



荷榮實業股份有限公司

黃栢熙 董事長

Salmeter 無籠飼養設備



SALMET®

歐盟設備人道飼養規範

COUNCIL DIRECTIVE 1999/74/EC of 19 July 1999

laying down minimum standards for the protection of laying hens

1999年7月19日理事會指令1999/74 / EC 制定保護蛋雞的最低標準

所有設備設計，皆須符合此規範才可由歐盟認證

1. ...either linear feeders providing **at least 10 cm per bird** or circular feeders providing at least 4 cm per bird...
每隻雞的線性餵食器 **至少提供10公分** 或每隻雞提供至少4公分的環形餵食器
2. ...where nipple drinkers or cups are used, there shall be at least **one nipple drinker or cup for every 10 hens**.
在使用乳頭飲水器或杯子的地方，**每十隻母雞至少要有一個乳頭飲水器或一個杯子**。
3. If group nests are used, there must be **at least 1 m² of nest space for a maximum of 120 hens**;
如果使用成組的巢，則**必須至少有1平方米的巢空間，最多可容納120隻母雞**。

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4. **Adequate perches**, without sharp edges and providing **at least 15 cm per hen**. Perches must not be mounted above the litter and the horizontal distance between perches must be at least 30 cm and the horizontal distance between the perch and the wall must be at least 20 cm;

足夠的棲息處，沒有鋒利的邊緣，**每隻母雞至少提供15公分的距離**。不得將墊腳安裝在垃圾桶上方，並且墊腳之間的水平距離必須至少30公分，並且墊腳和牆壁之間的水平距離必須至少20公分；

5. at least 250 cm² of littered area per hen, **the litter occupying at least one third of the ground surface**
每隻母雞至少有250平方公分的墊料區域，**墊料至少佔地面的三分之一**

6. there must be several pop holes giving direct access to the outer area, at least 35 cm high and 40 cm wide and extending along the entire length of the building;

in any case, a total opening of 2 m must be available per group of 1 000 hens;

必須有幾個通孔，可以直接通向外部區域，高度至少35公分，寬40公分，並沿建築物的整個長度延伸。
在任何情況下，每1000隻母雞總開口2 m；

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7. The stocking density must not exceed **nine laying hens per m²** usable area.

放養密度不得超過每平方米可用面積九隻蛋雞。

max. 18 birds per ground surface

最大值 每個地面18隻雞

8. ...there shall be **no more than four levels**...the headroom between the levels must be at least 45 cm;

...不得超過四個水平.....水平之間的淨空必須至少為45公分；

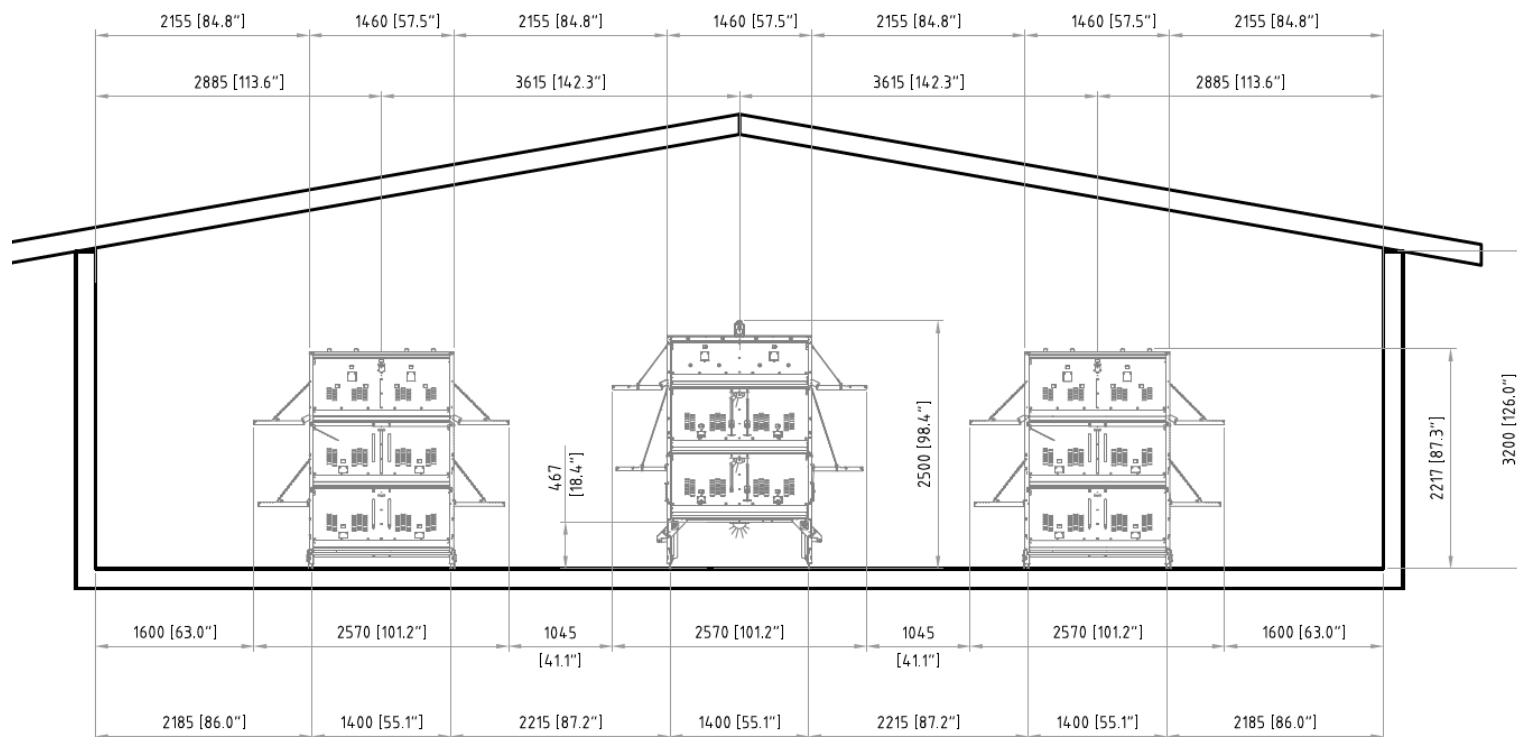
Pedigrow 無籠系統

Pedigrow 小雞無籠飼養

- 專為從小雞到中雞設計的飼養方式
- 提早訓練小雞適應無籠系統的模式



Pedigrow介紹影片



Aviary system 無籠系統

1. HighRise 3 系統

2. Combi Barn 系統

3. All-In-One 系統



Aviary system-**HighRise3**



HighRise 3 aviary system

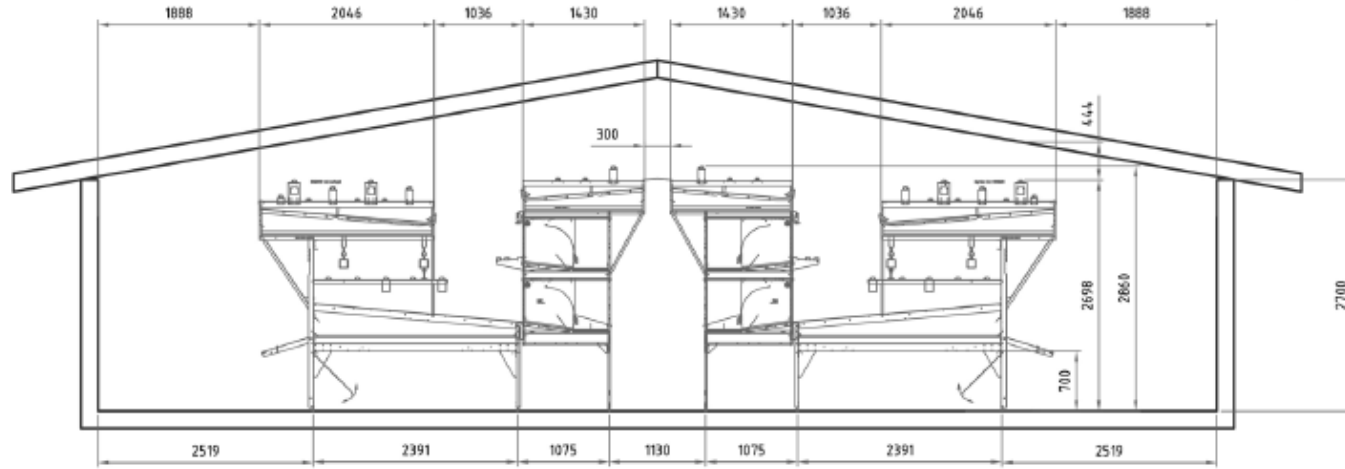
Combines easy management and animal welfare resulting in the **highest laying performance.**

Why choose the HighRise 3 aviary system:

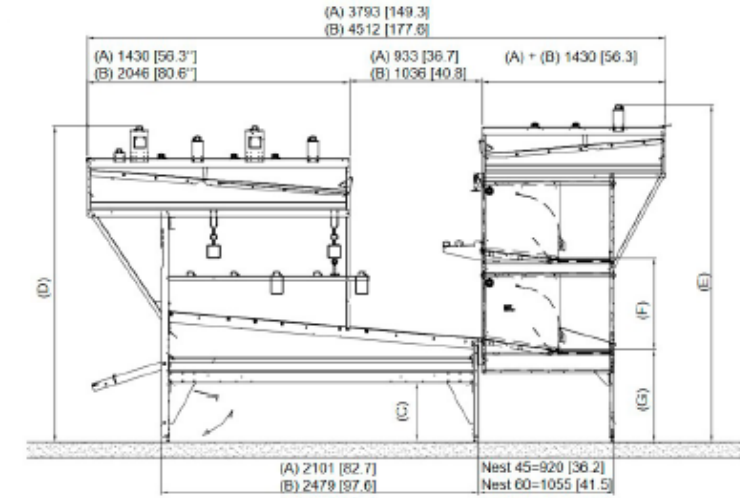
- Wide variety of system layouts
- Easy management
- Several options to train the hens
- Nest, water, feed, perches and slatted areas are easy reachable
- Long lifetime

... for your success!

HighRise3 尺寸圖



Example of a house equipped with the HighRise 3 aviary system



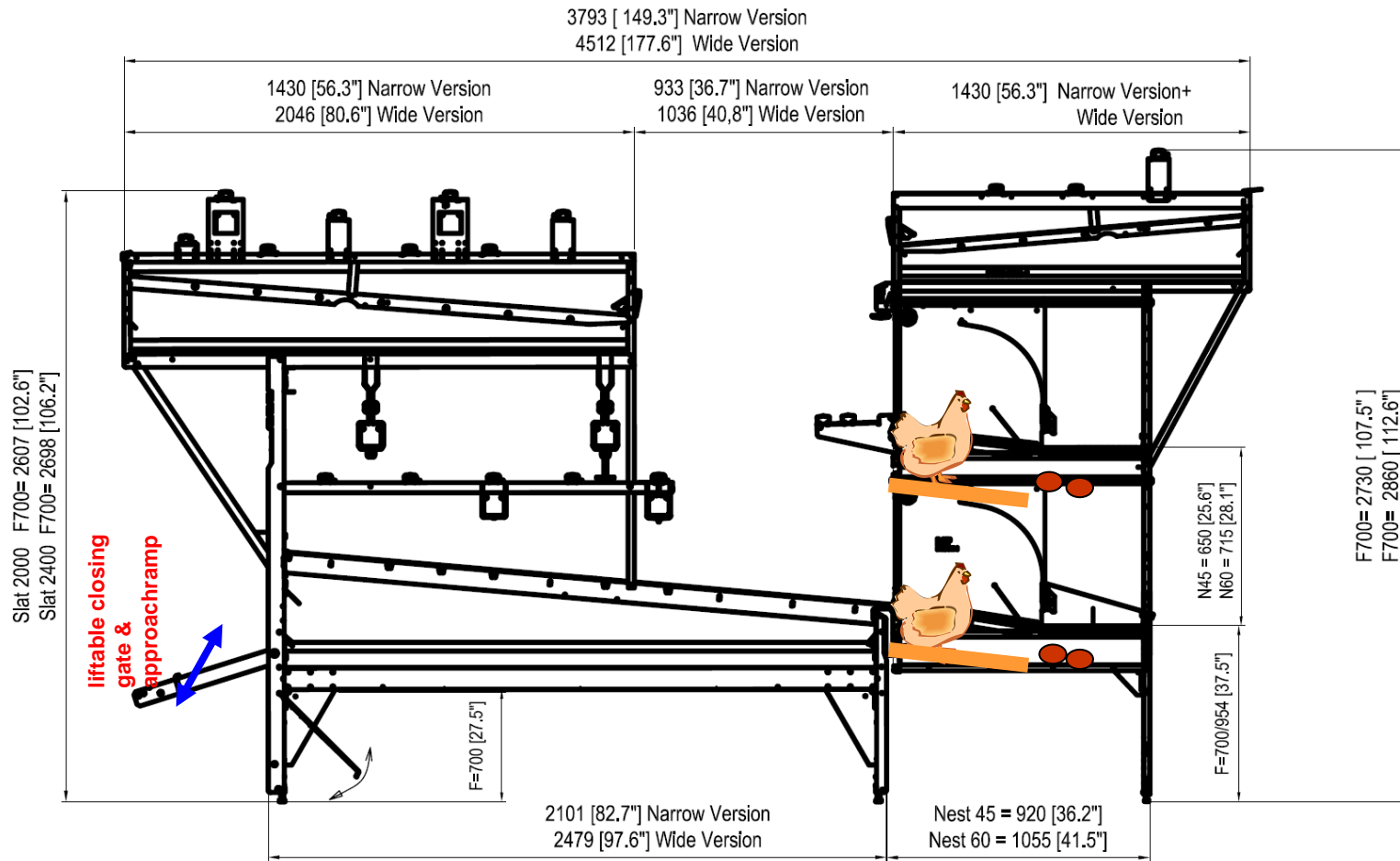
(A) Narrow Version mm [in] (B) Wide Version mm [in]

	(A) Narrow version				(B) Wide version			
	HR3-2000/ FH450/N45	HR3-2000/ FH450/N60	HR3-2000/ FH700/N45	HR3-2000/ FH700/N60	HR3-2400/ FH450/N45	HR3-2400/ FH450/N60	HR3-2000/ FH700/N45	HR3-2000/ FH700/N60
Feed height (C)	450 mm / 17,7"	450 mm / 17,7"	700 mm / 27,6"	700 mm / 27,6"	450 mm / 17,7"	450 mm / 17,7"	700 mm / 27,6"	700 mm / 27,6"
Nest depth	450 mm / 17,7"	600 mm / 23,6"	450 mm / 17,7"	600 mm / 23,6"	450 mm / 17,7"	600 mm / 23,6"	450 mm / 17,7"	600 mm / 23,6"
Overall width (incl. approaches)	4085 mm / 160,8"	4085 mm / 160,8"	4085 mm / 160,8"	4085 mm / 160,8"	4512 mm / 177,6"	4512 mm / 177,6"	4512 mm / 177,6"	4512 mm / 177,6"
Height (D)	2359 mm / 92,9"	2359 mm / 92,9"	2607 mm / 102,6"	2607 mm / 102,6"	2448 mm / 96,4"	2448 mm / 96,4"	2698 mm / 106,2"	2698 mm / 106,2"
Height (E)	2480 mm / 97,6"	2611 mm / 102,8"	2730 mm / 107,5"	2860 mm / 112,6"	2480 mm / 97,6"	2611 mm / 102,8"	2730 mm / 107,5"	2860 mm / 112,6"
Height (F)	650 mm / 25,6"	715 mm / 28,1"	650 mm / 25,6"	715 mm / 28,1"	650 mm / 25,6"	715 mm / 28,1"	650 mm / 25,6"	715 mm / 28,1"
Height (G)	704 mm / 27,7"	704 mm / 27,7"	954 mm / 37,6"	954 mm / 37,6"	704 mm / 27,7"	704 mm / 27,7"	954 mm / 37,6"	954 mm / 37,6"
Perches	18	18	18	18	21	21	21	21
Feed troughs	6	6	6	6	6	6	6	6
Drinker lines	2	2	2	2	2	2	2	2

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 63128 Dietzenbach - Germany

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Aviary system-HighRise3 系統描述

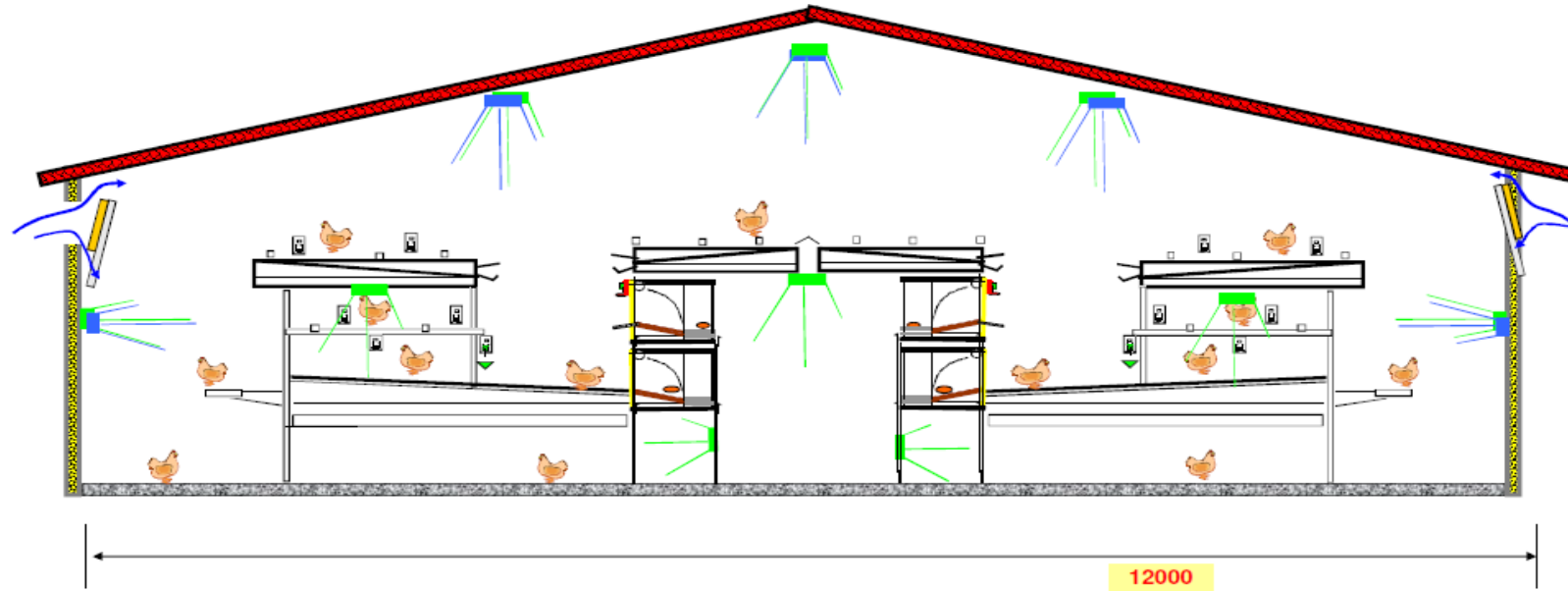


Narrow or Wide version available!

選配：

- 寬/窄版
- 腳高700/450毫米
- N45 / N60產蛋箱
- 增加 餵食器和飲水器線
- 糞肥乾燥（空氣通道）

HighRise 3 範例



House size: 100 x 12 m x 3,50 m

Project	SAMPLE		Date
usable house length	95,00	m	birds/nipple 9,1
floor space	1140	m ²	birds/house 20699,6 birds/m ²
usable area	2300	m ²	manure belt/slat length 95,00 m
Nest length	95,00	m	birds/Nest 68,09
bird density/usable space	9	birds/m ²	perches 19,4 cm/bird
feeding space	11,0	cm/bird pcs	scratch area 50%

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feed trough sides	24				
nipplelines	4	voliere tiers	2	width	2,046 M
Number of nipples per meter	6	roofslat tiers	2	width	1,43 M
Number of perches	42	Slat	2	width	2,479 M
Nest sides	4	outside isles	2		
deducted area (for example Nest)		average isles width	1,70	Meter	
additional area (for example roofslat)		28,50 (Stallfläche Dachslat - Verbindungsgang)			
additional area (for example roofslat)		1131,45 (Anlage)			
		max. no. Birds/nest	67,5		

HighRise 3系統功能



- 產蛋箱和腳踏墊集成在緊湊的系統中！雞隻可以很容易地達到產蛋箱，也容易得到飼料和水的供應，因此能保證產蛋箱雞隻的最大值
- 主要的腳踏墊朝向巢穴入口傾斜！腳踏墊上的雞蛋會滾向產蛋箱
- 完整系統的金屬結構增強了衛生條件
- 在自己的農場測試並運行

HighRise 3系統功能



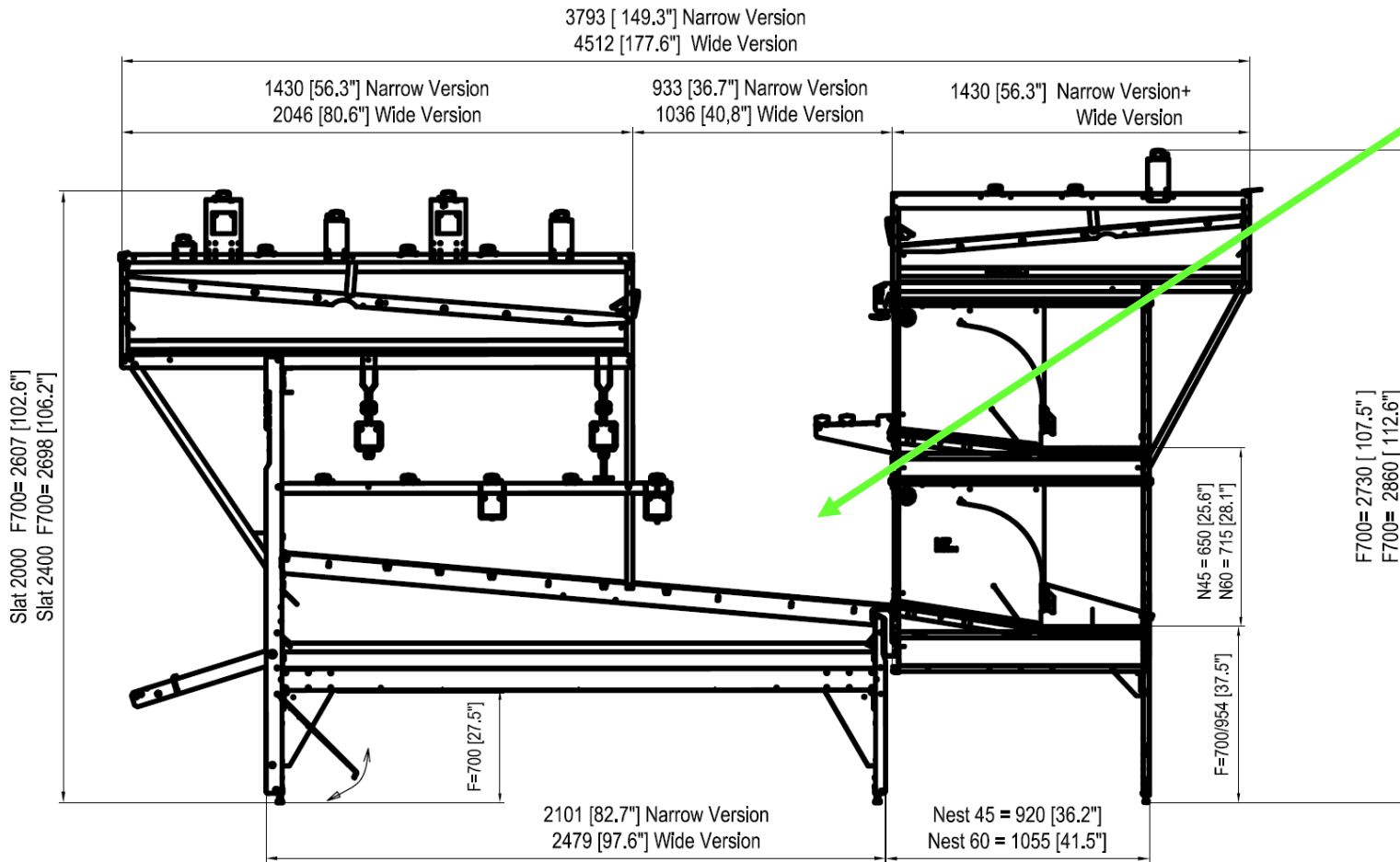
具有雙重功能的閉合網格：

易於鳥從地面跳上或飛到腳踏墊上



可以在踏墊區域飼養鳥類，以便在“開始生產期間”盡快找到飼料，水，產蛋箱，棲息處。

HighRise 3系統功能



- 設備的設計使人們可以輕鬆，舒適地控制雞群。
- 僅需一個維修通道即可輕鬆檢查三種不同水平的腳踏墊。



Aviary system-Combi Barn系統



Combi Barn System

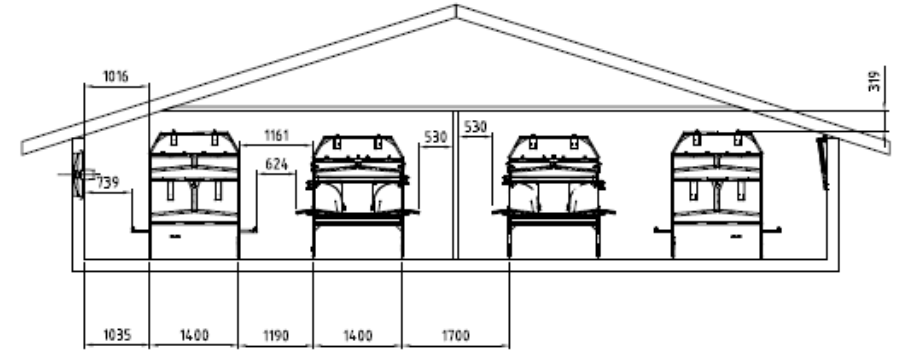
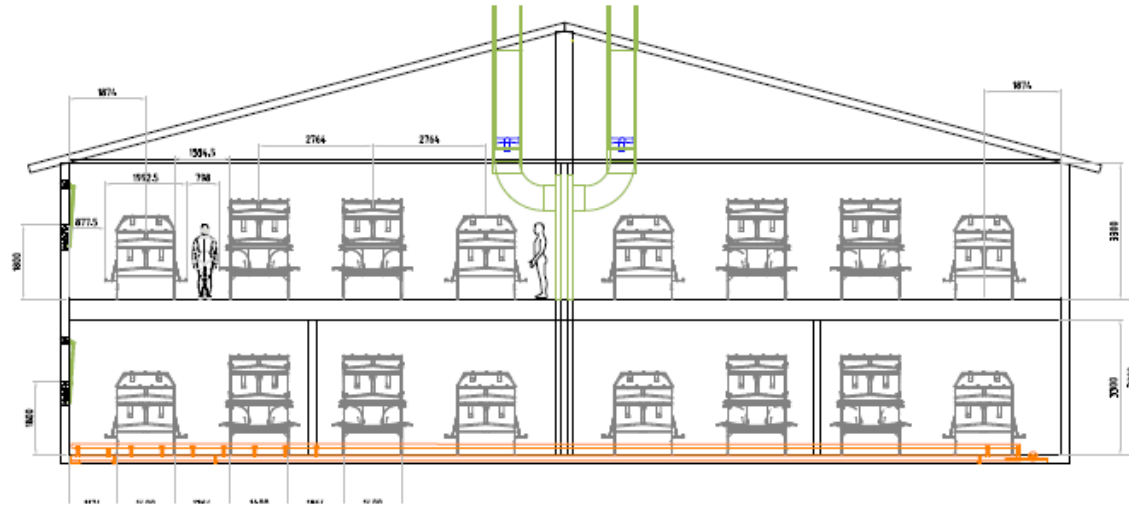
High flexibility & easy to manage **aviary system**.

Why choose the Combi Barn system:

- Available in different lay-outs allows optimum use of the house
- Perfect nest acceptance for the highest no. of sellable eggs
- Nests, water, feed, perches and slatted areas are easy reachable
- Perfect overview
- Long lifetime

... for your success!

Combi Barn系統 尺寸圖



Example of houses equipped with the Combi Barn System

Salmet GmbH & Co. KG

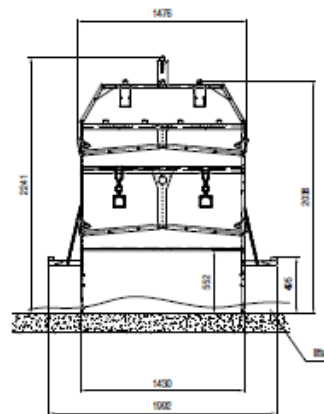
Tel: +49 6074 3760 0

info@salmet.de

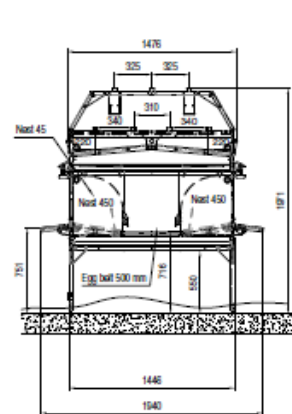
Assar-Gabrielsson-Str. 19a

63128 Dietzenbach - Germany

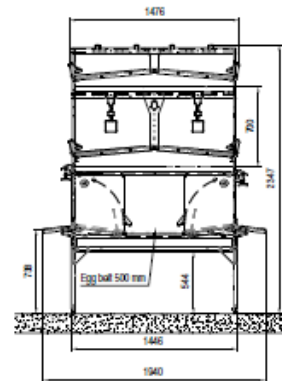
Perching Unit



Nesting Unit



Perching-Nesting Unit



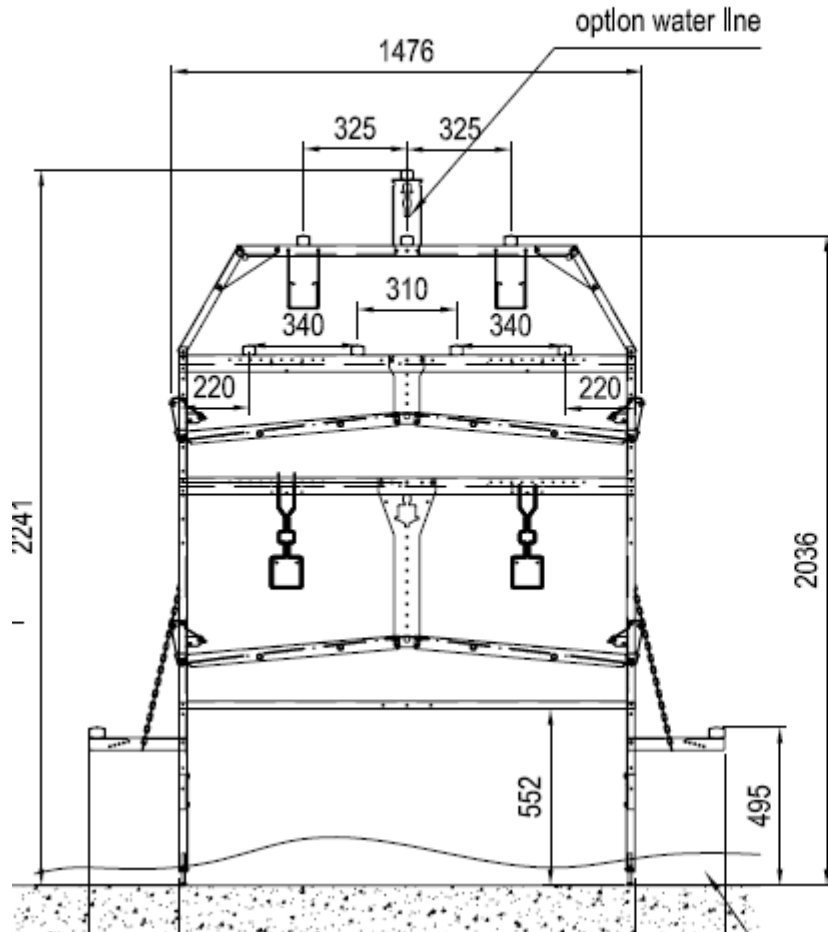
www.salmet.de

	Perching Unit		Nesting Unit		Perching-Nesting Unit	
	Standard	Optional	Standard	Optional	Standard	Optional
Perches*	13		9		10	
Drinker lines	-	2	2	1	2	
Feeder line	4		-	2	2	
Nipple/section	7,5, or 4 nipples per section and drinker line					
Section Length	1250 mm		1250 mm		1250 mm	

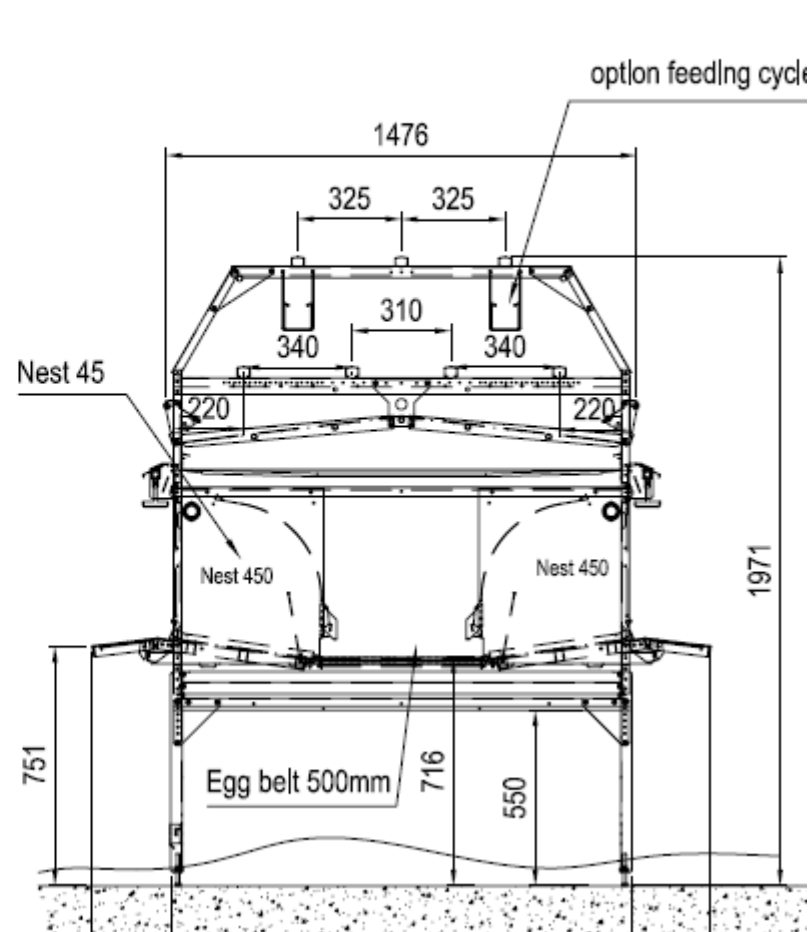
* Depending on local regulations

Aviary system-Combi Barn系統描述

Perching Unit



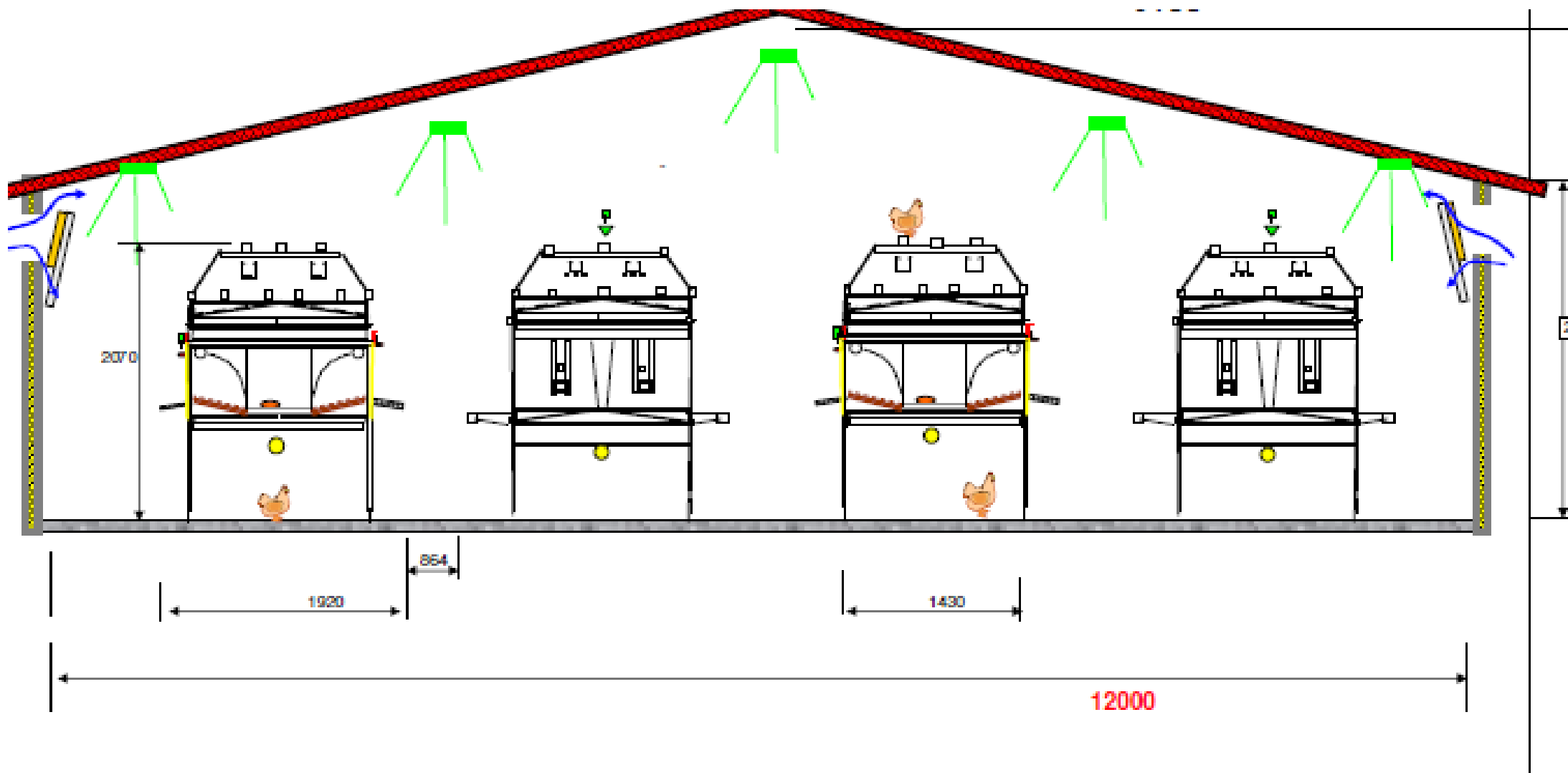
Nesting Unit



Options:

- 可以與HR3和AiO系統結合
- 帶添加的嵌套單元跟增加層級
- 增加餵食器和飲水器線
- 糞肥乾燥（空氣通道）

Combi Barn 範例

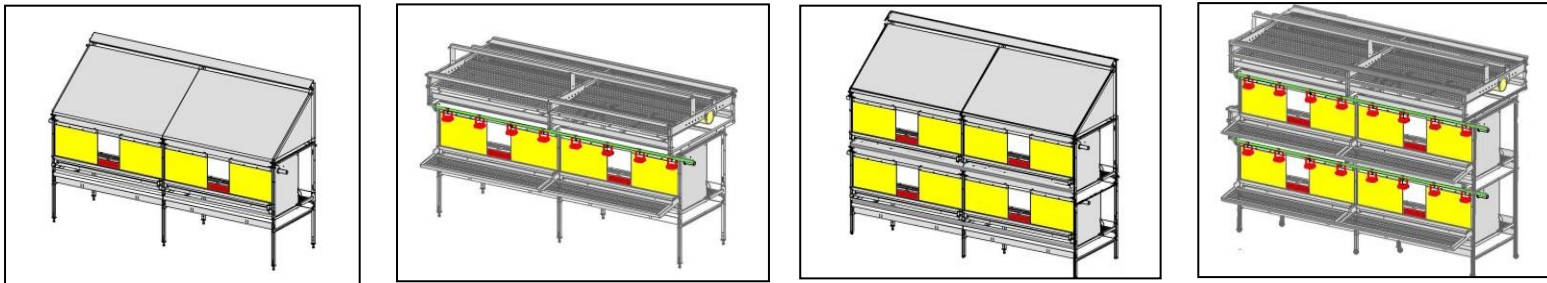


Combi Barn系統功能



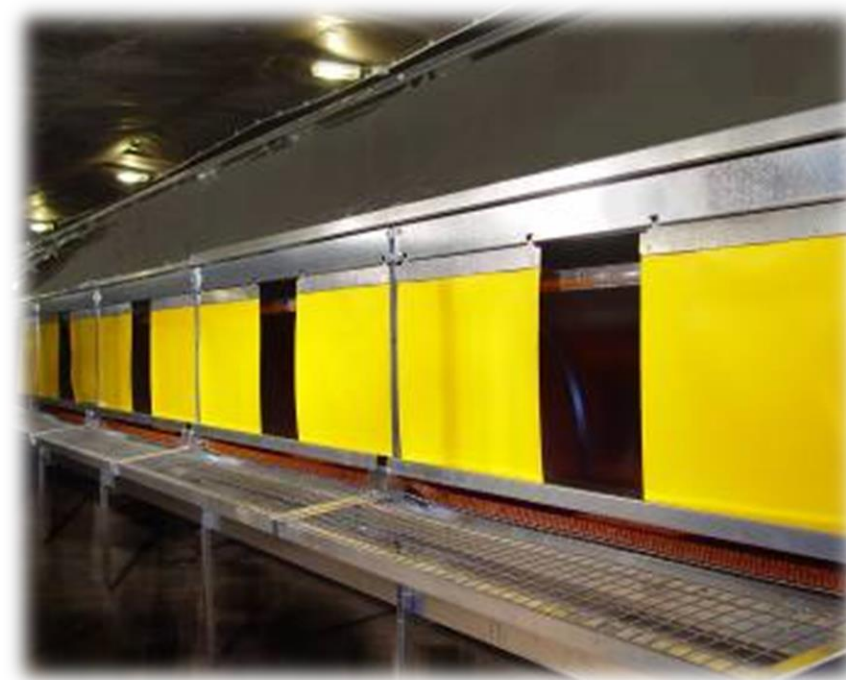
- 低系統高度，因此適合低矮建築物
- “鳥類友好”設計非常開放的結構 - 因此，陰影應盡可能少；導致地板蛋減少
- 快速且易於清潔
- 可提供2層和3層
- 高度低，易於檢查。
- 雞蛋易於收集
- 朝系統外側傾斜的地板
- 在自己的農場測試並運行

Combi Barn系統功能

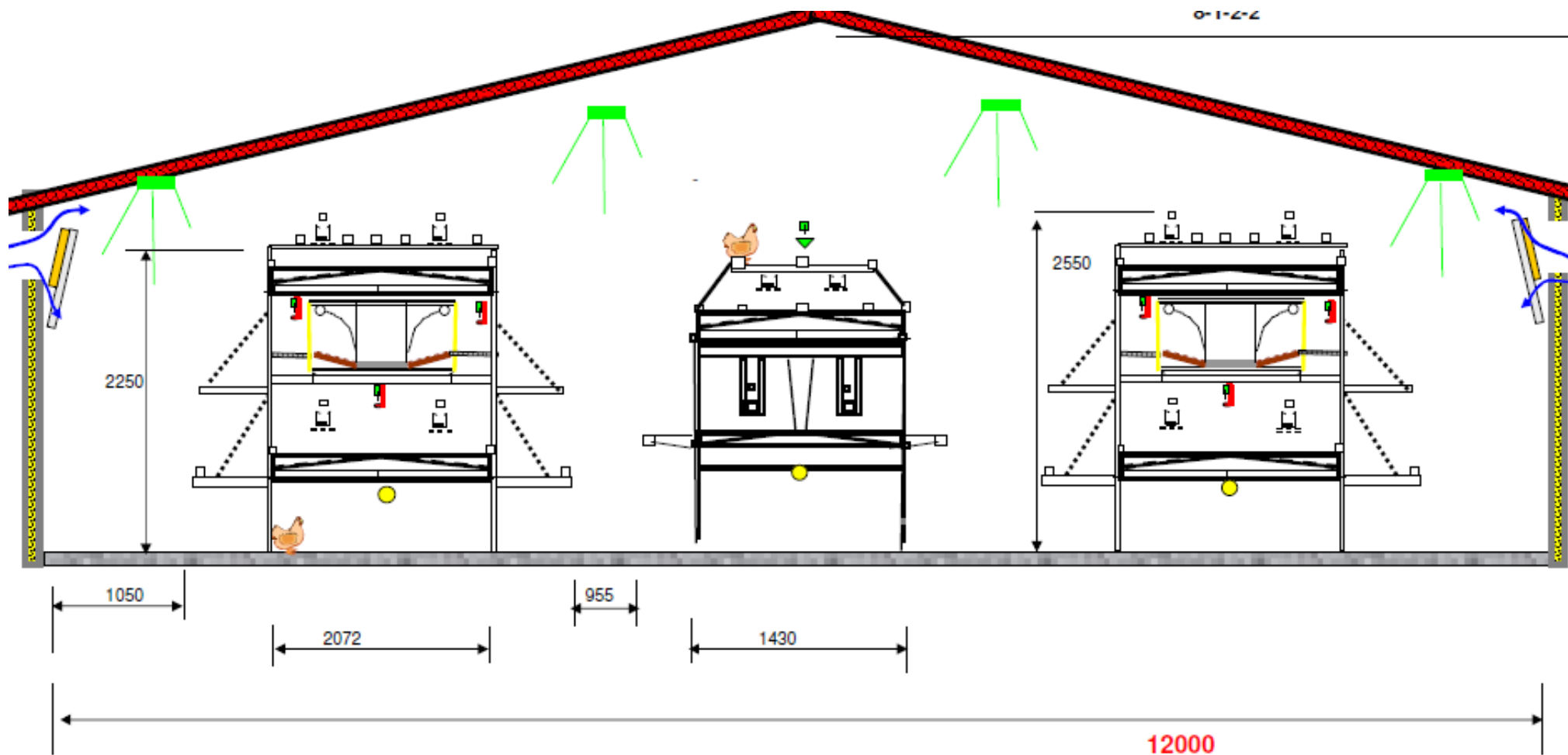


靠牆式產蛋箱選項

- 可與牆組合
- 可以與Aviary-HighRise3系統結合使用
- 可與Aviary-All-In-One系統結合使用



Combi Barn系統功能



結合Aviary系統

Aviary system-All-In-One 系統



All-In-One aviary system

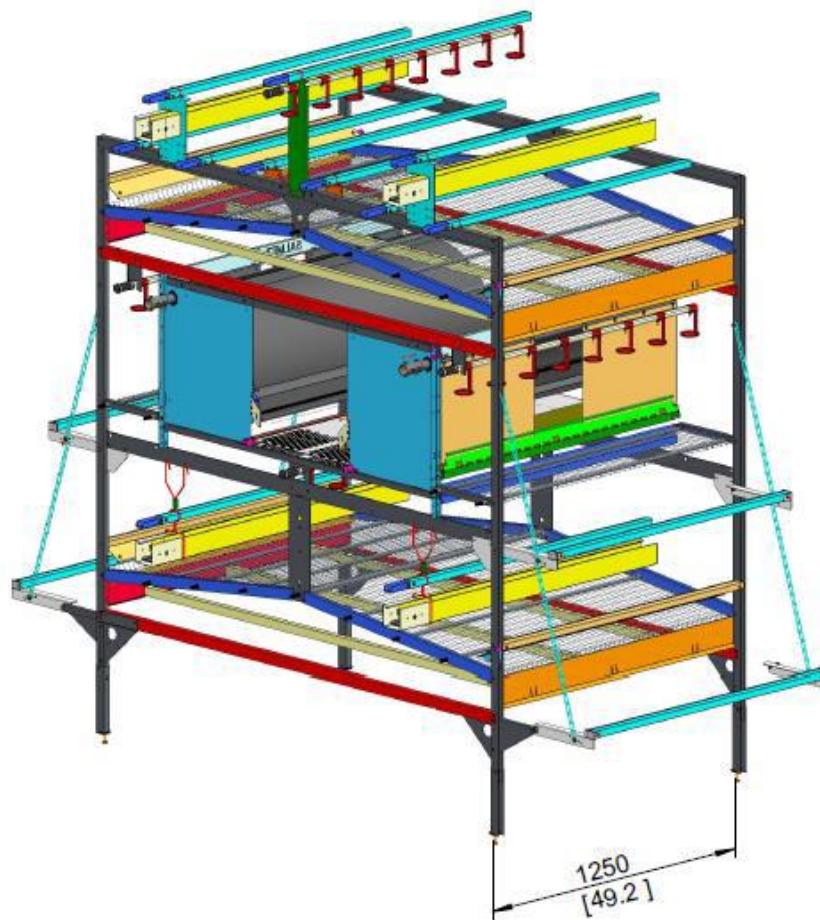
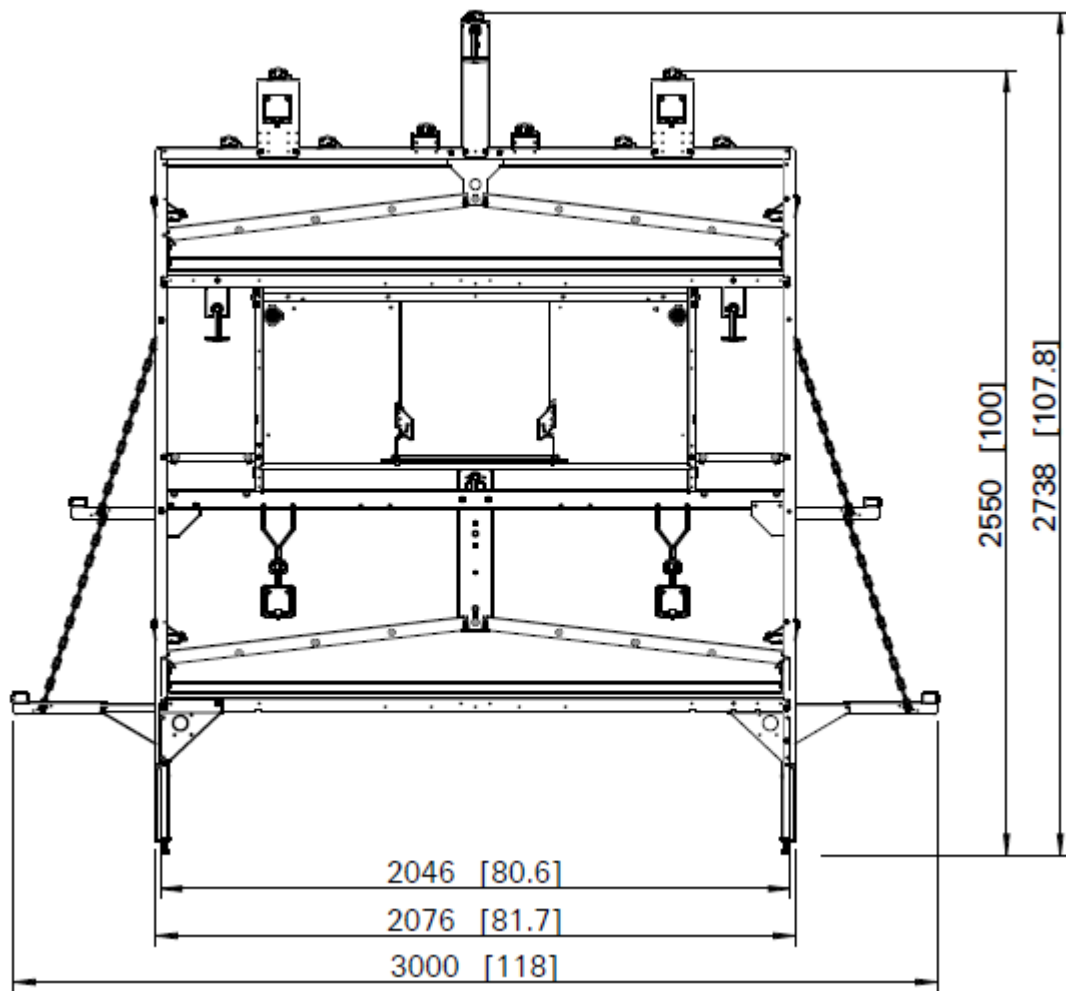
The thoroughly tested All-In-One aviary system combines **animal welfare** and the **highest laying performance**.

Why choose the All-In-One aviary system:

- Available in different widths allows optimum use of the house and bird numbers
- Perfect nest acceptance for the highest no. of sellable eggs
- Nests, water, feed, perches and slatted areas are easy reachable
- Very good hygienic conditions
- Advanced manure removal
- Long lifetime

... for your success!

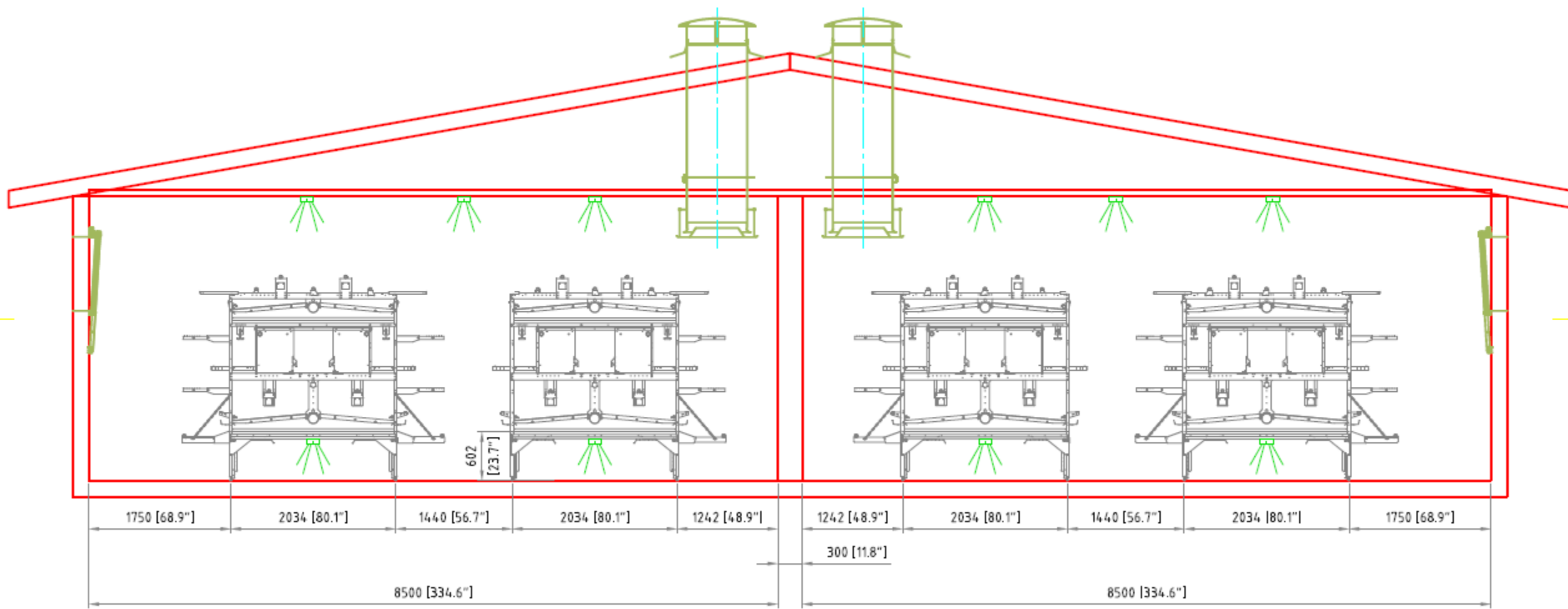
Aviary system-All-In-One系統描述



Options:

- 不同寬度：
2000或2400 mm
- 增加飲水機線
- 增加棲息處
- 樓梯並排

All-In-One 範例

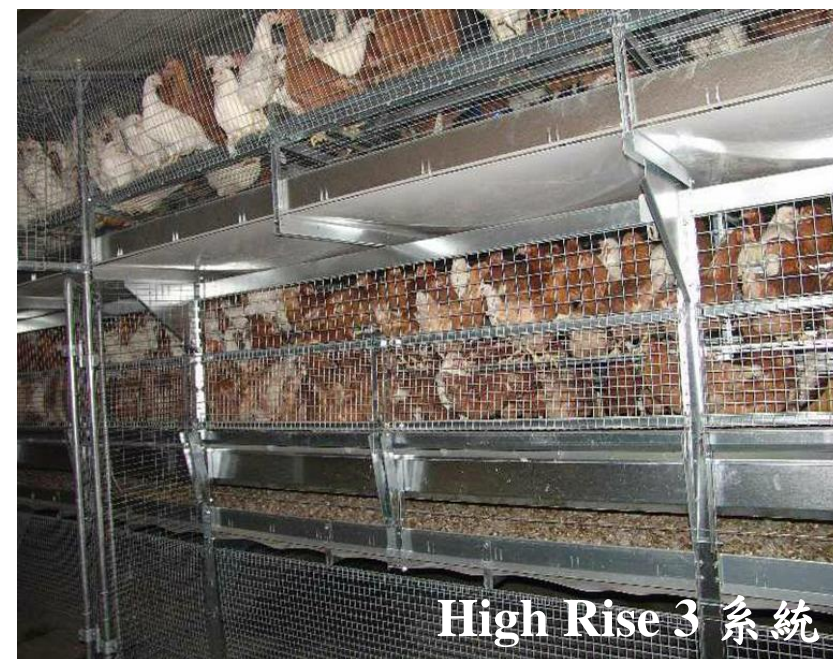


Perches 棲息處



ALL-IN-ONE 系統與 HighRise3 系統差別

- 成本價格：HighRise3 系統價格較高
- HighRise3 系統能更有效地控制雞群的行為。此無籠系統的閘門是可以由客戶自行控制開關，可控制雞群的活動區域。而 ALL-IN-ONE 系統則是單純的無籠系統。



總結

Aviary system與平養系統比較：

- 符合歐洲人道飼養規定
- 相對減少雞隻疾病的發生
- 成本價格降低(每隻雞的成本費用約13.8-14.2歐元)
- 以動物的習性，母雞進入產蛋箱生產的機率大幅提高
- 相對減少地蛋、碎蛋的發生機率
- Ammonia降低(雞舍內的墊料相對減少，且雞舍內部設計有自動化拖糞帶設備)
- 以相同空間計算，雞隻飼養數量與雞蛋數量約平養的1倍

Salmat 在德國農場已經用ALL-IN-ONE和HighRise 系統

飼養了一百萬隻蛋雞、三十萬隻小雞(絕對符合歐盟及德國的規範)

且產蛋率高達96%



Salmet 表示：

- With a good maintenance and a good rearing, you can almost reach the same cages performance of laying with the aviary system.
通過良好的維護和良好的飼養，您幾乎可以達到與鳥籠系統相同的籠養性能。
- Cages is still considered as the best way to produce eggs but of course, animal welfare is not always respected. 籠子仍被認為是生產雞蛋的最好方法，但當然，人們並不總是尊重動物的福利。
- Then between floor nest and aviary system, the main difference won't be in term of performance but in term of space. 在平養和 aviary system 之間，主要的區別不在於性能，而在於空間。
- You can double the amount of hens and the amount of eggs with All-in-One.
All-in-One 系統可以使母雞的數量和雞蛋的數量翻倍。
- Also, this is important for a country like Taiwan where the space of land is lacking. The land being costly, it is better to increase the bird density. In that case, aviary will be much more advantageous than layer nest system.
同樣，這對於像台灣這樣的缺乏土地的國家也很重要。土地價格昂貴，最好增加雞隻密度。在那種情況下，aviary 系統將比層巢系統更具優勢。

Salmet 表示：

- In Germany, Salmet farms are using All-in-One with 1 million layers and Pedigrow for 400 000 pullets.

Salmet德國農場正在使用具有100萬隻雞的All-in-One養殖場，並使用了Pedigrow生產40萬隻小母雞。

- We get a laying percentage of 96%. This is the same percentage as you can get in the cages. But of course, this depends of the staff too and Salmet will always help his customers to reach this kind of performance. 我們獲得了96%的鋪設率。這與籠中的百分比相同。但是，當然，這也取決於員工，Salmet會始終幫助其客戶達到這種性能。
- We can invite DaChan staff to Salmet farms in Germany for a teaching for example. We did it a lot with Japanese customer, European customers too.

我們可以邀請大成的員工前往德國Salmet農場進行教學。我們與日本客戶，歐洲客戶也做了很多工作。

Salmet Aviary system

House length 房屋長	105m
House width 房屋寬	12.2m
House height (side wall) 房屋高(側牆)	3.50m
Section length(nest) 區域長度(產蛋箱)	1.25m
Nest rows 產蛋箱行數	2
Aviary rows Aviary 行數	1
Nest depth 產蛋箱深	0.60m
Utile length	93.75m
Quantity of nests 產蛋箱數	300
House area 房屋空間	1,425 m ²
Slat area 腳踏墊空間	1,364.06 m ²
Utile area 雞隻可活動的空間	2,789.06 m ²
Nest area 產蛋箱空間	223.50 m ²
Birds according to nest area 產蛋箱區域的雞的數量	26,820
Birds according to utile are	25,101 (9birds / m ²)
Density of birds re house area 房屋空間的雞的密度	17.61 H/m ²
Density of birds re utile area	9 H/m ²
Feed area 餵食區域	10.45 cm/H

Salmet 平養系統

雞舍尺寸↵	長度:90 m↵	寬度:12.5 m↵	高度:3.5 m(邊牆)↵
雞舍數量↵	10(2層/每棟)↵	↵	↵
1棟↵	↵	↵	↵
雞籠長度:↵	85m↵	隻數/產蛋箱:↵	73.53↵
排數:↵	1↵	飲水線數量:↵	4↵
產蛋箱數量:↵	136↵	每平方米隻數:↵	9.41↵
		(公用區)↵	
飼料鍊圈數:↵	2↵	每層樓隻數:↵	10,000↵
↵	↵	所有總隻數↵	200,000↵

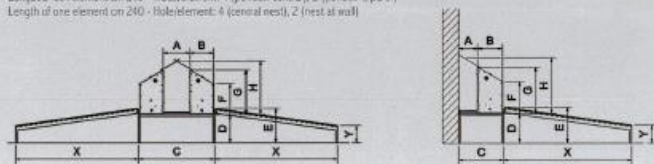
SKA蛋雞平養系統

AVIO 1

NOI AD 1 PIANO
1 TIER NESTS
POULTERS 1 ETAGE



Longhezza elemento cm 240 - Fori/elementi: 4 (nido centrale), 2 (nido a parete)
Longueur de l'élément cm 240 - Foris/éléments: 4 (nid central), 2 (nid à pari)
Length of one element cm 240 - Holes/elements: 4 (central nest), 2 (nest at wall)

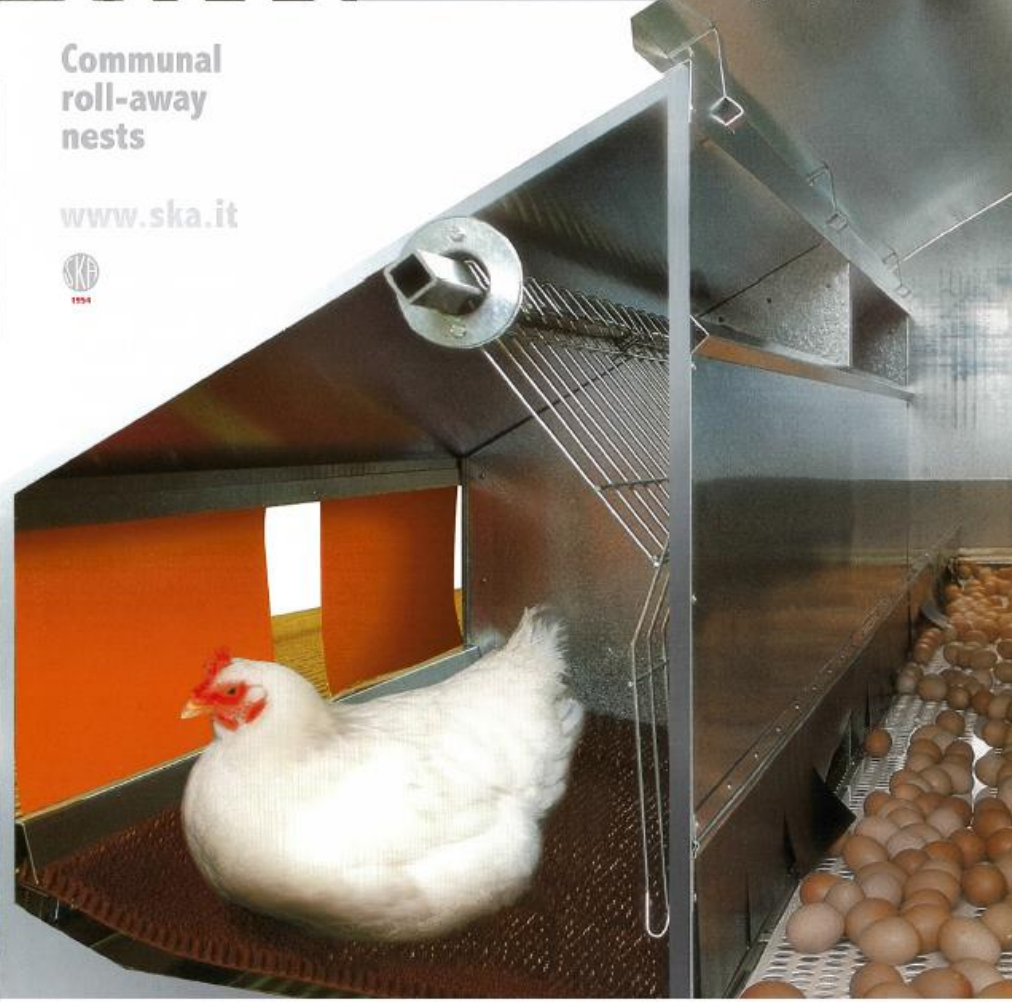


Poultry Equipment

AVIO

Communal
roll-away
nests

www.ska.it

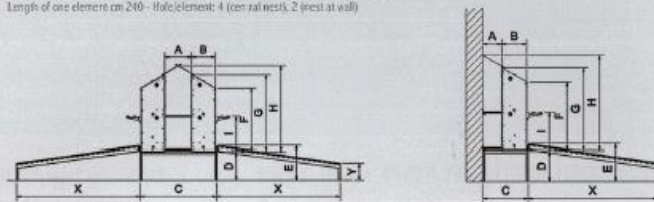


AVIO 2

NOI AD 2 PIANI
2 TIER NESTS
POULTERS 2 ETAGES



Longhezza elemento cm 240 - Fori/elementi: 4 (nido centrale), 2 (nido a parete)
Longueur de l'élément cm 240 - Foris/éléments: 4 (nid central), 2 (nid à pari)
Length of one element cm 240 - Holes/elements: 4 (central nest), 2 (nest at wall)



Tipo Type	Nastro Belt Type	Dimensioni foro Hole dimensions Dimensions du trou	Riproduttori/foro Breeder's/hole Reproducteurs/trou	Oviale/foro Layers/hole Pondeuses/trou	A	B	C	D	E	F	G	H	I	X	Y
AVIO Centrale Double sided Central	30	120x45x35h	48*	64**/45***	32	45,5	123	50-90	62-102	125	151	163	69	120-420	40-65
Centrale Double sided Central	50	120x45x35h	48*	64**/45***	52	45,5	143	50-90	62-102	125	151	169	69	120-420	40-65
AVIO D Parete Single sided Pari	30	120x45x35h	48*	64**/45***	33	45,5	78,5	50-90	62-102	125	151	173	69	120-420	40-65
Centrale Double sided Central	50	120x55x35h	59*	79**/55***	52	55,5	163	50-90	62-102	127	159	177	71	120-420	40-65
Parete Single sided Pari	30	120x55x35h	59*	79**/55***	33	55,5	88,5	50-90	62-102	127	159	182	71	120-420	40-65

Note Tutte le quote sono indicative e sono espresse in cm
(*) Valori indicativi riferiti a riproduttori pesanti
(**) Oviale da consumo secondo norme CE
(***) Oviale da consumo biologiche secondo norme CE

Notes All dimensions are indicative and in cm
(*) Indicative quantity referred to heavy breeders
(**) Commercial layers as per CE norms
(***) Organic commercial layers as per CE norms

Notes Toutes les dimensions sont indicatives et sont exprimées en cm
(*) Valeurs indicatives référées aux poules reproductrices lourdes
(**) Pondeuses de consommation selon les normes CE
(***) Pondeuses de consommation biologiques selon les normes CE

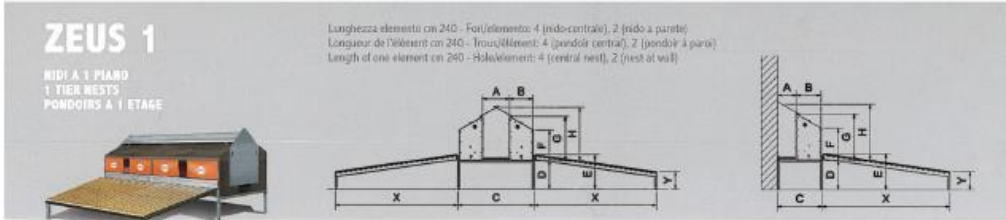


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木製産蛋箱 ZEUS

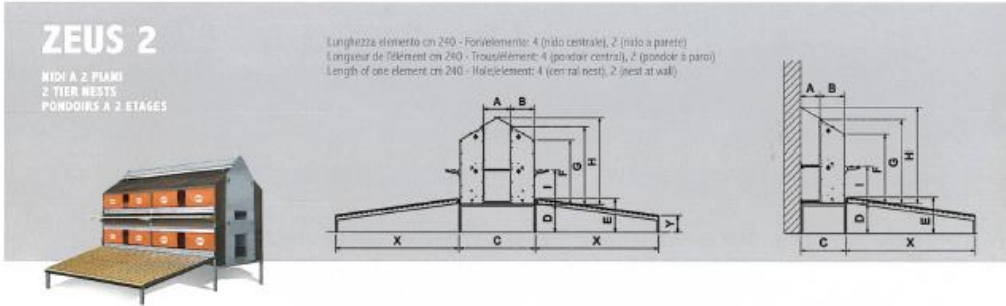


ZEUS 1

MIDI A 1 PIANO
1 TIER NESTS
PONDOIRS A 1 ETAGE

Luoghezza elemento cm 240 - Fori/éléments: 4 (rido-centrale), 2 (rido a parete)
Longueur de l'élément cm 240 - Trou/élément: 4 (nid central), 2 (nid à paroi)
Length of one element cm 240 - Hole/element: 4 (central nest), 2 (nest at wall)

	Tipo Type	Nastro Belt Taps	Dimensioni foro Hole dimensions Dimensions du trou	Riproduttore/foro Breeder's hole Reproducteurs/trou	Ovale/foro Layers hole Pondeuses/trou	A	B	C	D	E	F	G	H	X	Y
ZEUS	Centrale Double sided Central	50	120x45x35h	48*	64**/45***	52	45,5	143	50-90	62-102	54	83	100	120-420	40-65
	Parete Single sided Paroi	30	120x45x35h	48*	64**/45***	43	45,5	88,5	50-90	62-102	54	83	109	120-420	40-65
ZEUS D	Centrale Double sided Central	50	120x55x35h	59*	79**/55***	52	55,5	163	50-90	62-102	57	91	109	120-420	40-65
	Parete Single sided Paroi	30	120x55x35h	59*	79**/55***	43	55,5	98,5	50-90	62-102	57	91	117	120-420	40-65



ZEUS 2

MIDI A 2 PIANI
2 TIER NESTS
PONDOIRS A 2 ETAGES

Luoghezza elemento cm 240 - Fori/éléments: 4 (rido centrale), 2 (rido a parete)
Longueur de l'élément cm 240 - Trou/élément: 4 (nid central), 2 (nid à paroi)
Length of one element cm 240 - Hole/element: 4 (central nest), 2 (nest at wall)

	Tipo Type	Nastro Belt Taps	Dimensioni foro Hole dimensions Dimensions du trou	Riproduttore/foro Breeder's hole Reproducteurs/trou	Ovale/foro Layers hole Pondeuses/trou	A	B	C	D	E	F	G	H	I	X	Y
ZEUS	Centrale Double sided Central	50	120x45x35h	48*	64**/45***	52	45,5	143	50-90	62-102	120	148	165	69	120-420	40-65
	Parete Single sided Paroi	30	120x45x35h	48*	64**/45***	43	45,5	88,5	50-90	62-102	120	148	174	69	120-420	40-65

Note Tutte le quote sono indicative e sono espresse in cm
(*) Valori indicativi riferiti a riproduttori pesanti
(**) Ovale da consumo secondo norme CE
(***) Ovale da consumo biologiche secondo norme CE

Notes All dimensions are indicative and in cm
(*) Indicative quantity referred to heavy breeders
(**) Commercial layers as per CE norms
(***) Organic commercial layers as per CE norms

Notes Toutes les dimensions sont indicatives et sont exprimées en cm
(*) Valeurs indicatives référées aux poules reproductrices lourdes
(**) Pondeuses de consommation selon les normes CE
(***) Pondeuses de consommation biologiques selon les normes CE



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Communal roll-away
wooden nest
www.ska.it



Salmet Aviary system

SKA

House length 房屋長	105m
House width 房屋寬	12.2m
House height (side wall) 房屋高(側牆)	3.50m
Section length(nest) 區域長度(產蛋箱)	1.25m
Nest rows 產蛋箱行數	2
Aviary rows Aviary 行數	1
Nest depth 產蛋箱深	0.60m
Utile length	93.75m
Quantity of nests 產蛋箱數	300
House area 房屋空間	1,425 m ²
Slat area 腳踏墊空間	1,364,06 m ²
Utile area 雞隻可活動的空間	2,789.06 m ²
Nest area 產蛋箱空間	223.50 m ²
Birds according to nest area 產蛋箱區域的雞的數量	26,820
Birds according to utile are	25,101 (9birds / m ²)
Density of birds re house area 房屋空間的雞的密度	17.61 H/m ²
Density of birds re utile area	9 H/m ²
Feed area 餵食區域	10.45 cm/H

HOUSE LENGTH (internal)	房屋長度	m	90,00
HOUSE WIDTH	房屋寬度	m	12,50
SURFACE	面積	sqm	1.125
Q.TY OF HENS	母雞數量	nr	11.000
DENSITY OF HENS	母雞密度	per sqm	9,78
FARMING TYPE	農場類型		LAYERS 蛋雞

THANKS FOR YOUR ATTENTION

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