物安全标志或标识被破坏了吗? Bio-security Sign damaged or not?		
24	鸡场的生物安全设施不能正常使用了吗? Bio-security facility works well or not?		
25	鸡场发生其他违反生物安全的行为吗? Any violation of bio-security?		

记录人/Record by: _____

嗉囊饱满度检查表

Crop Checking Record

场名 Farm		栋号 House No.	检查人员 Inspector		日期 Date:
结果 Result		饱满 Full 有水有料 Feed & Water	饱满但发硬 Full but Solid 有料无水 Feed & No Water	饱满但发软 Full but Soft 有水无料 Water & No	空 Empty 无水无料 No feed & No
进雏3小时 3 hours after placement 随机检查200只 Random sample 200 birds 正常大于65% >65% as normal					
比例 Proportion					
进雏6小时 6 hours after placement 随机检查200只 Random sample 200 birds 正常大于85% >85% as normal					
比例 Proportion					
进雏12小时 12 hours after placement 随机检查200只 Random sample 200 birds 正常大于90% >90% as normal					
比例 Proportion					
备注：可标注“正”字统计/ Notes:Use Chinese character "正" for accounting.					



肉鸡技术纲要（11月-3月份适用）

编号	工作事项	日龄																																																			
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45						
1	温度	33	32.5	32.2	31.7	31.3	30.8	30.4	30.0	29.8	29.6	29.4	29.3	29.1	29.0	28.7	28.4	28.1	27.7	27.4	27.1	26.7	26.4	26.1	25.7	25.3	24.9	24.5	24.1	23.7	23.3	22.9	22.5	22.1	21.7	21.4	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19	18.7	18.4	18						
2	湿度	65%~70%								60%-65%								55%-60%								50%-60%								50%-60%								50%-55%								50%-55%			
3	耗料（克/只）	5	12	16	18	20	23	26	30	35.4	40.7	46.1	51.8	57.6	63.6	69.6	75.8	81.9	88.1	94.3	100.4	106.5	112.5	118.4	124.2	129.8	135.3	140.7	145.8	150.8	155.5	160.1	164.4	168.5	172.3	175.9	179.2	182.3	185.2	187.8	190.1	192.2	194.0	195.6	197.0	198.1	199.0						
4	饲料类型	J510（0.51Kg/只）															J511M（0.66Kg/只）								J511（0.95Kg/只）								J512M（1.18Kg/只）								J513（1.33Kg/只）								J513（0.59Kg/只）				
5	体重（g）	42							175.4							486.6							931.8							1467.3										2049.2						2633.7				2874.2			
6	称重	√							√							√							√							√													√										
7	投药 （方案举例）	利高霉素												氟苯尼考/氨苄西林 （鸡群出现大肠杆菌症状时用）											泰乐菌素/替米考星 （鸡群出现呼吸道症状时用）											安普霉素/新霉素/粘杆菌素/氨苄西林+中药 （鸡群出现肠炎和病毒感染时用）																	
8	疫苗	NDK、H9 ND+IB Marek' s+I BD										ND+IB(滴眼) H9(颈 皮注射)											Avinew 喷雾																														
9	光照强度	40-60 Lux										5-10 Lux																																									
10	控制光照时间	24h	23h（20:00—21:00）								16h（20:00—4:00）															18h（20:00—2:00）															19h	20h	21h	22h	23h	24h	24h	24h	24h	24h			
11	扩栏	1/3 育雏				√						√					√						√							√																							
12	开食盘	75—100 只/个				撤1/3	撤1/4	撤1/5																																													
13	料线	育雏料线同时使用										料盘上边缘与鸡喙囊平齐																																									
14	水壶	50-60 只/个		撤1/2	撤1/2																																																
15	水线与压力	育雏时水线同时使用，乳头流量20-27毫升/分钟										乳头流量（ml/分）=周龄×7+35																																									
16	水线高度	乳头与鸡眼睛平齐				鸡脖子与水平线呈15° 饮水					鸡脖子与水平线呈30° 饮水								鸡脖子与水平线呈45° 饮水										鸡脖子与水平线呈60° 饮水								鸡脖子与水平线呈65° 饮水																
17	垫料	垫料厚度8—10cm							每三天翻一次（垫料潮每天翻1次）								每两天一次（垫料潮每天翻1次）										每天一次（垫料潮每天翻2次）								每天铺新垫料50包																		
18	检查发电机	√														√														√															√								
19	检查喙囊	入雏后 3 、6、12h							√							√							√							√													√										
20	检查水压	√	√			√			√							√							√							√													√										
21	检查鸡体状况	√	√			√			√											√										√						√																	
22	冲洗水线							√				√					√						√							√				√					√				√										
23	通风	鸡背无风速															鸡背最大风速0.5m/s								鸡背最大风速0.8m/s								鸡背最大风速1.5m/s								鸡背最大风速2.0-2.5m/s												
24	采集血样	√																					√																					√									



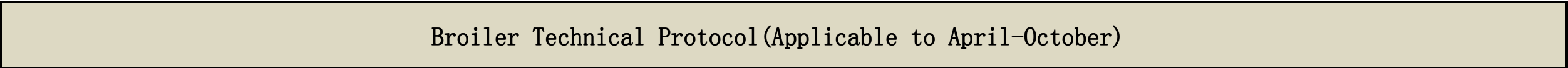
Broiler Technical Protocol(Applicable to November–March)

Serial number	Items	Days																																																
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45			
1	Temperature ℃	33	32.5	32.2	31.7	31.3	30.8	30.4	30.0	29.8	29.6	29.4	29.3	29.1	29.0	28.7	28.4	28.1	27.7	27.4	27.1	26.7	26.4	26.1	25.7	25.3	24.9	24.5	24.1	23.7	23.3	22.9	22.5	22.1	21.7	21.4	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19	18.7	18.4	18			
2	Relative Humidity %	65%-70%									60%-65%						55%-60%						50%-60%						50%-60%						50%-55%						50%-55%									
3	Daily Feed consumption(g/bird)	5	12	16	18	20	23	26	30	35.4	40.7	46.1	51.8	57.6	63.6	69.6	75.8	81.9	88.1	94.3	100.4	106.5	112.5	118.4	124.2	129.8	135.3	140.7	145.8	150.8	155.5	160.1	164.4	168.5	172.3	175.9	179.2	182.3	185.2	187.8	190.1	192.2	194.0	195.6	197.0	198.1	199.0			
4	Feed Type	J510 (0.51Kg/bird)															J511M (0.66Kg/bird)							J511 (0.95Kg/bird)							J512M (1.18Kg/bird)							J513 (1.33Kg/bird)						J513 (0.59Kg/bird)						
5	Target Weight (g)	42							175.4							486.6							931.8							1467.3							2049.2							2633.7			2874.2			
6	Weighing	✓							✓							✓						✓								✓							✓						✓							
7	Medication (proposal example)	Lincomycin											Florfenicol / Ampicillin (Use if the birds have symptom of Ecoli)							Tylosin/ Tilmicosin (Use if the birds have respiratory reaction)										Apramycin/Neomycin/Colimycin/Ampicillin+Chinese herb(Use if the birds have symptom of enteritis and virus infection)																				
8	Vaccination	NDK、H9 ND+IB Marek's+IBD										ND+IB(Eyedrop) H9(SQ)											Avinew Spray																											
9	Lighting intensity (Lux)	40-60 Lux									5-10 Lux																																							
10	Lighting Program	24h	23h (20:00—21:00)									16h (20:00—4:00)											18h (20:00—2:00)														19h	20h	21h	22h	23h	24h	24h	24h	24h	24h	24h			
11	Turn-out	1/3 Brooding				✓						✓						✓						✓							✓																			
12	Feeder lid	75—100 bird/lid				Remove 1/3	Remove 1/4	Remove 1/5																																										
13	Feeder Line	Use feeder line during brooding period									Height of feed line: the crop of birds at the same height as the edge of feed pan																																							
14	Mini drinker	50-60 Birds/drinker			Remove 1/2	Remove 1/2																																												
15	Water Flow Rate and Pressure	Water line is used as well during brooding period, and the flow rate is 20 to 27 ml/min									The flow rate(ml/min)=week×7÷35																																							
16	Height of water line	Nipple height at chick's eye level			Neck forms an angle of 15 degree with the horizontal line					Neck forms an angle of 30 degree with the horizontal line						Neck forms an angle of 45 degree with the horizontal line											Neck forms an angle of 60 degree with the horizontal line						Neck forms an angle of 65 degree with the horizontal line																	
17	Litter	Thickness 8—10cm							Turn over the litter every three days								Turn over the litter every two days											Turn over the litter everyday							Place new litter 50 bag/day															
18	Generator Check	✓														✓															✓														✓					
19	Crop Check	3, 6, 12h after placement								✓						✓								✓							✓						✓							✓						
20	Water Pressure Check	✓	✓			✓			✓							✓							✓								✓						✓						✓							
21	Flock Condition Check	✓	✓			✓			✓											✓										✓						✓														
22	Water Line Cleaning							✓					✓				✓						✓											✓					✓				✓							
23	Ventilation	No airspeed at chick back															Maximum airspeed 0.5m/s at chick back							Maximum airspeed 0.8m/s at chick back							Maximum airspeed 1.5m/s at chick back							Maximum airspeed 2.0-2.5m/s at chick back												
24	Blood Sampling	✓																					✓																					✓						



肉鸡技术纲要(4月-10月份适用)

编号	工作事项	日龄																																																
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45			
1	温度	33	32.5	32.2	31.7	31.3	30.8	30.4	30.0	29.8	29.6	29.4	29.3	29.1	29.0	28.7	28.4	28.1	27.7	27.4	27.1	26.7	26.4	26.1	25.8	25.5	25.2	25.0	24.7	24.5	24.3	24.0	23.7	23.4	23.1	22.8	22.5	22.2	21.8	21.5	21.2	20.9	20.6	20.4	20.1	19.8	19.5			
2	湿度	70%-75%								65%-70%							60%-65%							60%-65%							55%-60%							55%-60%							50%-55%					
3	耗料（克/只）	5	12	16	18	20	23	26	30	35.4	40.7	46.1	51.8	57.6	63.6	69.6	75.8	81.9	88.1	94.3	100.4	106.5	112.5	118.4	124.2	129.8	135.3	140.7	145.8	150.8	155.5	160.1	164.4	168.5	172.3	175.9	179.2	182.3	185.2	187.8	190.1	192.2	194.0	195.6	197.0	198.1	199.0			
4	饲料类型	J510（0.51Kg/只）															J511M（0.66Kg/只）							J511（0.95Kg/只）							J512M（1.18Kg/只）							J513（1.33Kg/只）							J513（0.59Kg/只）					
5	体重（g）	42							175.4							486.6							931.8							1467.3								2049.2							2633.7				2874.2	
6	称重	√							√							√							√							√								√				√								
7	投药 （方案举例）	利高霉素											氟苯尼考/氨苄西林（鸡群出现 大肠杆菌症状时用）							泰乐菌素/替米考星 （鸡群出现呼吸道症状时用）								安普霉素/新霉素/粘杆菌素/氨苄西林 （鸡群出现肠炎时用）																						
8	疫苗	NDK ND+IB Marek's+IBD										ND+IB(滴眼) H9(颈 皮注射)											Avinew 喷雾																											
9	光照强度	40-60 Lux								5-10 Lux																																								
10	控制光照时间	24h	23h（20:00---21:00）								22h	20h	18h	16h（20:00---4:00）										18h（20:00---2:00）														19h	20h	21h	22h	23h	24h	24h	24h	24h	24h			
11	扩栏	1/2- 1/3育 雏				√							√					√					√																											
12	开食盘	75-- 100 只/个				撤1/3	撤1/4	撤1/5																																										
13	料线	育雏料线同时使用								料盘上边缘与鸡喙囊平齐																																								
14	水壶	50-60 只/个		撤1/2	撤1/2																																													
15	水线与压力	育雏时水线同时使用，乳头流量20-27毫升/分钟								乳头流量（ml/分）=周龄×7+35																																								
16	水线高度	乳头与鸡眼睛平齐			鸡脖子与水平线呈15° 饮水					鸡脖子与水平线呈30° 饮水										鸡脖子与水平线呈45° 饮水										鸡脖子与水平线呈60° 饮水							鸡脖子与水平线呈65° 饮水													
17	垫料	垫料厚度5—8cm						每两天翻一次（垫料潮每天翻1次）										每天一次（垫料潮每天翻2次）							每天两次（垫料潮更换新垫料）										每天铺新垫料60包															
18	检查发电机	√														√														√													√							
19	检查喙囊	入雏后 3、6 、12h							√							√							√							√												√								
20	检查水压	√	√			√			√							√							√							√													√							
21	检查鸡体状况	√	√			√			√											√										√																				
22	冲洗水线							√				√					√						√						√					√				√				√								
23	通风	鸡背无风速															鸡背最大风速0.5m/s							鸡背最大风速0.8m/s							鸡背最大风速1.5m/s							鸡背最大风速2.0-2.5m/s												
24	采集血样	√																					√																				√							

[illegible]