GLOBAL TEAM WORK

PLASSON COOLING PAD SYSTEM

Yonti Bernat| 22.02.2021

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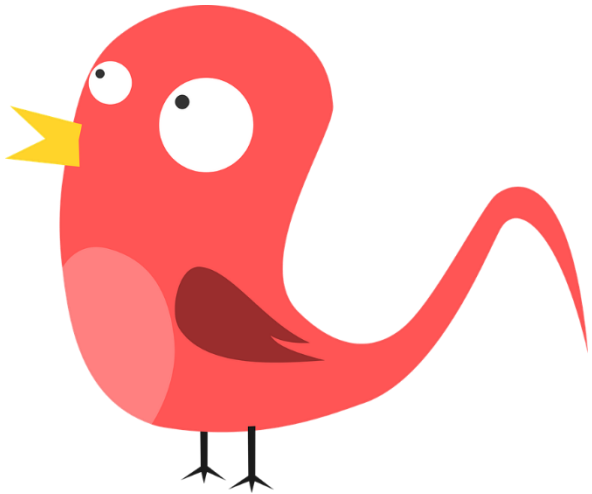
Global Presence - Local Commitment

Why using Cooling Pads?

We all agree on:

- Birds are changing continuously as genetics are improving.
- Faster growth with better FCR
- Body weights and metabolism are increased
- Global Climate is becoming warmer
- More cases of EXTREME conditions!



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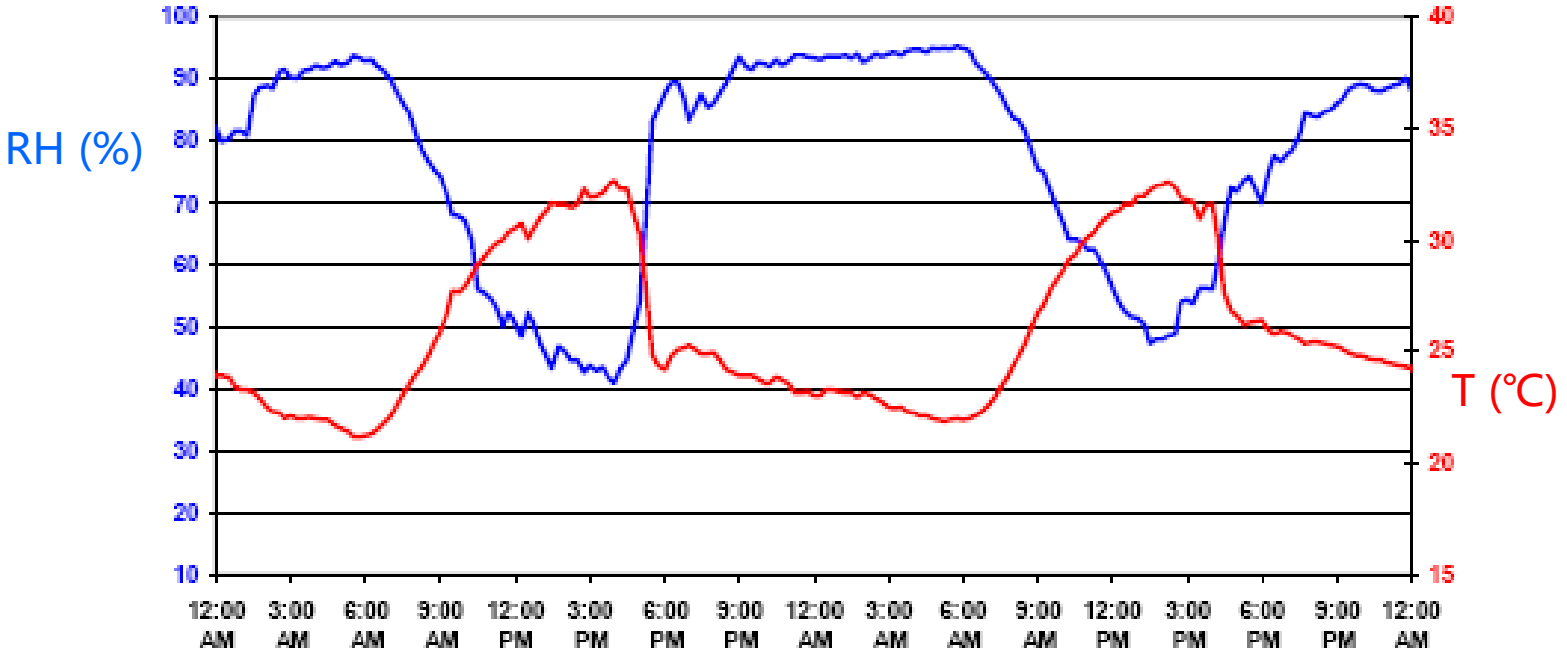
When conditions go the the extreme…

EXTREME conditions ➔ Stress ➔ **Emergency**



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It’s all about the Design

At emergency conditions Cooling pad system should work without any glitches or restrictions!

Perfect system performance starts with a good product and application design!

Product design + application design ➔ success under emergency conditions

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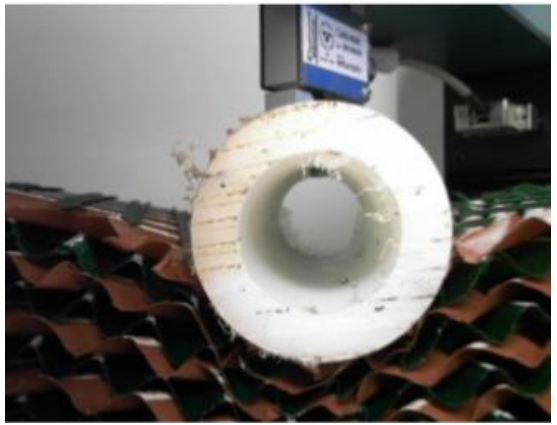
Product design - Paper raw material

The heart of the system is the paper

- Made in Europe
- Consistent and stable quality
- Clean and firm edges
- Stiff material



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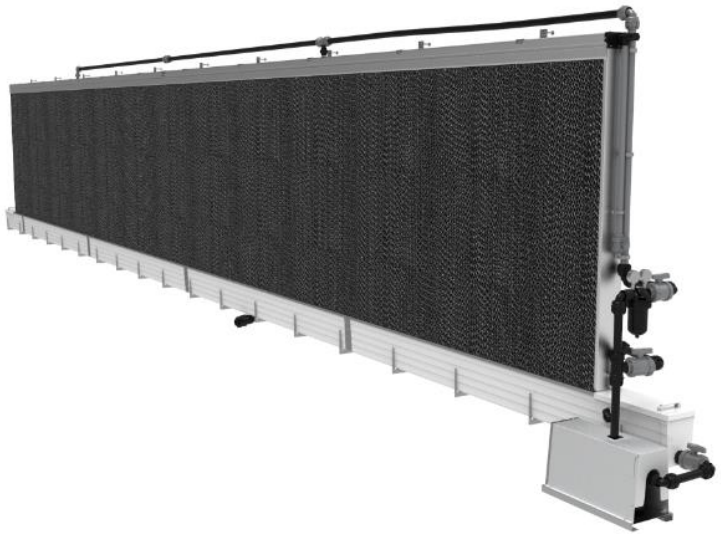
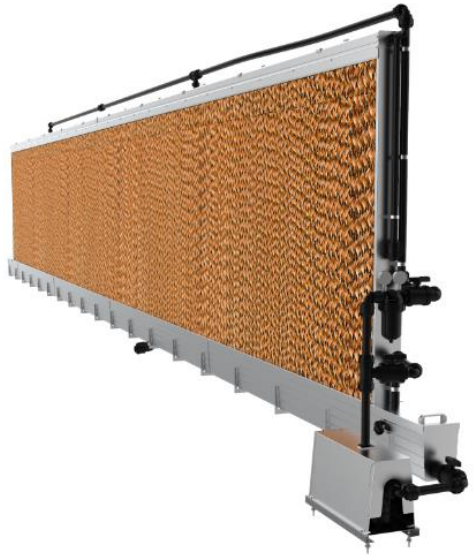
Product design – paper coated?

Coated Vs not Coated





Coated

Non coated

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Product design – Coated Vs not Coated

Coated

Non coated

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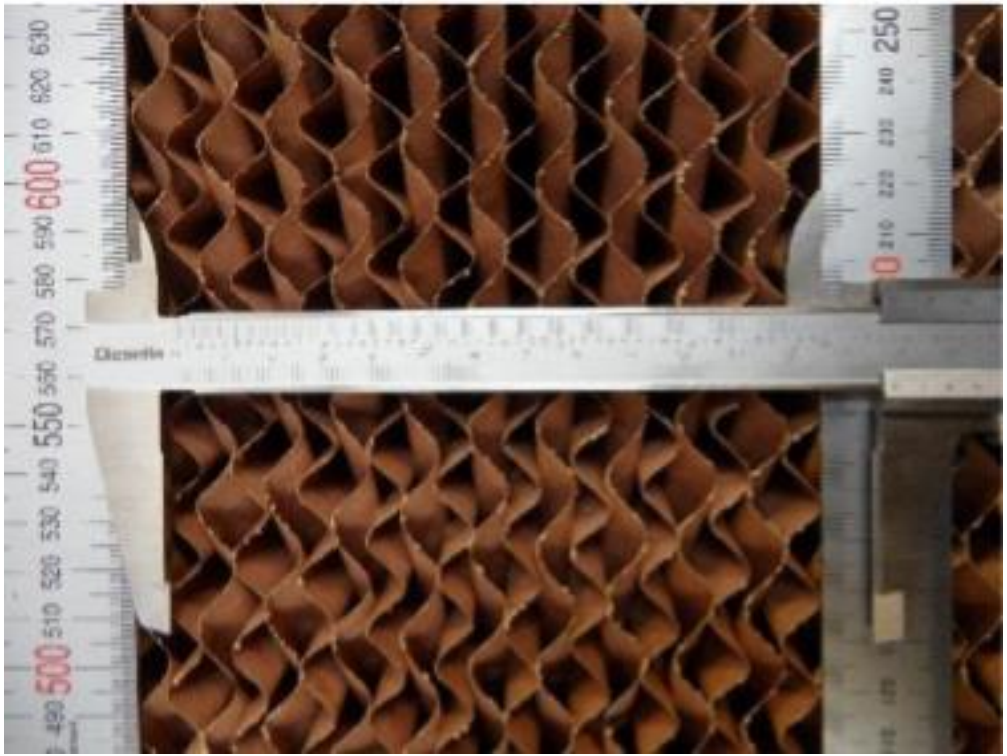
Product design – Width of channels

If the width of the channels is too small, then the pressure drop will be too high.

Our paper single corrugation width is between 10-12mm



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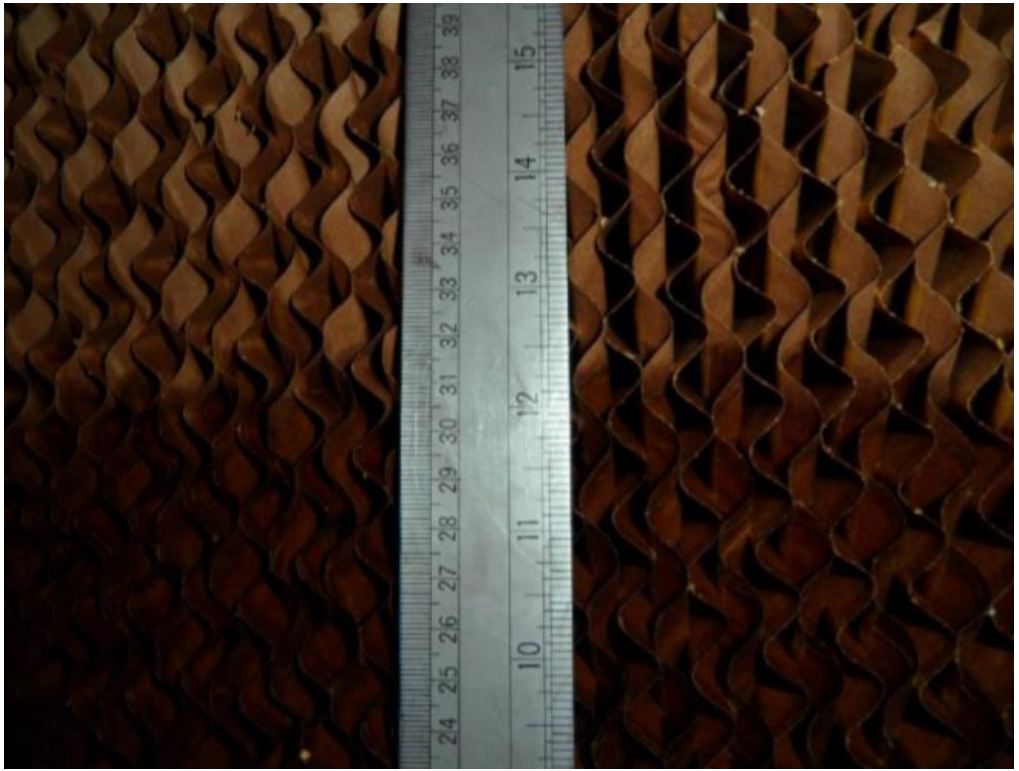
Product design – Capillary action

A pad containing more water is considered to have a better cooling properties.

Our pad has an excellent capillary properties!



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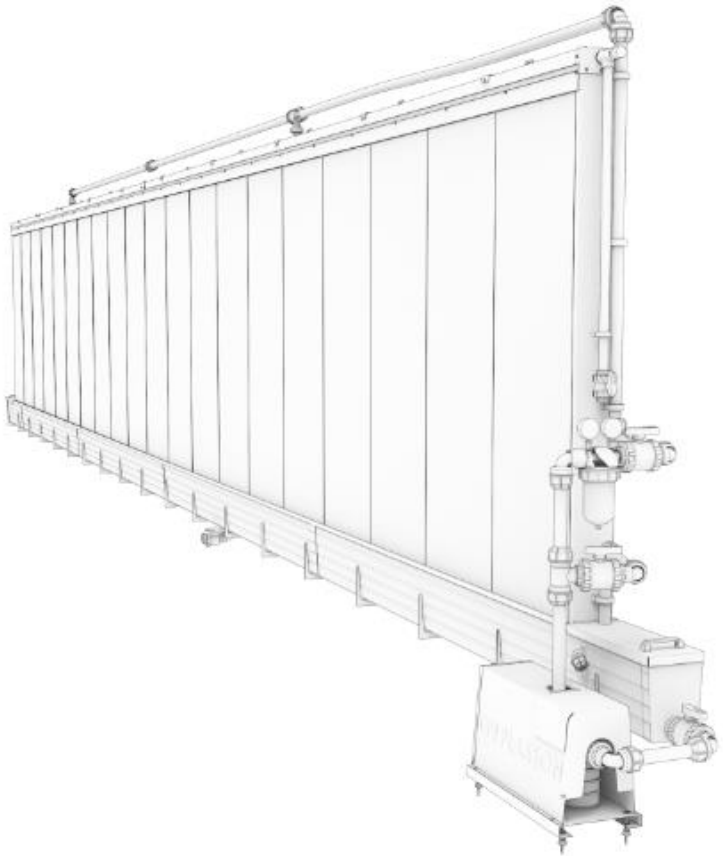
Product design – the paper

1. Raw material
2. Stiffness
3. Coating
4. Corrugation width
5. Capillary properties



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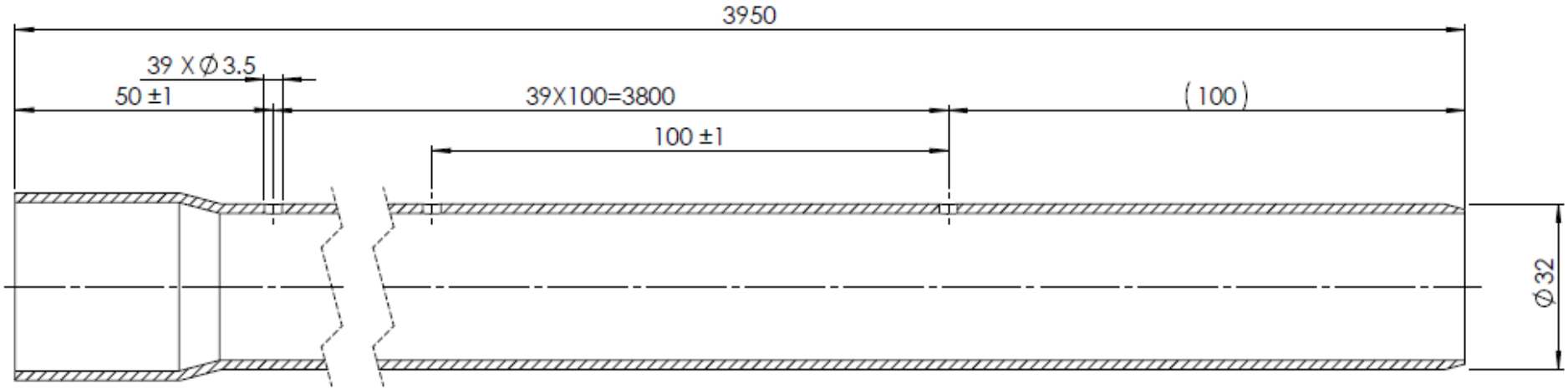
Product design – the system

1. Perforated pipe

Hole's configuration (One line), large hole diameter (3.5mm), fast water distribution and faster pad wetting (40 sec for 24m length)



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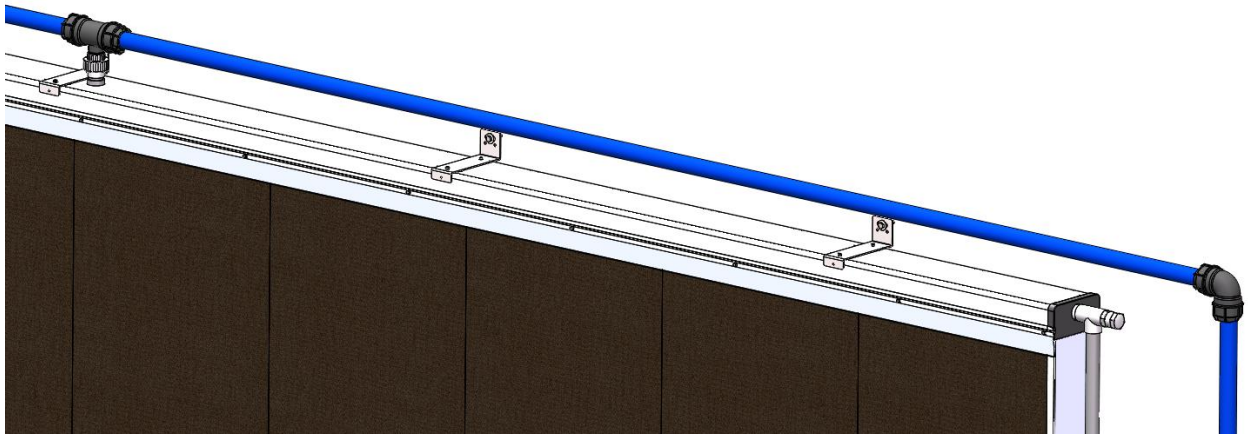
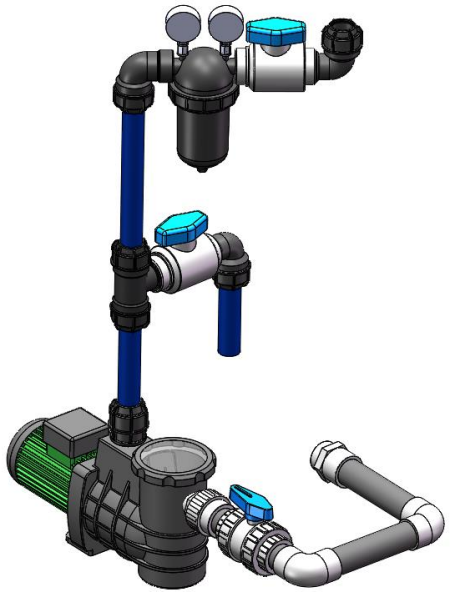
Product design – the system

2. Plasson Mechanical fittings implementation

All fittings between the pump and the CPAD inlets are ***Plasson*** mechanical fittings





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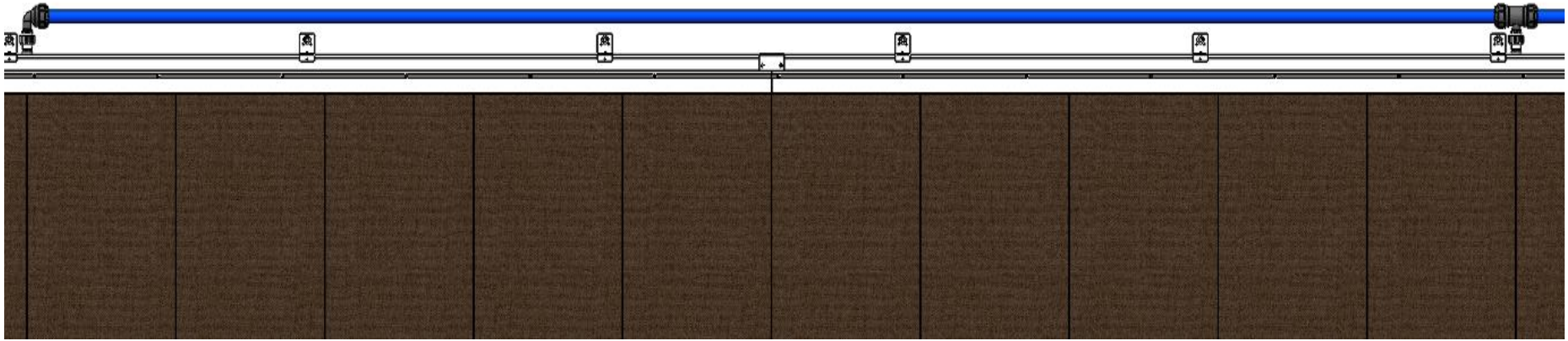
Product design – the system

3. Two water inlets to the pad.

At a longer than 21m length – 2 water inlets are applied



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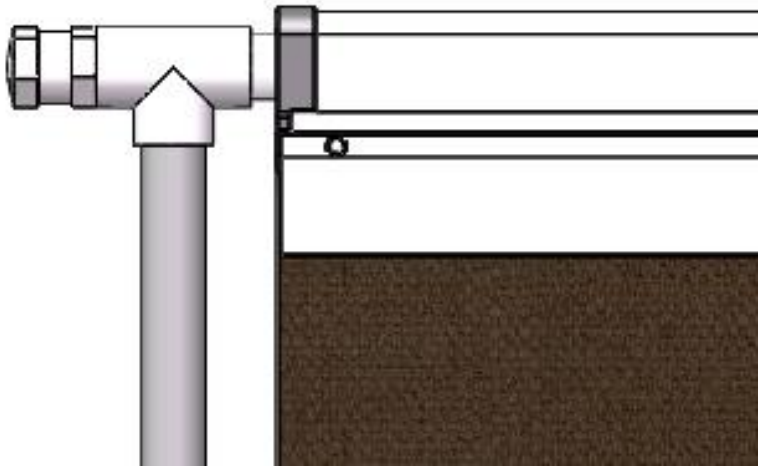
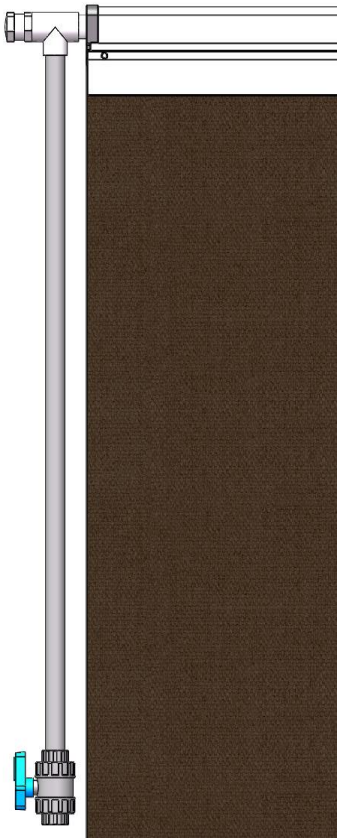
Product design – the system

4. Two top maintenance accesses

Two maintenance accesses on both sides of the perforated pipe. Removing of the plug allow cleaning of perforated pipe and holes with HP or brush.





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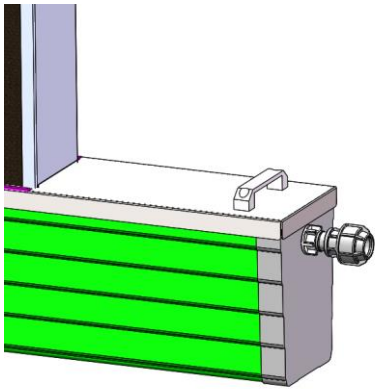
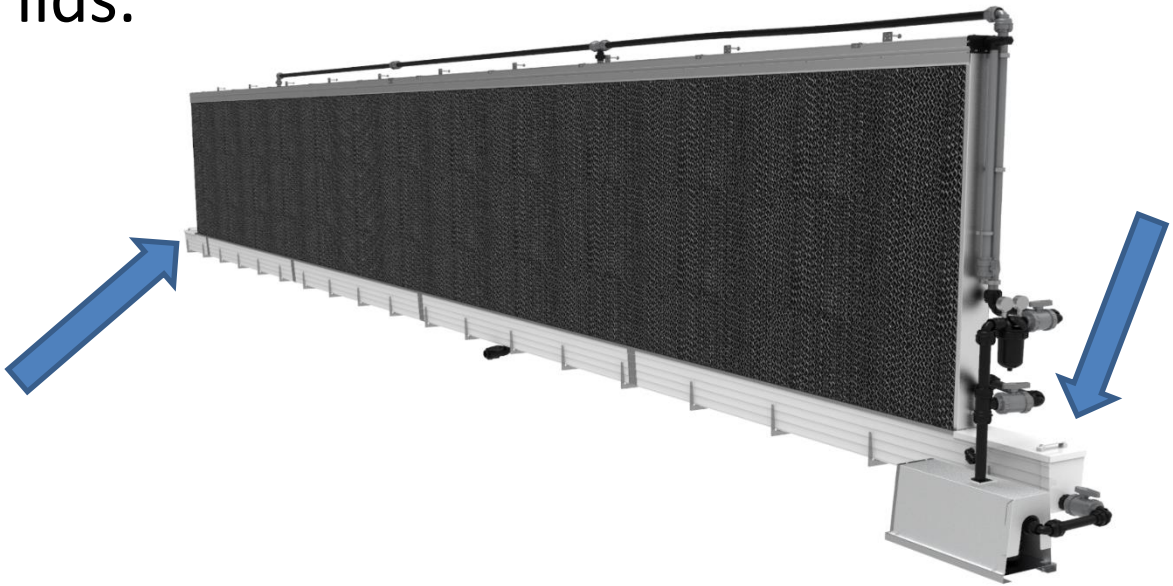
Product design – the system

5. Two water reservoir extensions

Two extended water reservoirs
with maintenance lids.





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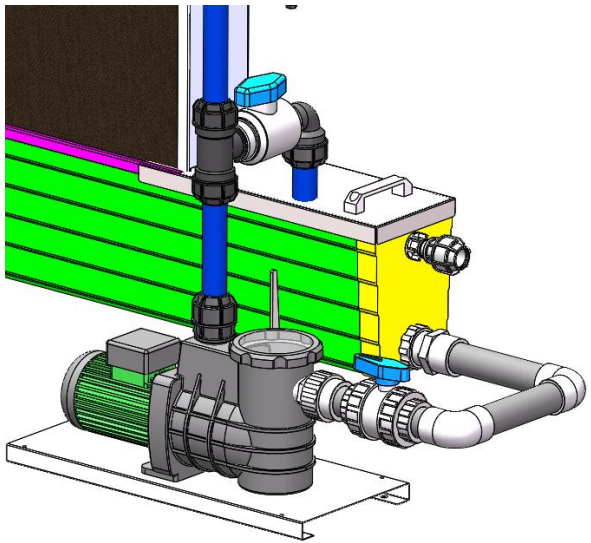
Product design – the system

6. Pump location

Pump location at the end of the water reservoir.

Optional center positioning of the pump for cooling pads longer than 18m

Easy access easy maintenance



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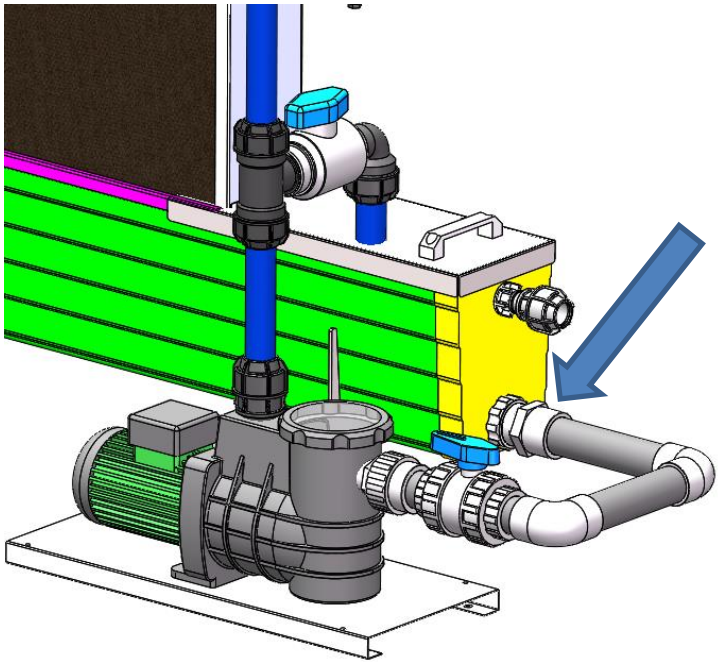
Product design – the system

7. Pump water inlet location

Pump inlet can be located on the side wall or bottom.

Side wall option simplifies installation, reduce filter blockage, easy to maintain.

Side wall installation reduces the needed space under the pad bottom gutter to about 450mm.



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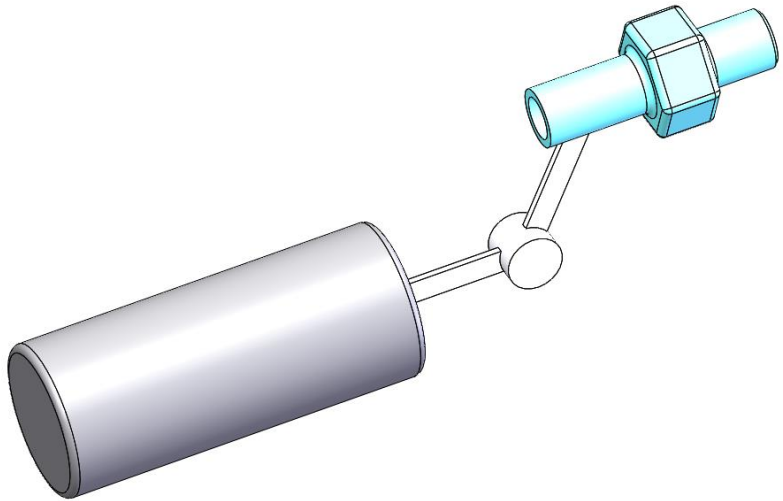
Product design – the system

8. High-capacity water level valve

Stable, high flow, corrosion resistant water level valve.



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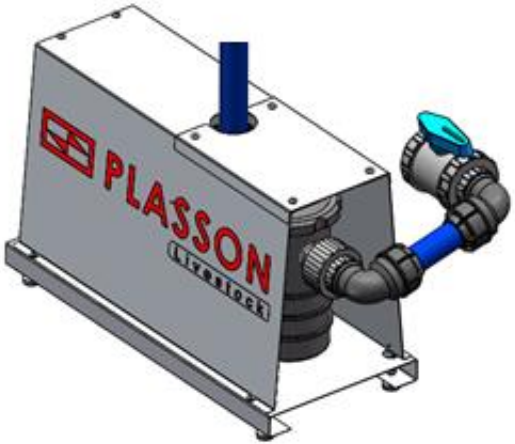
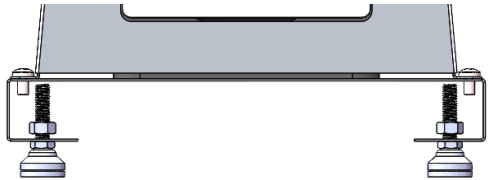
Product design – the system

9. Pump rain covers

Pump housing, elevated from the ground, optional fixing and placements.





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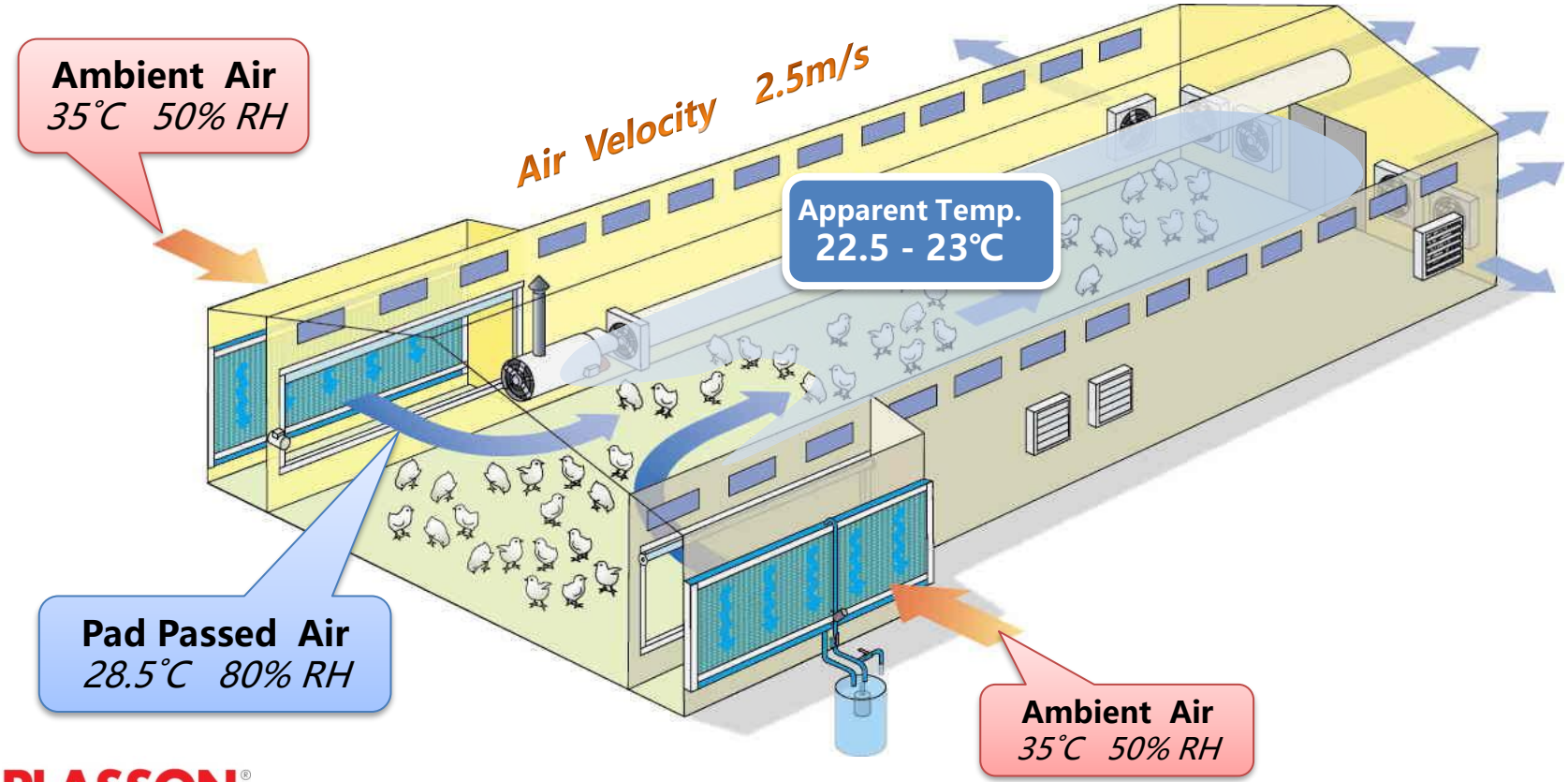
Product design – the system

1. Perforated pipe holes.
2. Plasson Mechanical fittings implementation.
3. Two water inlets to a pad longer than 21m.
4. Two top maintenance accesses.
5. Two extended water reservoirs with maintenance lids.
6. Pump location.
7. Pump water inlet location.
8. High-capacity water level valve
9. Pump rain covers

Application design – Cooling effect



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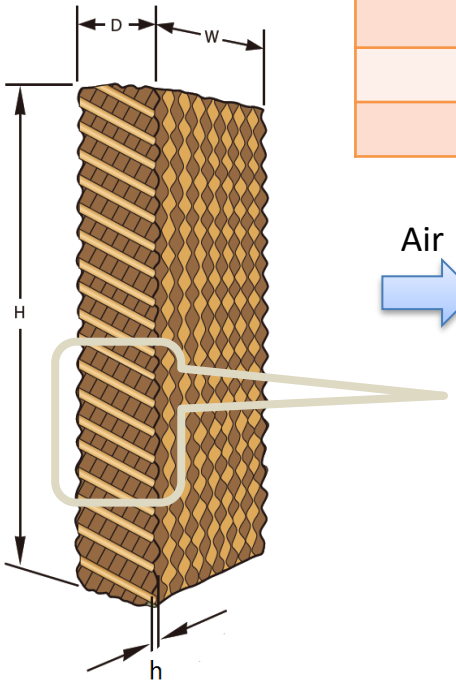
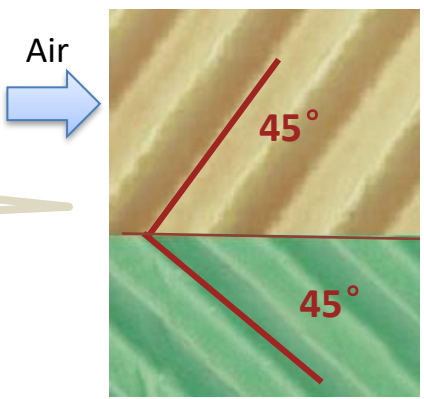
Application design - Angle of channel

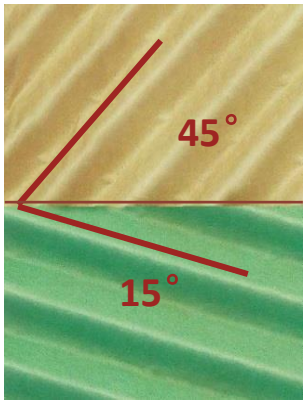
Choose the right paper type according the location and growth conditions

H (mm)	1500 - 2200	1500 - 2200
W (mm)	600	600
D (mm)	150	150
h (mm)	7	7





Model 4545



Model 4515

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Application design - Paper 4515 / 4545

Evaporation efficiency at same air velocity: 4545 > 4515

4545

- Cooler to moderate and dry climate conditions
- Breeders and Pullets

Pressure drop at same air velocity: 4545 > 4515

4515

- Mostly hot and humid conditions
- Broilers

COST : 4515 > 4545

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Cooling pad system general pictures

Supporting of the Cooling Pad bottom trough

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Cooling pad system general pictures

Gutter and Paper Pad Tray

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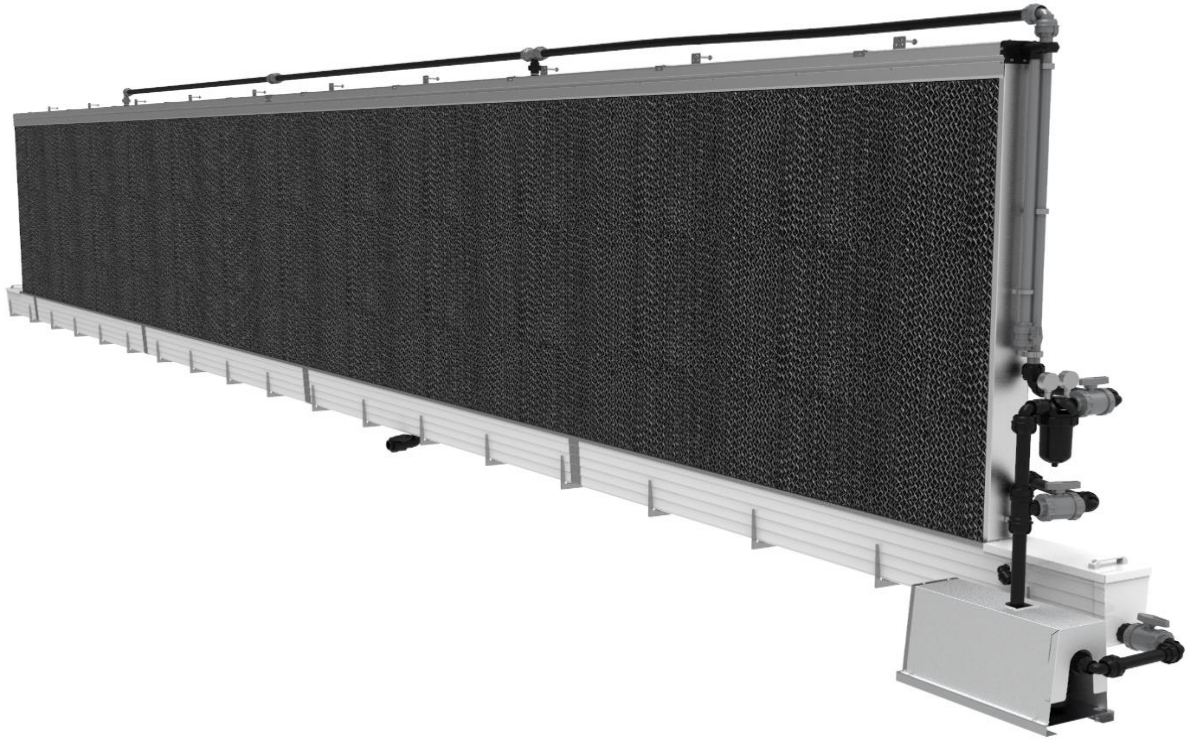
Cooling pad system general view



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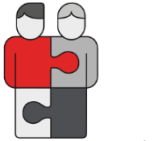
Thank You



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Feeding Drinking Climate Housing

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