# **Poultry ventilation FARMTEC**

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#### **Contents 2**

- Litter management
- Dimensioning and pitfall
  - House layout when converting cage to Aviary
  - Air distribution with Heat Exchanger



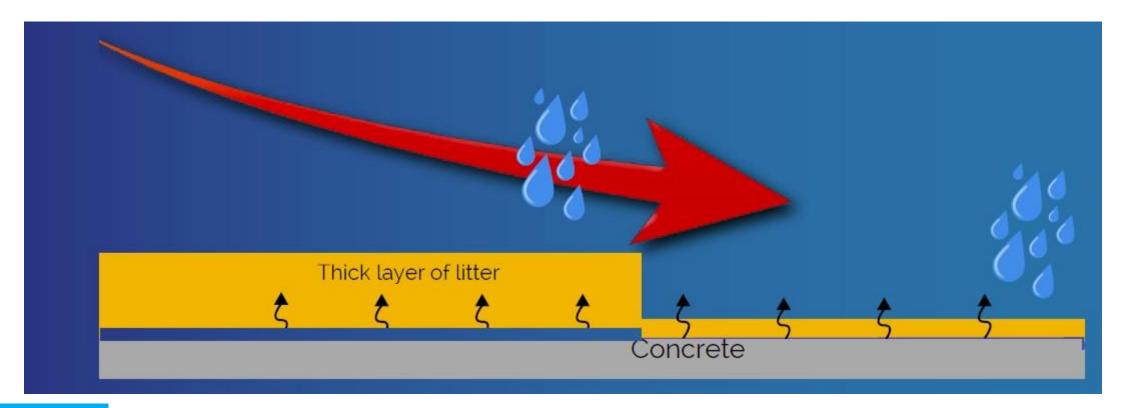
## Management points

- Preheat the floor (Condensation sneak in at 12-18 days, and destroy litter)
- Use a small amount of litter (That help avoid condensation)
- Use a good litter material that can absorb moist and compost)
- Keep the birds well distributed (no birds in an area = cold floor)
- Manage your drinker system (Water spillage is the biggest killer of litter)
- Feed quality can make wet litter (salty fee make birds drink more)
- Disease can make wet litter (we all drink more when we are sick)
- Ventilation can help, but not cure big mistakes in above



#### Condensation and drying, thick and thin layer of litter

- If the litter debt is to much, the floor will be cold
- The humidity in the air will then create condensation on the floor





#### **Example of condensation on floor**





# **Bad wet, Bedding**

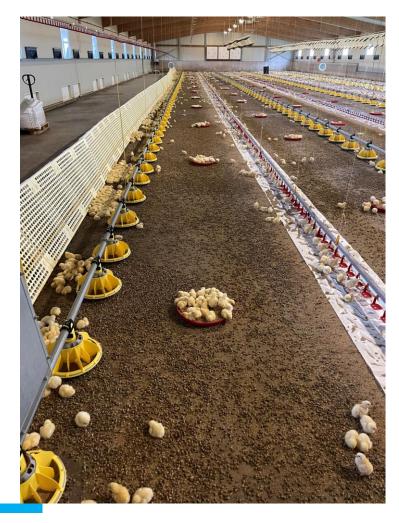


Top 2 cm dry Wet underneath

Too much litter anyway



# Birds huddling







# Floor temperature









# Feed tray is more comfortable



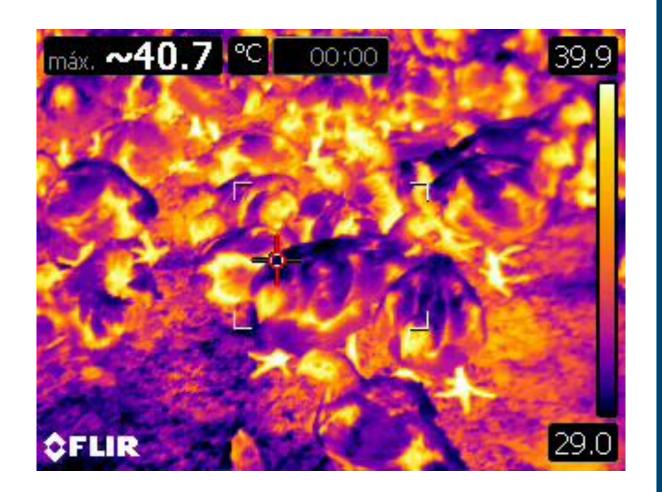






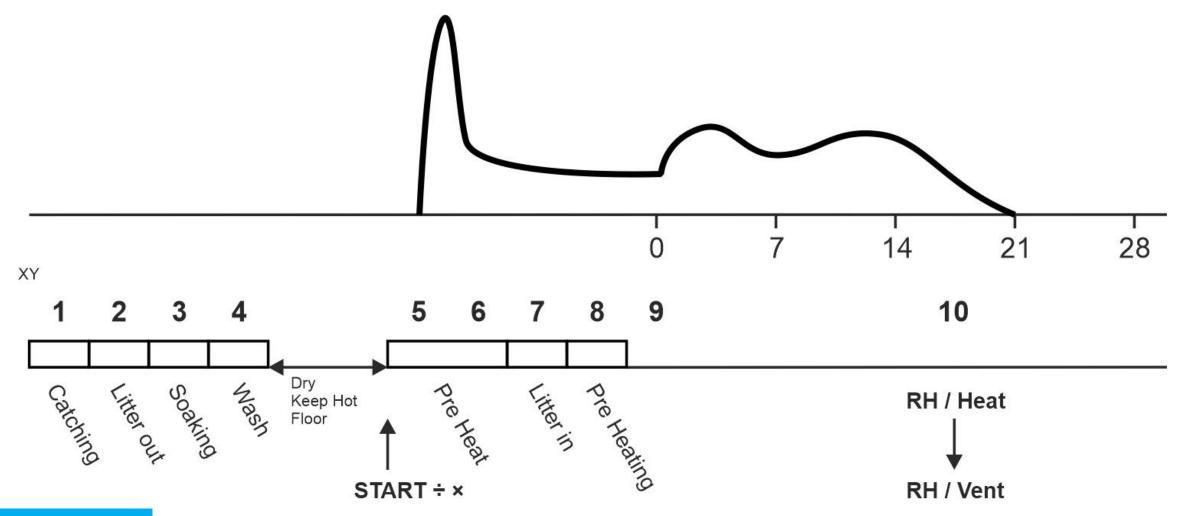
#### The birds keep the litter hot

- The body heat of the birds make the litter warm
- When the birds walk away the heat evaporate the moist.
- This keep the litter dry
- Uniformity bird distribution Is key





#### Batch "events" Good preheating, low heat consumption

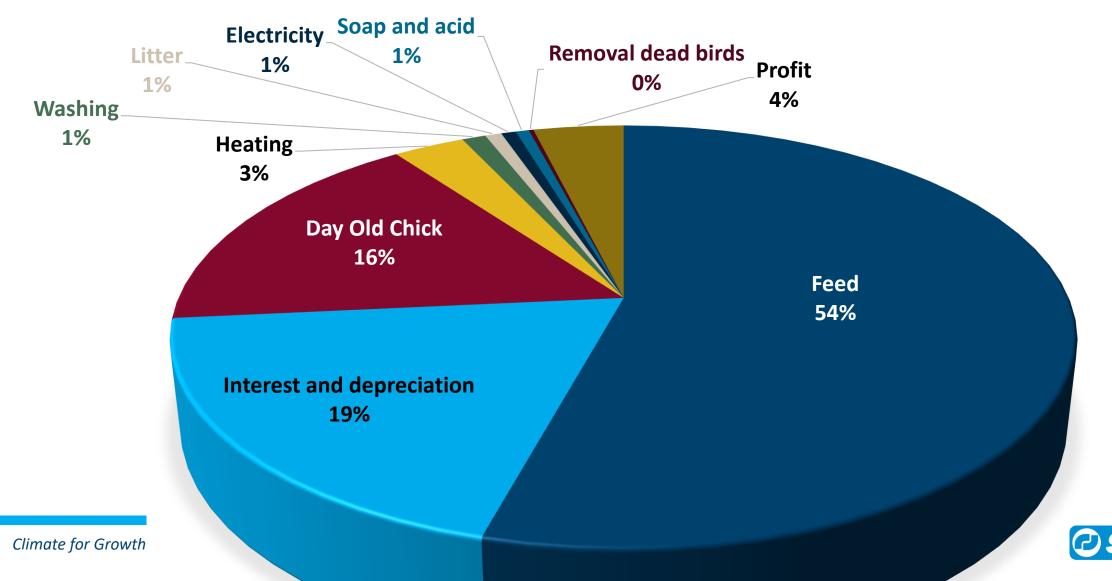




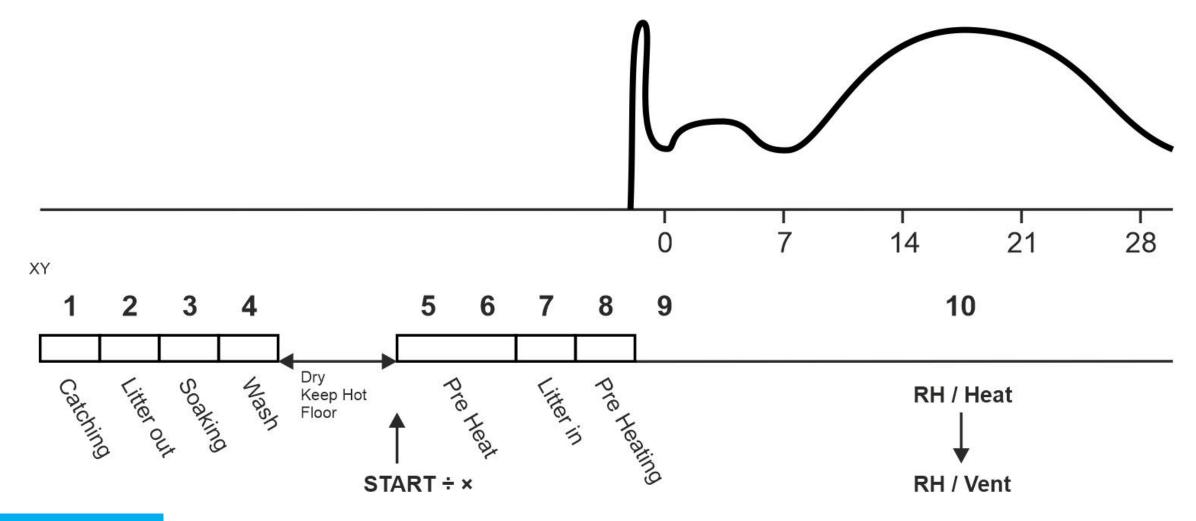
## The way to do it, 48 hours after catch, start new preheat



## Heat is cheap ©



#### Batch "events" limited preheating, high heat consumption

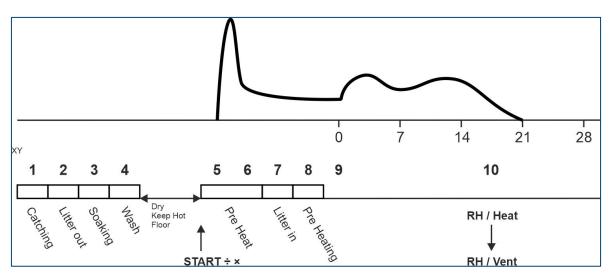


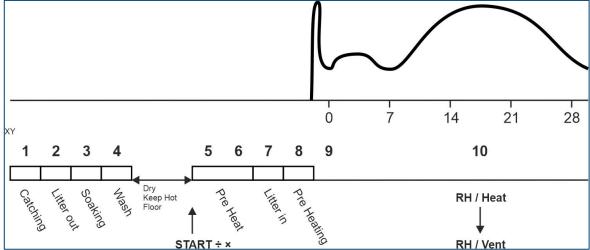


## Batch no preheat and high set RH start of batch

Correct preheat, low heat usage

No preheating, later high heat consumption







# Manage your drinker system





#### Water leakage

- Water in cup
- Birds wet on neck
- Water spillage (? I/day)







### **Wet litter**







# Birds have to get water down into the beak





## Water / Feed 249 % (ref 170)





#### Water to feed ratio counts

	Water/ Feed ratio	Broilers	Bird Age	Ave Wt.	FCR	Total Water- L
	1.7	30,000	40	2.5 Kgs	1.7	216,750
	1.9	30,000	40	2.5 Kgs	1.7	242,250
25.500 I / 40 days = 637,5 liter per day						An extra <b>25,500</b> L for the batch





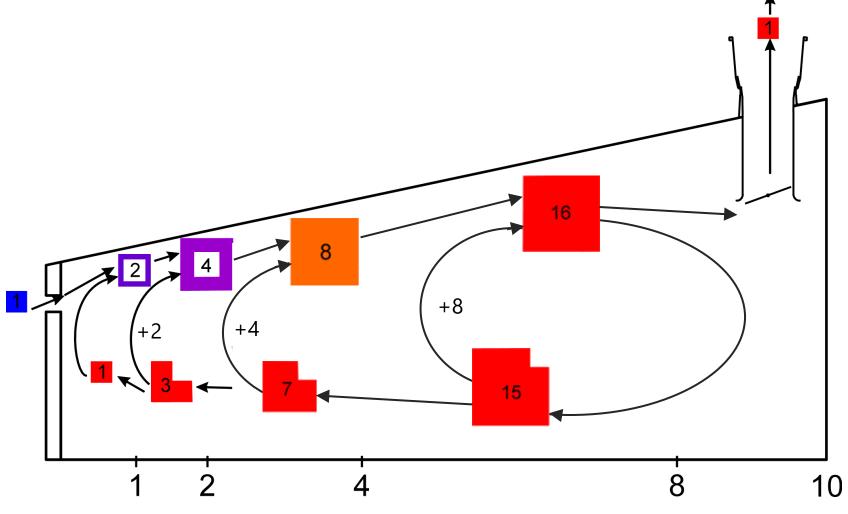


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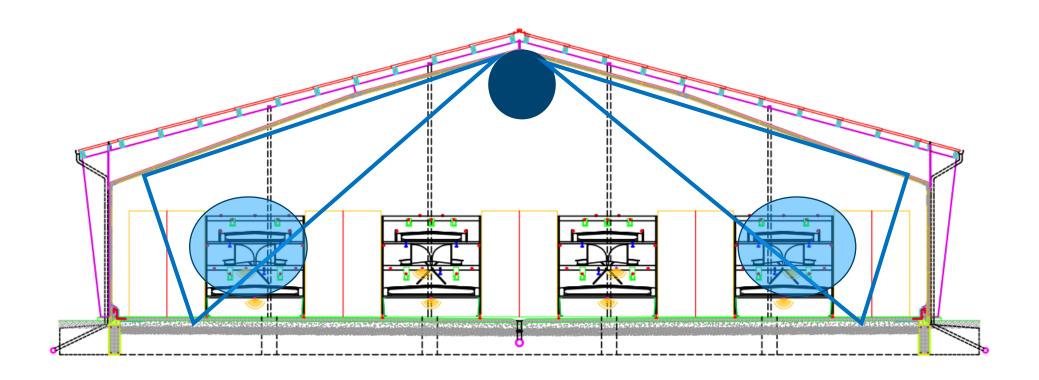


## **Development of Return Air**



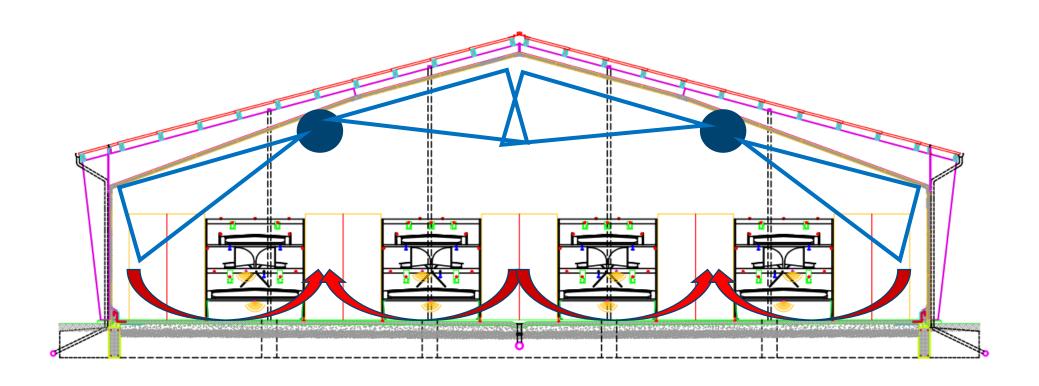


## Ventilated from 1 pipe, bad air distribution



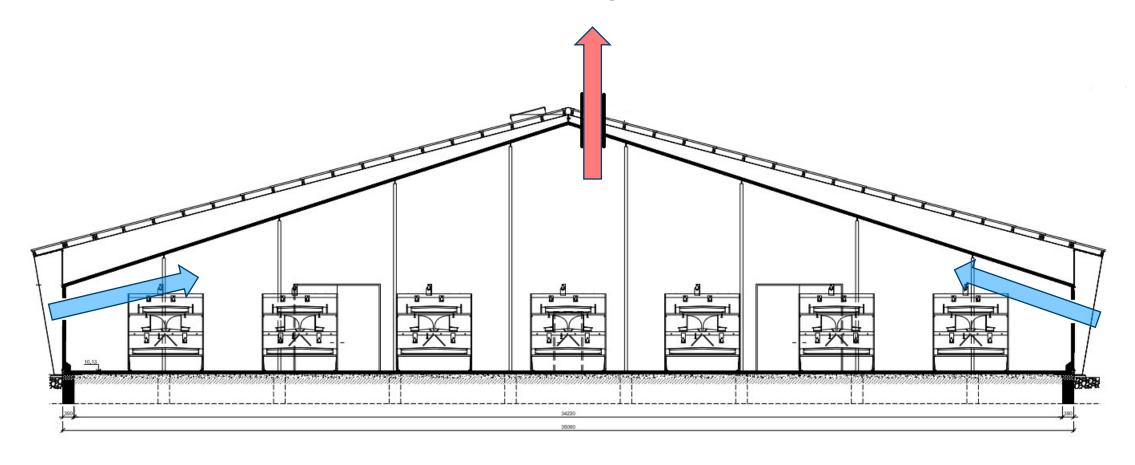


## Ventilated from 2 pipe ok solution





## With wall inlets and chimney, natural ventilation



At ventilation failure, birds die of suffocation

A small air exchange keep them alive long time



# **Distrebution and activity**





# Dyr der vågner op





# Making ready for sleep





# Questions?





**SKOV** 





## **Engage with us**

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