

# PETERSIME

X-Streamer Chick-Store



Ives Vanstechelmen

March 2026

# Content

- ▶ Introduction
- ▶ Advantages
- ▶ Machine details
- ▶ In practice
- ▶ Summary



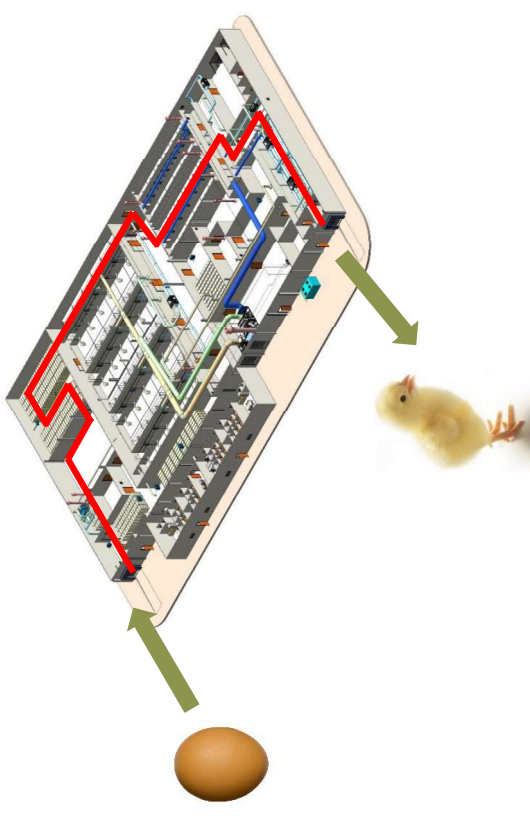
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# Introduction

- ▶ A hatchery turns hatching eggs into chicks
- ▶ Good hatchability, chick quality and chick uniformity
- ▶ Process does not end at hatch



# Introduction



Handling



Storage



Transport



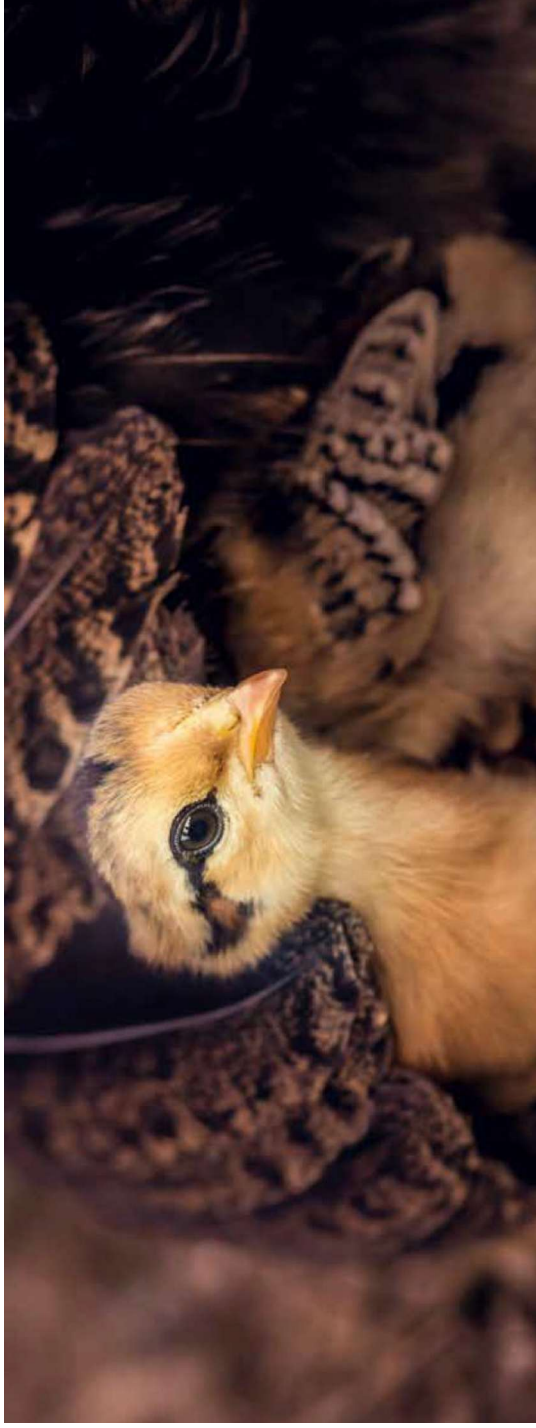
Farm

Maximize potential in day old chicks and minimize the losses  
Room for improvement in chick storage



# Introduction

- ▶ Day old chicks are poikilotherm
- ▶ Body temperature follows temperature of the environment
- ▶ Depend on the parent bird to brood them



# Introduction

- ▶ Day old chicks are poikilotherm
- ▶ Optimal chick storage
  - ▶ Completely controlled environment
  - ▶ Provide continuation of parental attentiveness





# Introduction

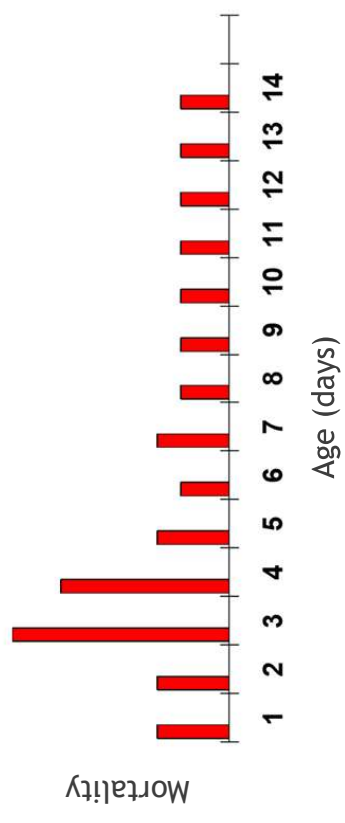
- ▶ Critical indicators for chick comfort after hatch:
  - ▶ Weight loss
  - ▶ Dead on arrival
  - ▶ Culls
  - ▶ First week mortality
  - ▶ Performance: growth, feed conversion



# Introduction



- Evaporative heat losses:
  - At thermal comfort: lose 1g H<sub>2</sub>O/24h
  - Overheated chicks: 5-10g H<sub>2</sub>O/24h



# Introduction



- ▶ Vent temperature/behaviour:
  - ▶ Hot (+105 °F) -> agitated, noisy, gasping
  - ▶ Comfort (~ 104 °F) -> quite, evenly spread out
  - ▶ Cold (-103 °F) -> cold feet, huddle



# Introduction

- ▶ Current chick storage practice sometimes suboptimal
  - ▶ But critical in case of
    - ▶ Long storage
    - ▶ Long transport
  - ▶ Need for a **dedicated machine**
    - ▶ X-Streamer Chick-Store
    - ▶ Completely controlled environment

**CHICK-ST<sup>ORE</sup>**



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- ▶ **Advantages**
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# Advantages

- ▶ Gains in performance
- ▶ More flexible logistics
- ▶ Uncompromised bio-security



# Advantages

- ▶ Gains in performance
- ▶ More flexible logistics
- ▶ Uncompromised bio-security



# Gains in performance

- ▶ Completely controlled environment
- ▶ Precise temperature control
- ▶ Uniform airflow
- ▶ Better chick uniformity



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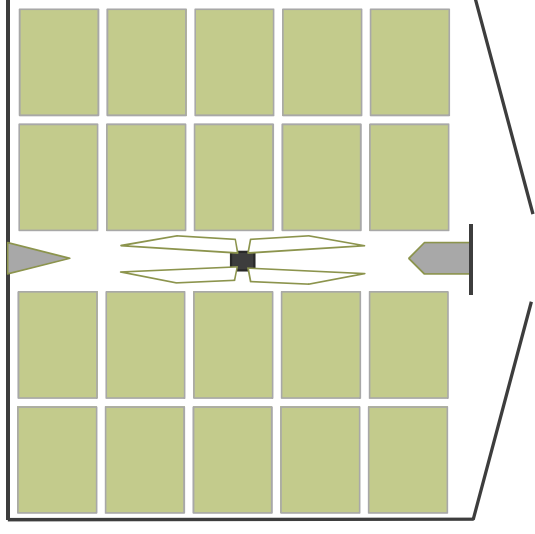
# Gains in performance

- ▶ Completely controlled environment
  - ▶ Precise temperature control
  - ▶ Uniform airflow
  - ▶ Better chick uniformity
  - ▶ Reduced stress
    - ▶ No interference in the process
    - ▶ Machine doors remain closed
    - ▶ Limited exposure
    - ▶ Chicks less vulnerable
    - ▶ Consistent program



# Gains in performance

- ▶ Completely controlled environment
  - ▶ Precise temperature control
  - ▶ Uniform airflow
  - ▶ Better chick uniformity
  - ▶ Reduced stress
  - ▶ Fixed trolley positions



# Gains in performance

- Creates optimal storage conditions



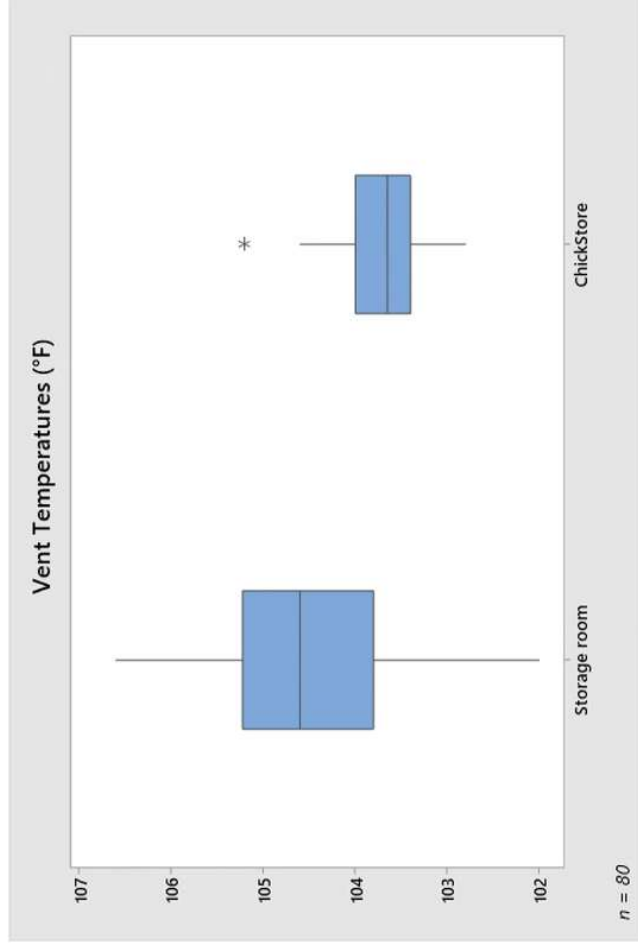
# Gains in performance

- ▶ Creates optimal storage conditions
  - ▶ Reduced chick mortality
  - ▶ Higher quality
  - ▶ Better uniformity
  - ▶ Better post hatch performance
  - ▶ Better welfare



# Gains in Performance

- ▶ Trials
- ▶ Vent temperature measurement
  - ▶ More comfort in Chick-Store
  - ▶ Improved first week mortality



# Advantages

- ▶ Gains in performance
- ▶ **More flexible logistics**
- ▶ Uncompromised bio-security

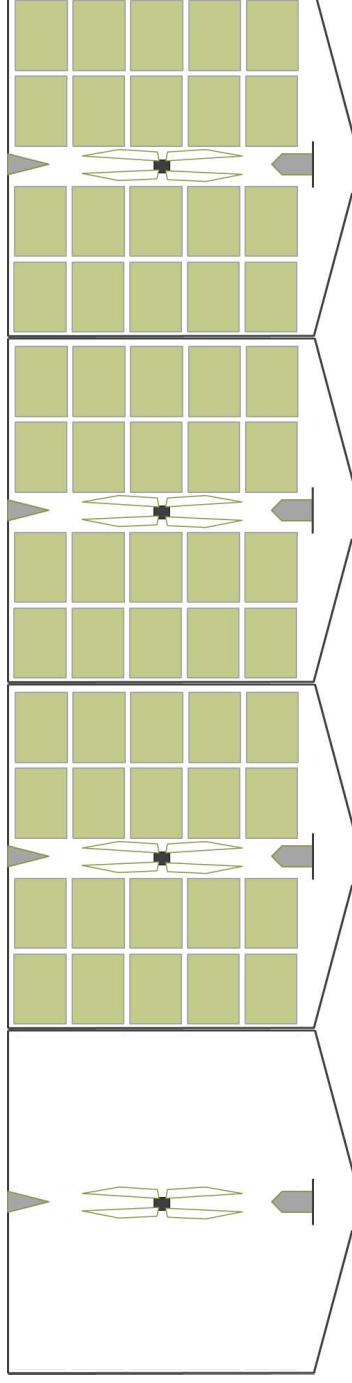


# More flexible logistics

- ▶ Higher flexibility in logistics
  - ▶ Batch specific logistics
- Easier to organise transport - more flexible



Truck 1



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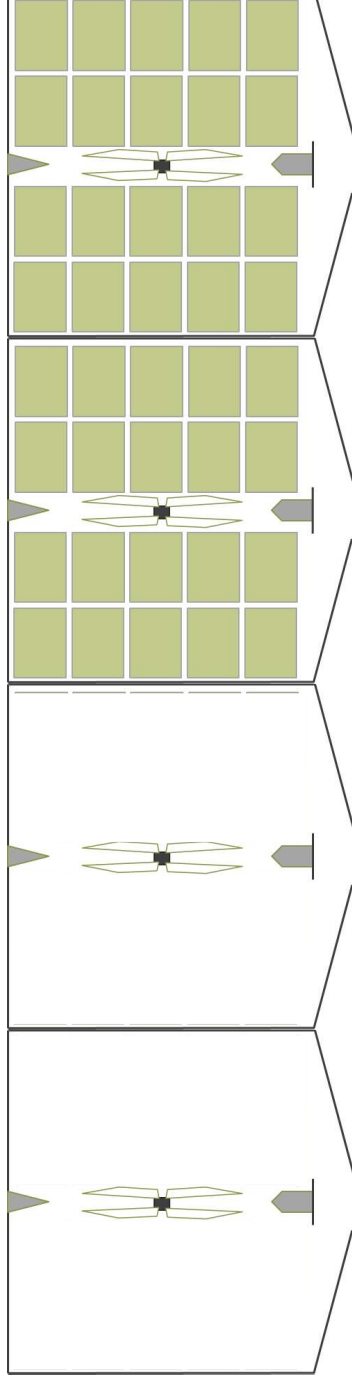


# More flexible logistics

- ▶ Higher flexibility in logistics
- ▶ Batch specific logistics



Truck 2



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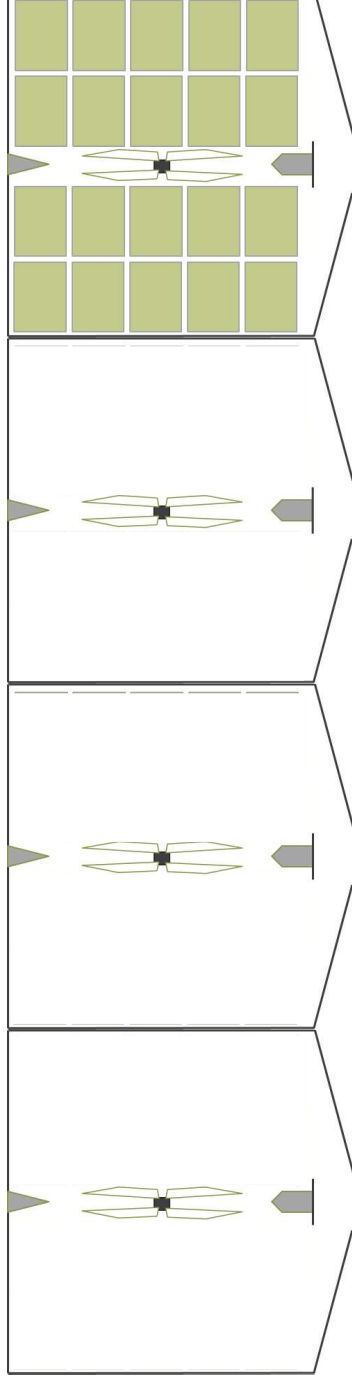


# More flexible logistics

- ▶ Higher flexibility in logistics
- ▶ Batch specific logistics



Truck 3



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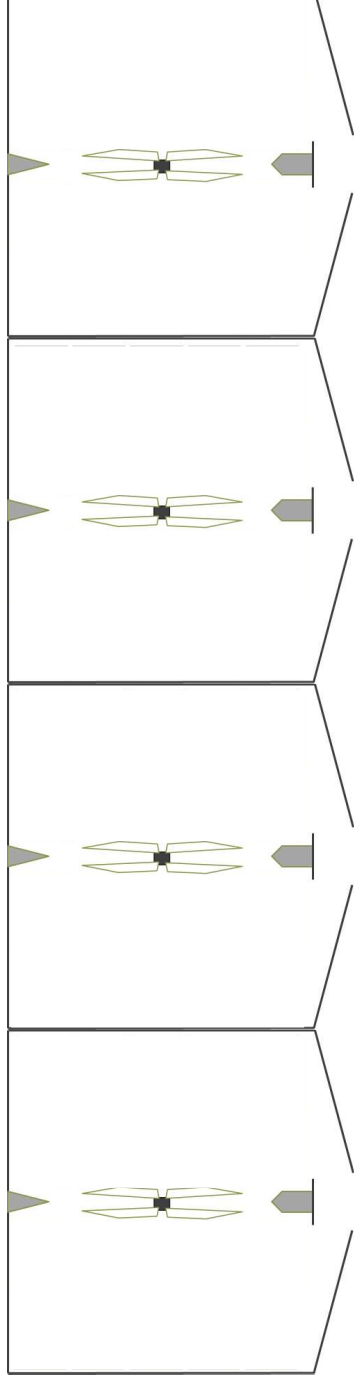
# More flexible logistics

- Higher flexibility in logistics
- Batch specific logistics

Chicks that have to stay overnight for long transport can be isolated from other chicks → not disturbed or exposed; can remain in optimal environment



Plane



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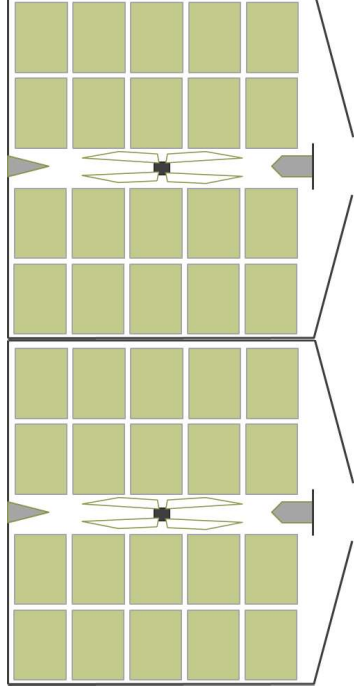


# More flexible logistics

- ▶ Higher flexibility in logistics
- ▶ Batch specific storage
  - ▶ Batches are kept together
  - ▶ Improved bio-security



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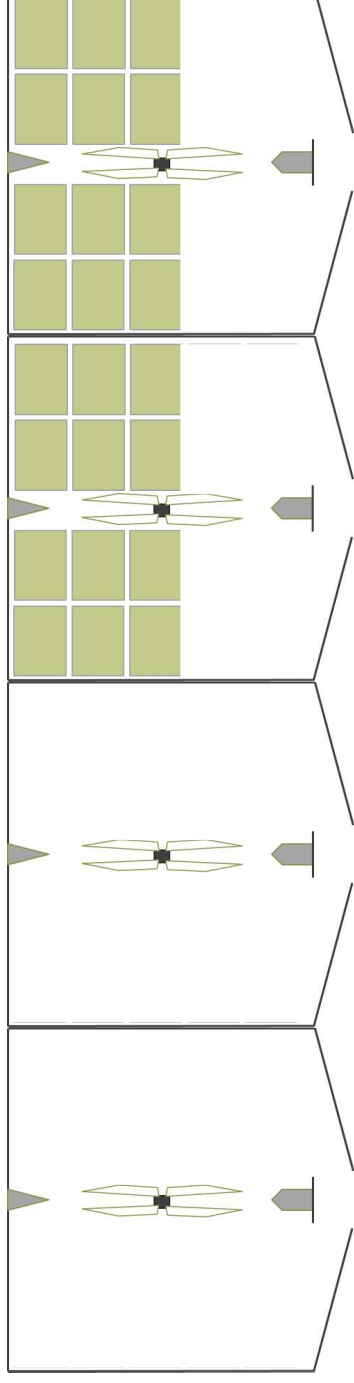


2 x XSTR-12S Chick-Store



# More flexible logistics

- ▶ Higher flexibility in logistics
- ▶ Batch specific storage
  - ▶ Batches are kept together
  - ▶ Improved bio-security
  - ▶ Longer storage possible
  - ▶ Partial loading possible



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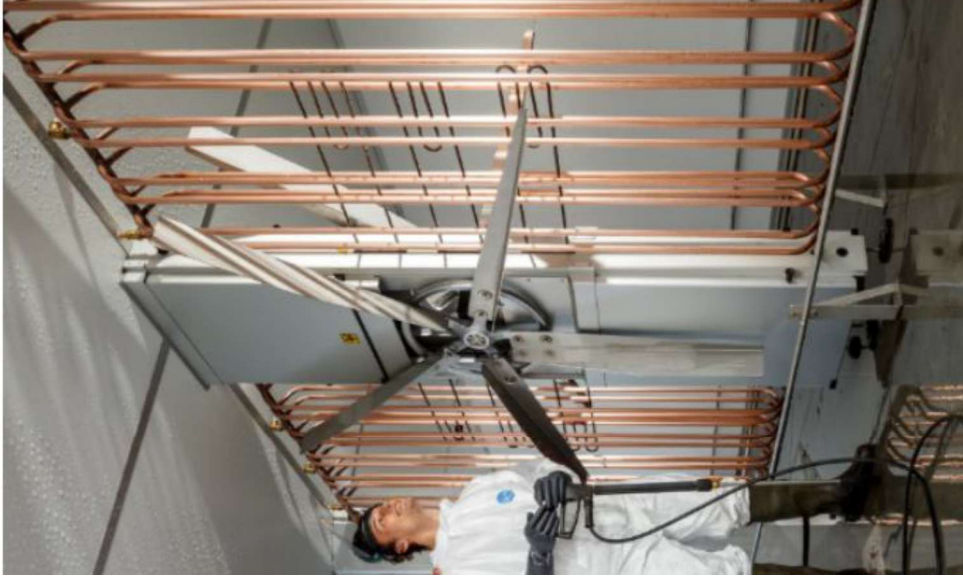
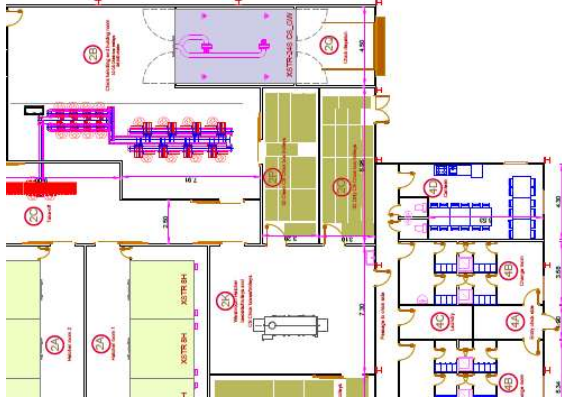
# Advantages

- ▶ Gains in performance
- ▶ More flexible logistics
- ▶ **Uncompromised bio-security**



# Uncompromised bio-security

- ▶ Open structure without dirt traps
- ▶ Enables easy cleaning
- ▶ Less space to clean



# Uncompromised bio-security

- ▶ Open structure without dirt traps
- ▶ Enables easy cleaning
- ▶ Less space to clean
- ▶ Traceability of data
  - ▶ CO<sub>2</sub>, temperature, humidity of DOC during storage
  - ▶ Possible to analyse issues with certain batch of chicks due to poor storage



- 



# Content

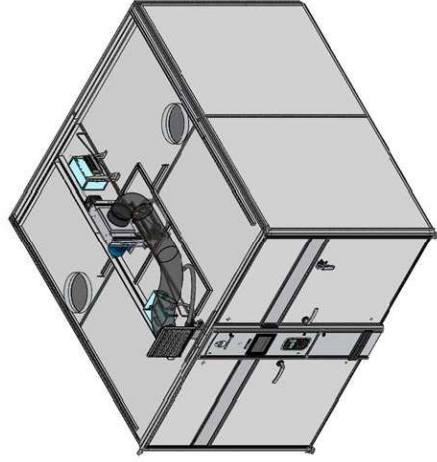
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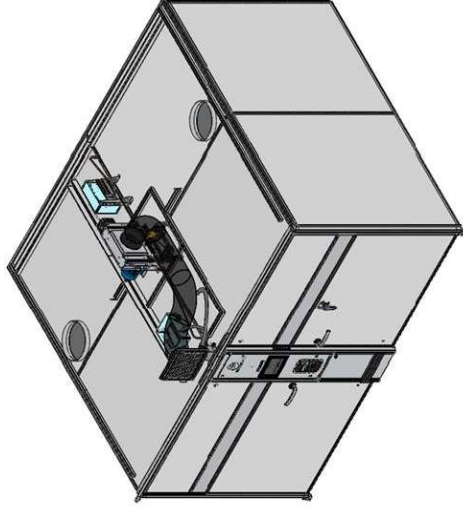


# Machine details

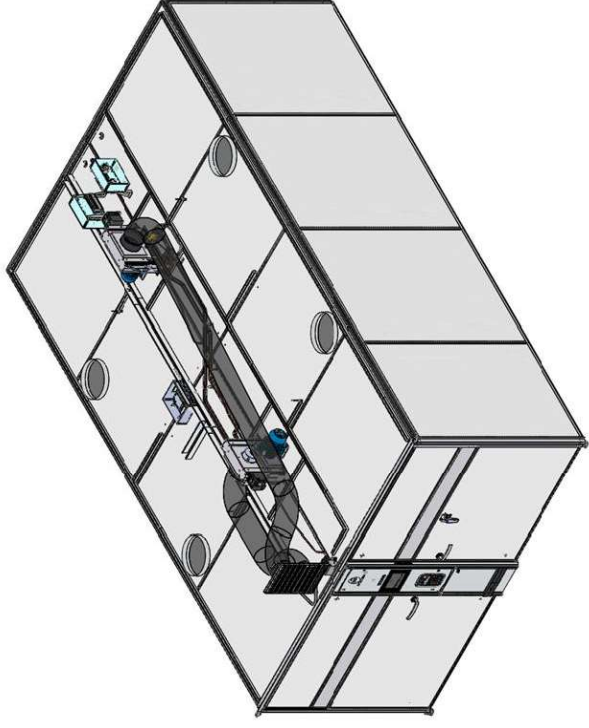
► 3 sizes for regular



**XSTR Chick-Store 8S**  
up to 40,000 DOC



**XSTR Chick-Store 12S**  
up to 60,000 DOC

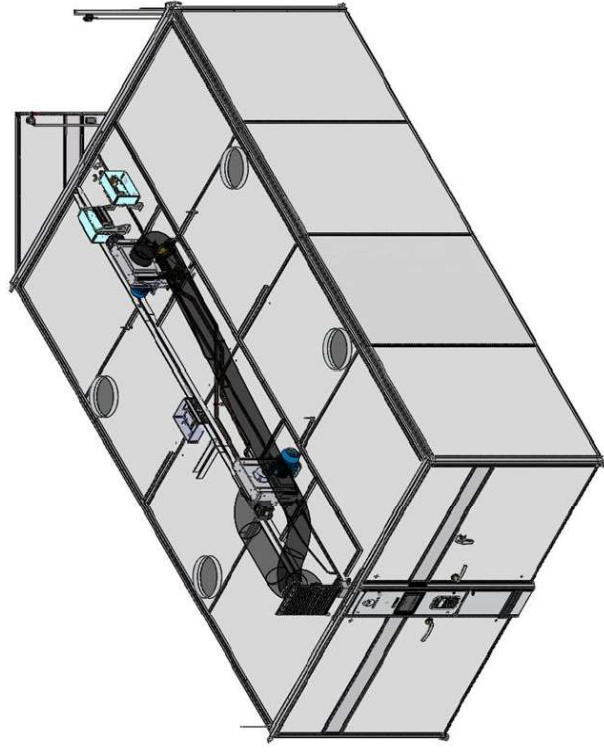


**XSTR Chick-Store 24S**  
up to 120,000 DOC

# Machine details



► 3 sizes for Gateway



XSTR Chick-Store 8S Gateway    XSTR Chick-Store 12S Gateway    XSTR Chick-Store 24S Gateway  
up to 40,000 DOC    up to 60,000 DOC    up to 120,000 DOC

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# Machine details



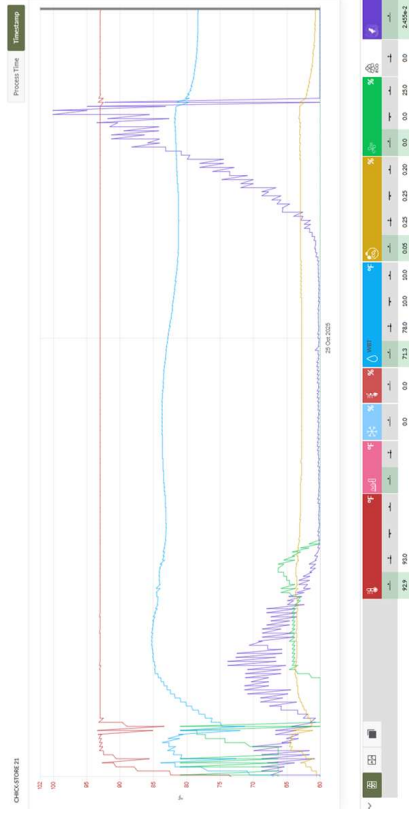
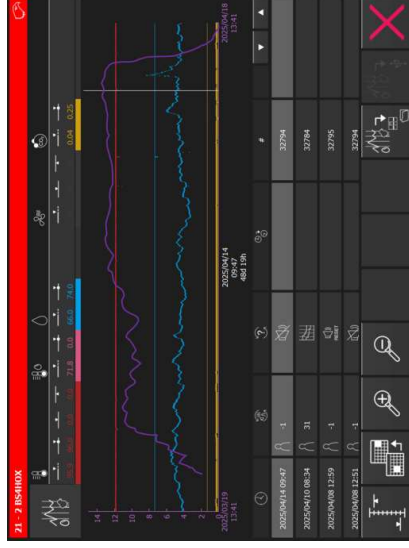
- ▶ NestSound: Embryo response Technology
  - ▶ Sound monitoring technology for enhanced chick welfare
  - ▶ Automatic call detection algorithm
  - ▶ Via microphones (4 in 24S; 2 in 12S/8S)



# Machine details



- NestSound: Embryo response Technology
- Acoustic call monitoring
- History analysis



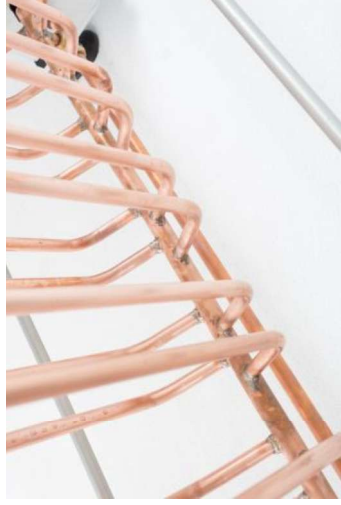
# Machine details

- Specifications
- Window covers
- CO<sub>2</sub>NTROL
- Extra cooling capacity
- Uniform airflow



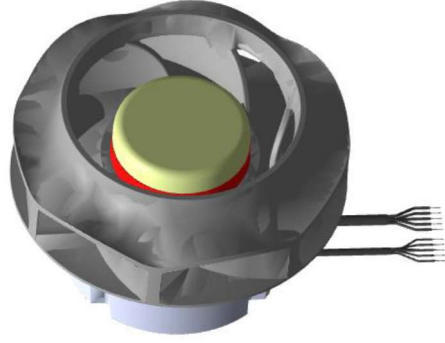
18mm coils & extra sections

5-blade pulsator

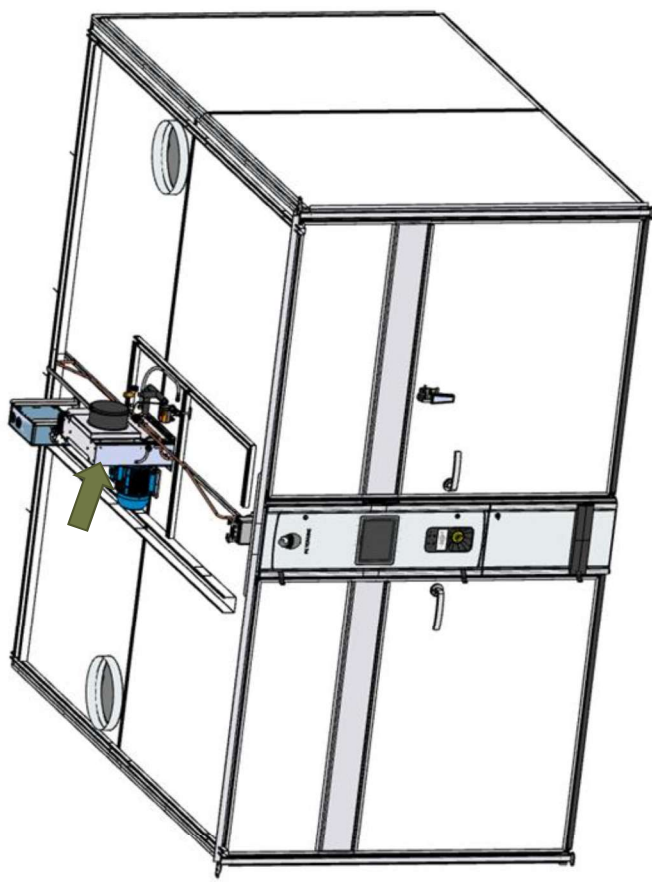


# Machine details

- Specifications
  - Increased air inlet fan
    - 60,000 DOC produce a lot of CO<sub>2</sub>



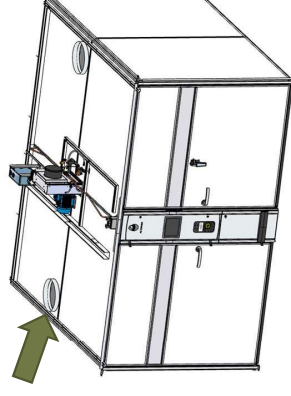
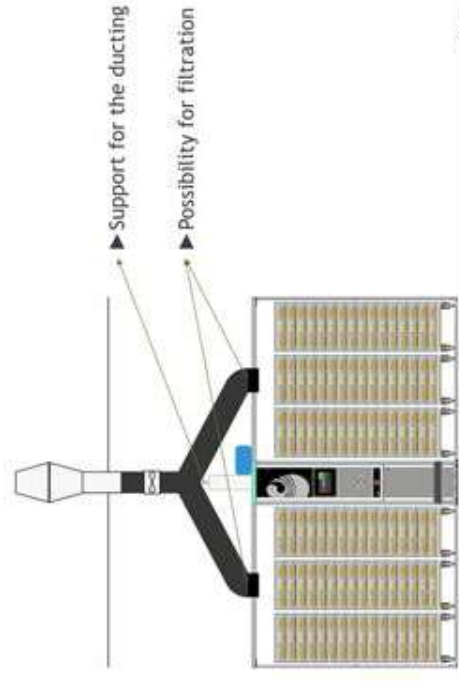
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# Machine details

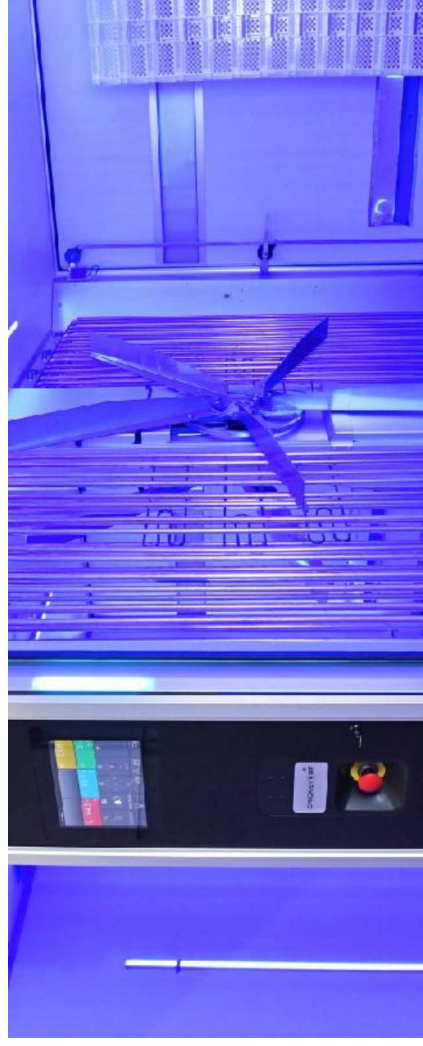
- Specifications
  - No exhaust dampers
    - 2 openings in the roof
    - Air outlet through the roof with ventilator
    - HVAC material



# Machine details



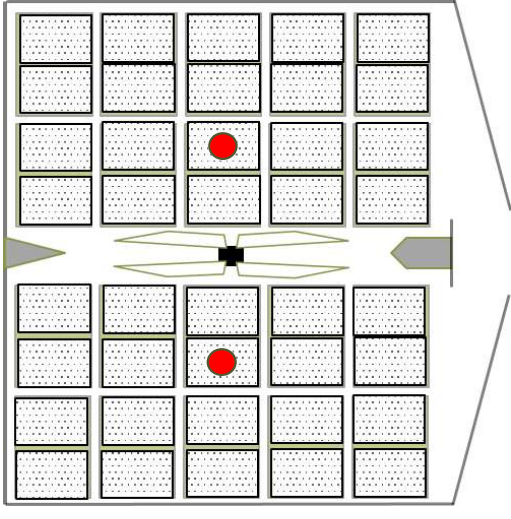
- ▶ Specifications
  - ▶ Chick-Store Light Kit
    - ▶ Keep chicks calm cfr traditional chick room
    - ▶ Avoid stress when doors open: smooth transition from Chick-Store to bright light of chick dispatch





# Machine details

- ▶ Specifications
  - ▶ Additional temperature sensors
    - ▶ 2 extra temperature sensors (~rear sensor 24S/16S)
    - ▶ Under the ceiling
    - ▶ Always working
    - ▶ Alarm when absolute temperature max. (+105 °F)
    - ▶ Standard in Chick-Store

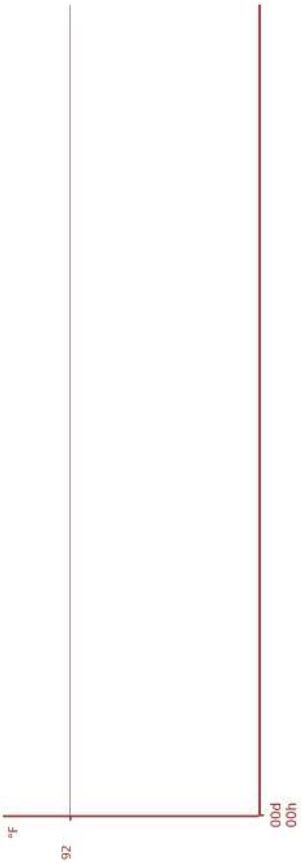


# Machine details

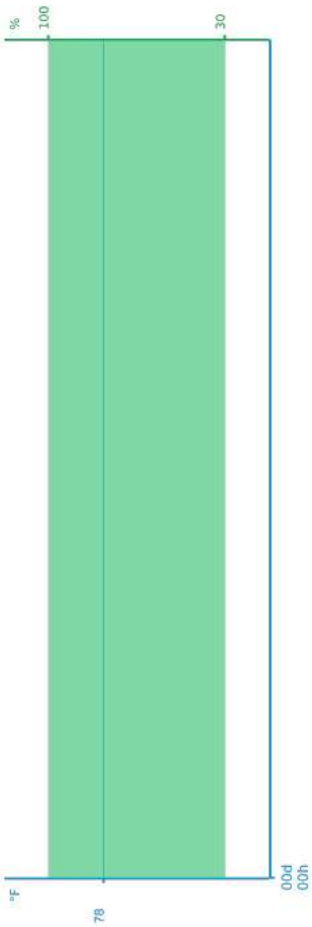
- Specifications
- Software
  - Automatic control of the process
  - Standard program available



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IP/H/PL	00d 00h	92.0	92.0	92.0	92.0	1.0	- 2.0	



# Machine details

- Specifications
  - Software
    - Automatic control of the process
    - Standard program available
    - Program is adjustable



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# Machine details

- ▶ Specifications
  - ▶ Open door functionality
    - ▶ Possibility to open doors for 10 min. without alarm
    - ▶ Ease of operation while loading/unloading chicks
    - ▶ Keep chick temperature withing safe margin



# Machine details

- Specifications
- Open door functionality
  - Doors opened

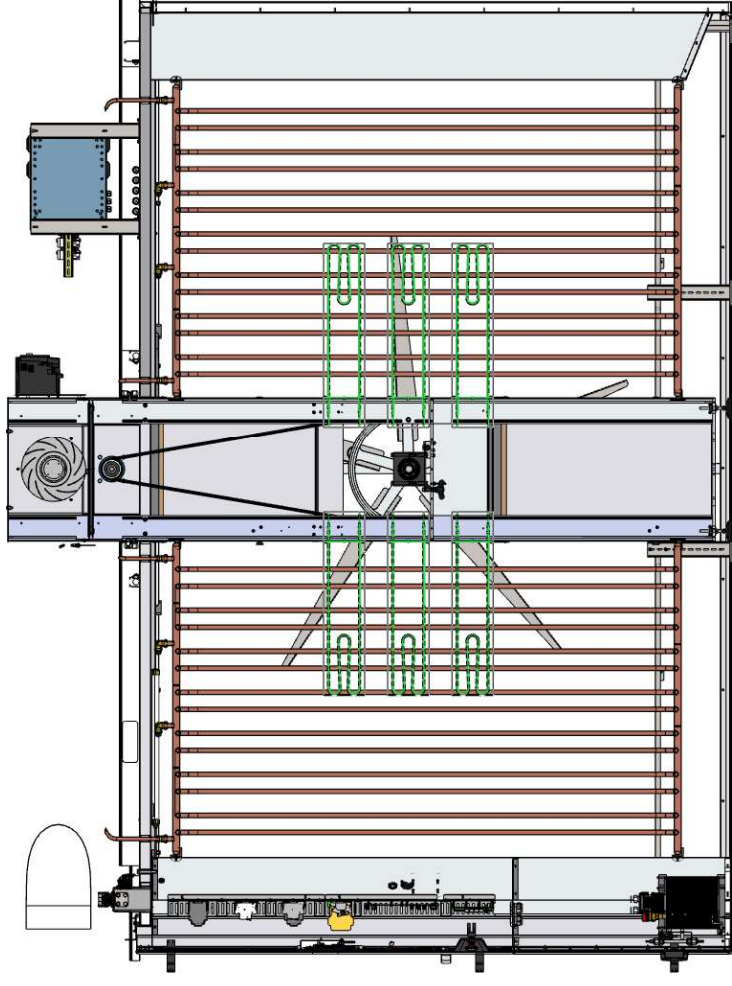


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# Machine details

- Specifications
- Open door functionality
  - Doors opened
    - Pulsator stops turning (Safety)
    - Inlet and outlet ventilator keep running
    - Cooling keeps working
    - Heating keeps working

Provide a stable environment



# Machine details

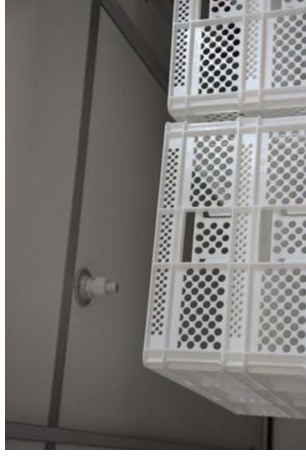
- ▶ Specifications
  - ▶ Open door functionality
    - ▶ Open door alarm automatically silenced for 10'
    - ▶ Doors often opened/closed during loading/unloading
    - ▶ Open door alarm after 10'





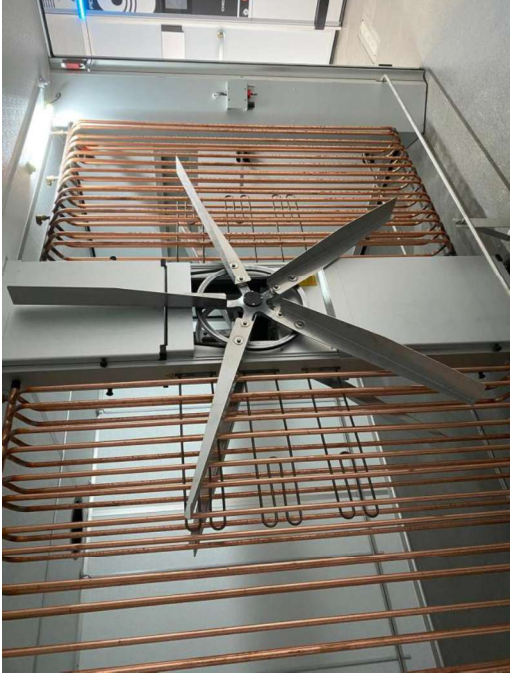
# Machine details

- Specifications
  - Open door functionality
    - Extra safety temperature sensors
      - If temperature too high during loading/unloading
        - => High temperature alarm





# Machine details



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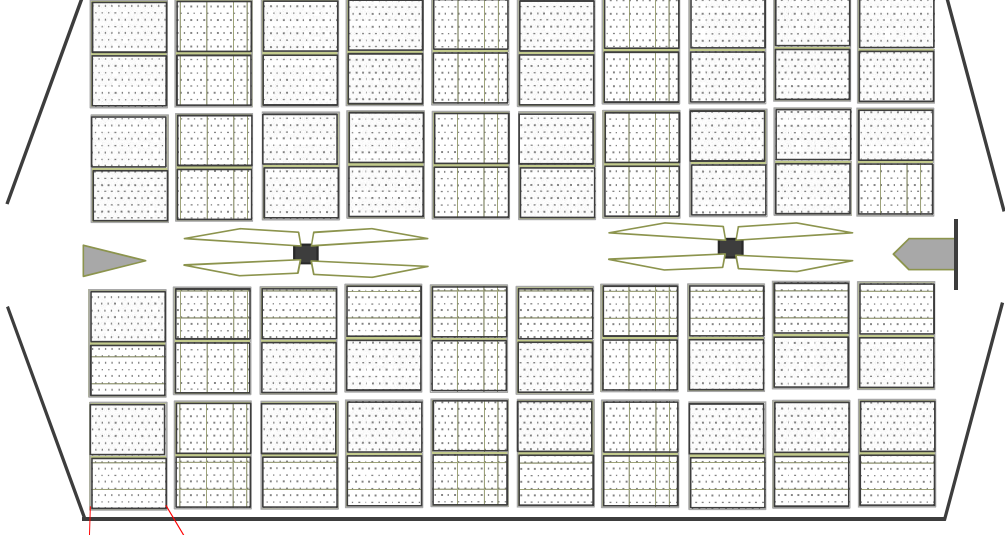
# In practice

- ▶ Petersime chick box trolleys
  - ▶ Chick box trolley
  - ▶ Chick box safe-T trolley



# In practice

- ▶ X-Streamer Chick-Store 24S (GW)
- ▶ Capacity up to 120,000 chicks
  - ▶ 40 chick box trolleys
  - ▶ 100 DOC per box
  - ▶ 2 boxes
  - ▶ 15 high
- ▶ Partial loading is possible

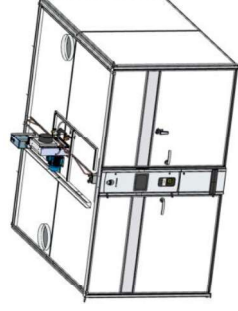
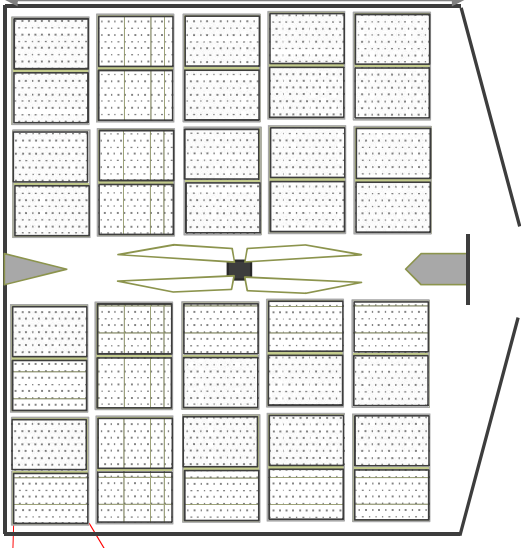


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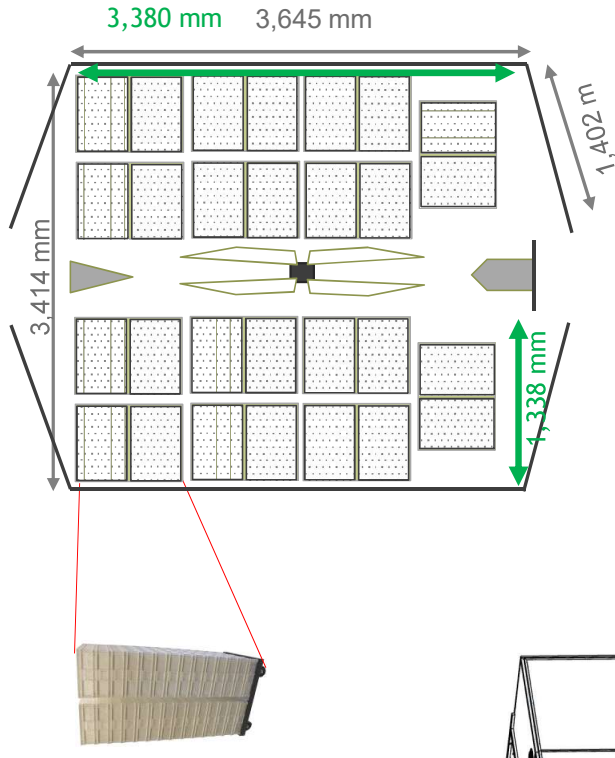
# In practice

- ▶ X-Streamer Chick-Store 12S (GW)
- ▶ Capacity up to 60,000 chicks
  - ▶ 20 chick box trolleys
  - ▶ 100 DOC per box
  - ▶ 2 boxes
  - ▶ 15 high
- ▶ Partial loading is possible



# In practice

- ▶ X-Streamer Chick-Store 8S (GW)
- ▶ Capacity up to 42,000 chicks
  - ▶ 14 chick box trolleys
  - ▶ 100 DOC per box
  - ▶ 2 boxes
  - ▶ 15 high
- ▶ Partial loading is possible



# In practice



From chick processing...



to the X-Stream Chick-Store...

**CHICK-STRE**



controlling the environment of  
the high quality chicks for  
many hours - if needed even  
overnight





# In practice

- ▶ On site training
  - ▶ Chick-Store start-up training
  - ▶ Principles and best practices
  - ▶ Evaluating the process
    - ▶ Learning to work with controller
    - ▶ Correct loading
    - ▶ Assessing chick comfort
    - ▶ Machine program
  - ▶ Ensure smooth transition to chick transport

Can be combined with Re-Store startup training:  
no need to put Chick-Store start-up training in quote  
if there's already Re-Store start-up training in it





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# Summary

- X-Streammer Chick-Store designed to create controlled environment for chick storage

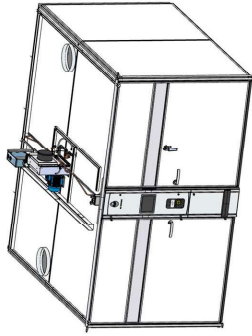


# Summary

- Space saving
- Improves performance, bio-security, flexibility in logistics



CHICK-ST<sup>ORE</sup>



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Thank you!



Questions ?