

BROUILLER

PM3

Performance
Objectives

2014



ROSS
An Aviagen Brand

Introduction

This booklet contains the performance objectives for the Ross® PM3 Broiler and should be used with the Ross Broiler Management Manual.

Performance

These objectives indicate the performance achievable under good management and environmental conditions and when feeding recommended nutrient levels.

Producers may find that local factors prevent such performance being achieved. For example:

- The availability of raw materials may limit nutrient content and intake.
- Extreme climatic conditions will reduce performance.
- Economic considerations may limit choice of production systems.

Therefore, average performance may be lower.

In the tables values are rounded, this may result in small inaccuracies when using the objectives to calculate other performance statistics.

Yields will vary between processing plants depending on type of equipment used (e.g. carcass chilling technology, automated versus manual de-boning) and the exact portion being produced.

For further information on the management of Ross stock, please contact your local Technical Service Manager or the Technical Service Department.

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Key Management Points

The Ross PM3 is an early maturing broiler with exceptional uniformity. It is favoured in markets where space is at premium and where consumers demand a smaller broiler for whole bird processing. Cost effective production of chicken meat depends on achieving good bird performance and the following points are important to achieve optimum performance of the Ross PM3 broiler:

- Maximise chick quality by good management of hatching, storage and transport conditions.
- Design the brooding set-up to ensure easy access to water and feed at placement and to ease the transition between supplementary systems and the automated feeders and drinkers at 4-5 days. Feed a highly digestible, high quality Starter diet.
- Keep chicks in their thermal comfort zone by monitoring chick behaviour, but beware of low relative humidities (less than 50% RH). Ross PM3 may need slightly warmer early temperatures than other Ross breeds. Establish a minimum ventilation programme from day one.
- Monitor crop fill, feeding and drinking behaviour and 7 day live weight to allow continuous improvement of the brooding set-up.
- Keep birds in their thermal comfort zone throughout the growing period. Fast growing broilers produce large amounts of heat, particularly in the second half of the growout period. Keeping ambient temperatures less than 21°C (69.8°F) from 21 days onwards may improve growth rates.
- Maintain high standards of biosecurity and cleanliness to keep disease to a minimum.

As-Hatched Performance

Day	Body weight (g) ¹	Daily gain (g)	Av. daily gain/week (g)	Daily intake (g)	Cum. intake (g) ²	FCR ³
0	41					
1	57	15		13	13	0.232
2	73	16		17	30	0.412
3	90	18		20	50	0.551
4	111	20		23	73	0.661
5	133	23		27	100	0.748
6	159	26		30	130	0.818
7	188	29	20.89	34	164	0.876
8	219	32		38	203	0.924
9	254	35		43	246	0.965
10	293	38		47	293	1.001
11	334	41		52	345	1.033
12	379	45		57	402	1.061
13	427	48		62	464	1.088
14	478	51	41.52	68	532	1.112
15	533	55		73	605	1.136
16	591	58		79	685	1.159
17	652	61		85	769	1.180
18	716	64		91	860	1.202
19	783	67		97	957	1.223
20	853	70		103	1060	1.244
21	925	72	63.80	109	1169	1.264
22	1000	75		115	1284	1.285
23	1077	77		121	1406	1.305
24	1157	80		127	1533	1.325
25	1238	82		133	1666	1.345
26	1322	84		139	1806	1.366
27	1407	85		145	1951	1.386
28	1494	87	81.34	151	2101	1.406
29	1583	88		156	2258	1.427
30	1672	90		162	2420	1.447
31	1763	91		167	2587	1.467
32	1855	92		173	2760	1.488
33	1947	93		178	2937	1.508
34	2041	93		183	3120	1.529
35	2135	94	91.46	187	3307	1.550

As-Hatched Performance continued

Day	Body weight (g) ¹	Daily gain (g)	Av. daily gain/week (g)	Daily intake (g)	Cum. intake (g) ²	FCR ³
36	2229	94		192	3499	1.570
37	2323	95		196	3696	1.591
38	2418	95		201	3897	1.612
39	2513	95		205	4101	1.632
40	2607	95		209	4310	1.653
41	2702	95		213	4523	1.674
42	2796	94	94.44	215	4738	1.695
43	2889	93		218	4956	1.716
44	2981	92		221	5177	1.737
45	3073	92		224	5401	1.758
46	3163	91		226	5627	1.779
47	3253	90		229	5855	1.800
48	3342	89		231	6086	1.821
49	3430	88	90.60	232	6318	1.842
50	3516	87		234	6553	1.863
51	3602	85		235	6788	1.885
52	3686	84		238	7025	1.906
53	3769	83		239	7264	1.927
54	3851	82		240	7505	1.949
55	3932	81		241	7746	1.970
56	4011	79	83.04	242	7988	1.991
57	4089	78		242	8230	2.013
58	4165	76		243	8473	2.034
59	4239	74		242	8715	2.056
60	4312	73		243	8958	2.077
61	4383	71		243	9200	2.099
62	4453	70		242	9443	2.121
63	4521	68	72.83	242	9685	2.142

NOTES

¹On-farm body weight (i.e. feed present in intestinal tract)

²Feed consumption per living bird

³FCR includes initial body weight at placement and does not account for mortality

In the table values are rounded, this may result in small inaccuracies when using the objectives to calculate other performance statistics.

ROSS PM3 BROILER: Performance Objectives

Male Performance

Day	Body weight (g) ¹	Daily gain (g)	Av. daily gain/week (g)	Daily intake (g)	Cum. intake (g) ²	FCR ³
0	41					
1	56	15		12	12	0.213
2	72	16		16	28	0.383
3	90	18		19	47	0.520
4	110	20		23	69	0.630
5	133	23		26	96	0.719
6	159	26		30	126	0.793
7	187	29	20.91	34	160	0.854
8	219	32		39	199	0.906
9	255	35		43	242	0.950
10	293	39		48	290	0.988
11	336	42		53	343	1.022
12	381	46		58	401	1.052
13	431	49		64	465	1.080
14	484	53	42.32	70	535	1.106
15	540	56		76	610	1.130
16	600	60		82	692	1.153
17	664	64		88	780	1.175
18	731	67		94	874	1.197
19	801	70		101	975	1.217
20	874	73		108	1083	1.238
21	951	77	66.77	114	1197	1.258
22	1031	80		121	1318	1.279
23	1113	82		128	1445	1.299
24	1198	85		135	1580	1.319
25	1286	88		141	1721	1.339
26	1376	90		148	1869	1.359
27	1468	92		155	2024	1.379
28	1562	94	87.29	161	2185	1.399
29	1658	96		168	2353	1.419
30	1756	98		174	2527	1.439
31	1855	99		180	2707	1.459
32	1955	100		186	2893	1.480
33	2057	102		192	3086	1.500
34	2160	103		198	3284	1.520
35	2263	103	100.15	204	3487	1.541

Male Performance continued

Day	Body weight (g) ¹	Daily gain (g)	Av. daily gain/week (g)	Daily intake (g)	Cum. intake (g) ²	FCR ³
36	2367	104		209	3696	1.562
37	2472	105		214	3911	1.582
38	2577	105		219	4130	1.603
39	2682	105		224	4354	1.624
40	2787	105		229	4583	1.645
41	2892	105		233	4817	1.665
42	2996	104	104.71	236	5053	1.686
43	3099	103		239	5292	1.708
44	3201	102		242	5534	1.729
45	3302	101		245	5778	1.750
46	3402	100		247	6026	1.771
47	3501	99		250	6276	1.793
48	3599	98		253	6528	1.814
49	3695	96	99.86	253	6782	1.835
50	3790	95		256	7038	1.857
51	3883	93		256	7294	1.878
52	3975	92		260	7554	1.900
53	4067	91		262	7815	1.922
54	4157	90		263	8079	1.944
55	4245	88		264	8342	1.965
56	4331	86	90.87	265	8607	1.987
57	4416	85		266	8873	2.009
58	4500	84		267	9140	2.031
59	4581	81		266	9405	2.053
60	4661	80		266	9672	2.075
61	4739	78		267	9939	2.097
62	4815	77		267	10206	2.120
63	4890	75	79.87	268	10474	2.142

NOTES

¹On-farm body weight (i.e. feed present in intestinal tract)

²Feed consumption per living bird

³FCR includes initial body weight at placement and does not account for mortality

In the table values are rounded, this may result in small inaccuracies when using the objectives to calculate other performance statistics.

ROSS PM3 BROILER: Performance Objectives

Female Performance

Day	Body weight (g) ¹	Daily gain (g)	Av. daily gain/week (g)	Daily intake (g)	Cum. intake (g) ²	FCR ³
0	41					
1	57	15		14	14	0.252
2	73	16		18	32	0.440
3	91	18		21	53	0.583
4	111	20		24	77	0.692
5	134	23		27	104	0.777
6	160	26		31	135	0.844
7	188	29	21.01	34	169	0.898
8	220	32		38	207	0.943
9	254	35		42	249	0.981
10	292	38		47	296	1.014
11	333	41		51	347	1.043
12	376	44		56	403	1.070
13	423	47		61	464	1.096
14	473	50	40.71	66	530	1.119
15	526	53		71	601	1.142
16	582	56		76	677	1.164
17	640	58		82	759	1.186
18	701	61		87	846	1.207
19	765	64		93	939	1.228
20	831	66		98	1038	1.249
21	899	68	60.84	104	1141	1.270
22	969	70		109	1251	1.290
23	1042	72		115	1365	1.311
24	1116	74		120	1485	1.332
25	1191	76		125	1611	1.352
26	1268	77		130	1741	1.373
27	1347	78		135	1877	1.393
28	1427	80	75.38	140	2017	1.414
29	1507	81		145	2162	1.434
30	1589	82		150	2312	1.455
31	1671	82		154	2466	1.476
32	1754	83		159	2625	1.496
33	1838	84		163	2788	1.517
34	1922	84		167	2955	1.537
35	2006	84	82.76	171	3125	1.558

Female Performance *continued*

Day	Body weight (g) ¹	Daily gain (g)	Av. daily gain/week (g)	Daily intake (g)	Cum. intake (g) ²	FCR ³
36	2090	84		175	3300	1.579
37	2175	84		178	3478	1.599
38	2259	84		182	3660	1.620
39	2344	84		185	3846	1.641
40	2428	84		188	4034	1.662
41	2512	84		192	4226	1.682
42	2595	84	84.17	194	4420	1.703
43	2678	83		197	4617	1.724
44	2761	83		200	4817	1.745
45	2843	82		202	5020	1.766
46	2924	81		205	5224	1.786
47	3005	81		207	5431	1.807
48	3085	80		209	5640	1.828
49	3165	79	81.34	211	5851	1.849
50	3243	78		213	6064	1.870
51	3320	77		214	6278	1.891
52	3397	76		216	6494	1.912
53	3472	75		217	6710	1.933
54	3546	74		218	6928	1.954
55	3619	73		218	7146	1.975
56	3691	72	75.22	219	7365	1.995
57	3761	70		219	7585	2.016
58	3830	69		219	7804	2.037
59	3898	67		219	8024	2.058
60	3964	66		219	8243	2.079
61	4028	64		218	8461	2.100
62	4091	63		218	8679	2.121
63	4152	61	65.80	216	8895	2.143

NOTES

¹On-farm body weight (i.e. feed present in intestinal tract)

²Feed consumption per living bird

³FCR includes initial body weight at placement and does not account for mortality

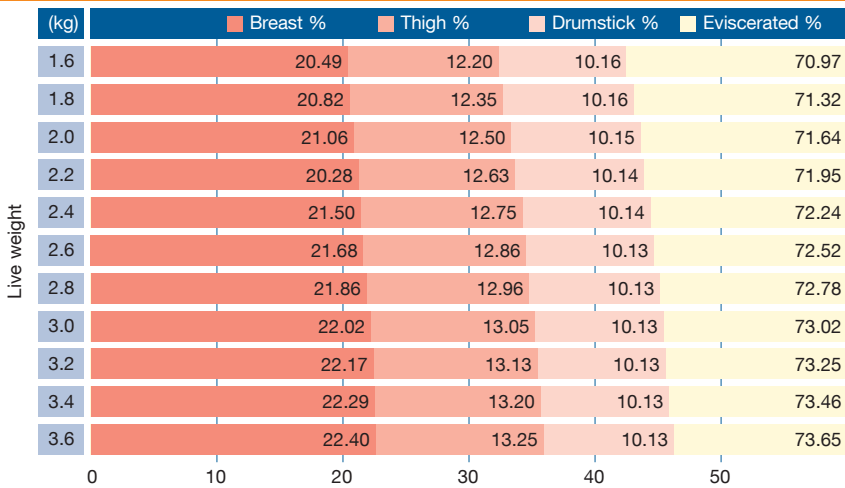
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ROSS PM3 BROILER: Performance Objectives

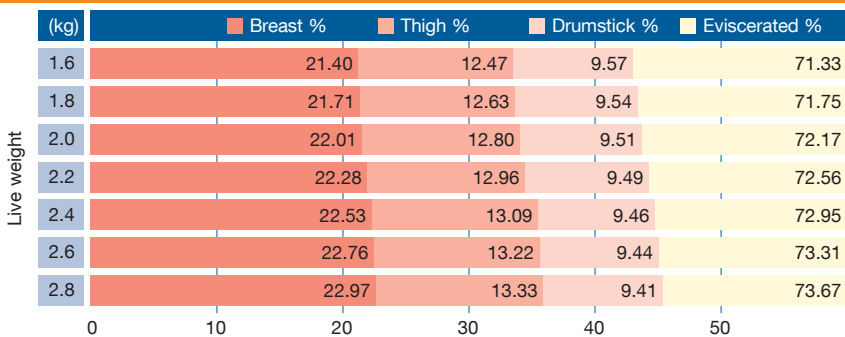
Carcass Yield

The following diagrams indicate how yields of the major portions change with increasing live weight in each sex. Two types of processing are described: eviscerated yield is broken down into breast meat, thigh and drumstick to represent a portioning operation and into breast meat and leg meat to represent a deboning operation.

ROSS PM3 Male - Portion

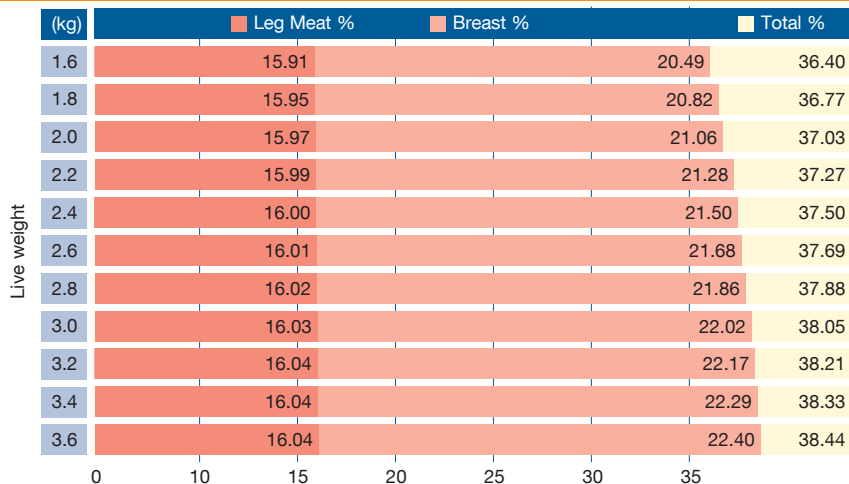


ROSS PM3 Female - Portion

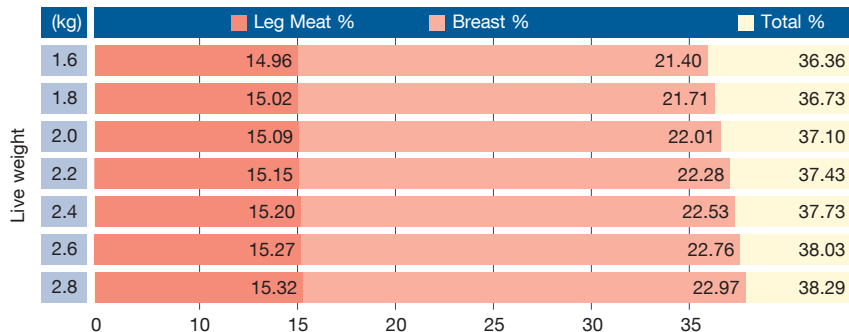


ROSS PM3 BROILER: Performance Objectives

ROSS PM3 Male - Debone



ROSS PM3 Female - Debone



Definitions of terms:

Eviscerated % eviscerated carcass (without neck, abdominal fat and internal organs) as a percentage of live weight.

Breast % breast meat (without skin and bone) as a percentage of live weight.

Thigh/Drumstick % whole thigh/drumstick (with skin and bone) as a percentage of live weight.

Leg Meat % sum of deboned thigh (without skin) and deboned drumstick (without skin) as a percentage of live weight.

NOTE: These figures represent dry yield. They do not include any moisture retained during chilling or processing. Carcass component yields will vary among processing plants depending on, for example, type of equipment used and the exact portion(s) being produced.



Every attempt has been made to ensure the accuracy and relevance of the information presented. However, Aviagen accepts no liability for the consequences of using the information for the management of chickens.

For further information on the management of Ross stock, please contact your local Technical Service Manager or the Technical Services Department.