

In this issue, introducing 3. The most advanced manure handling in the industry

1. EFA (Egg Farm Automation) targeting Rats and AI Free
2. Ultimate Zero crack and the most efficient Egg Collecting system in the industry
- 3. The most advanced manure handling in the industry**
4. 24 hours real-time computer system and ventilation control system to support precise automated egg farm management

## The most advanced manure handling in the industry

The system is consisting of 3 parts.

### Part 1 New Manure Collector C **clean** series

New Manure Collector C Series offers clean and slip/trouble free operation by its four major advantages and solid structure.

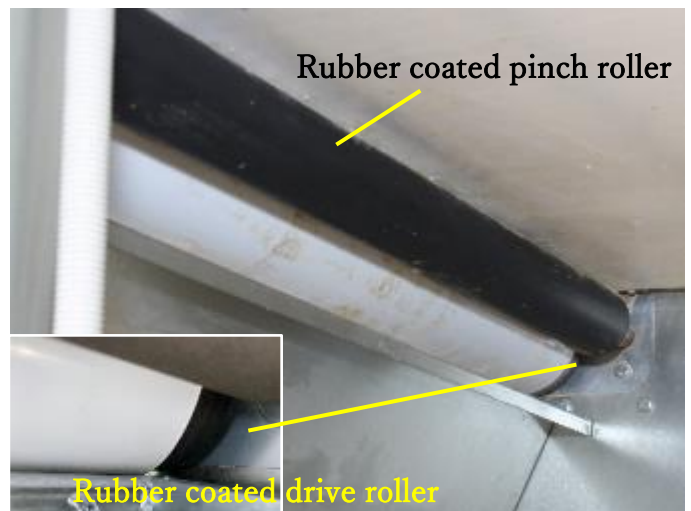
#### 4 Advantages



#### Advantage 1

##### Nonslip full- width rubber coated pinch roller Rubber coated drive roller

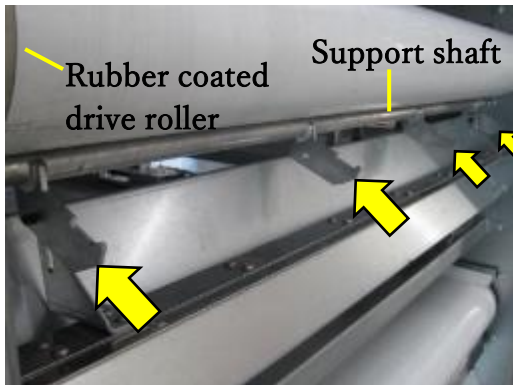
Gets rid of manure belt slips and minimizes damage of manure belts.



### Advantage 2

#### Four-point clamping on every tier

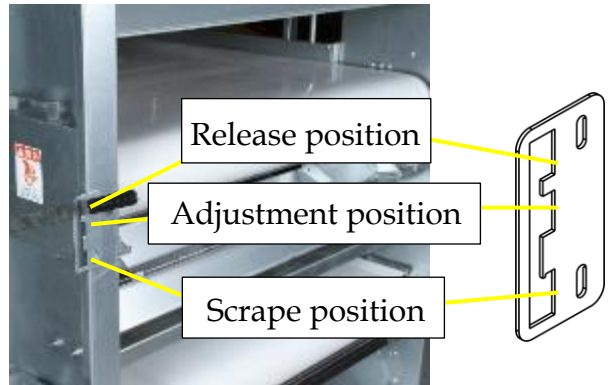
The four-point clamping provides rigid support for the scraper even at the center part of the manure belt, where clamping tends to be weak.



### Advantage 3

#### Three position scraper **Patented**

Adjusts the blade-to-belt pressure at the adjustment position, encloses tightly the belt at the scrape position. It helps outstanding manure cleaning.

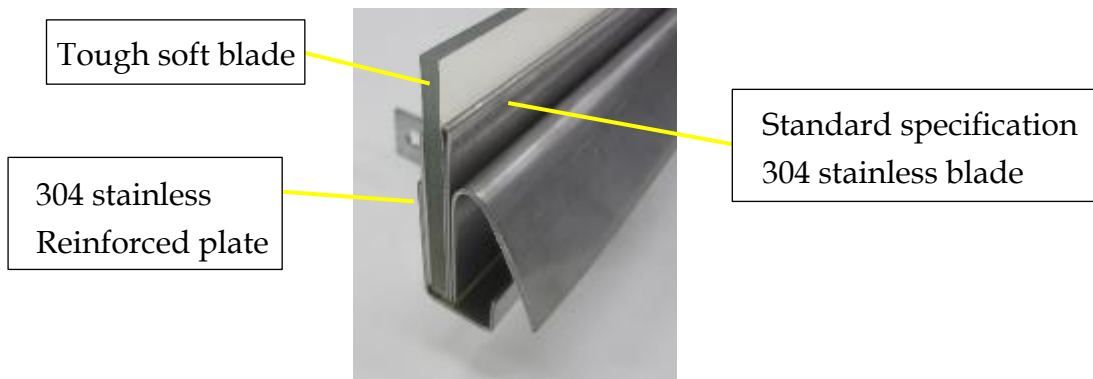


### Advantage 4

#### Newly Developed Product

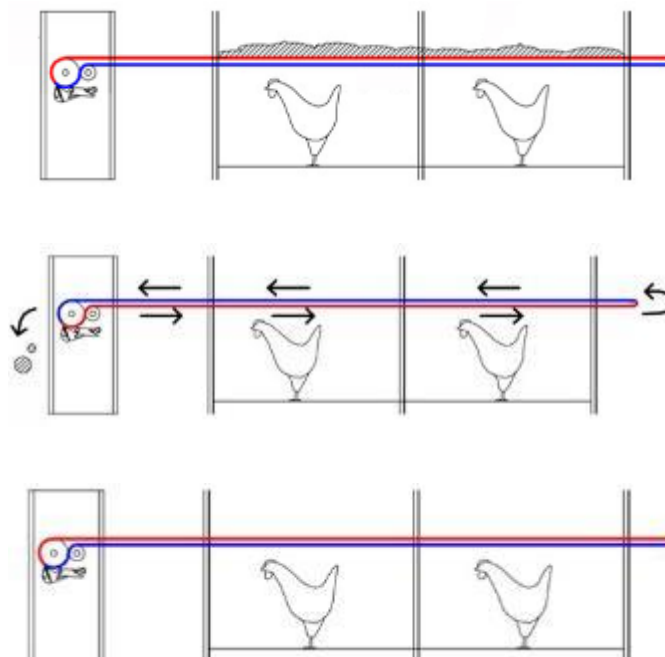
#### Tough Soft Scraper **Optional**

Wear-resistant elastic plastic incorporated into the standard stainless blade decreases a load on manure belts while maintaining scraping capability. Trouble free performance will be enhanced.



### 360 Auto Stop

Utilizing the Advantage 1 above



## Part 2 Cross Manure Conveyor System

Newly Developed Product

Patented

### Manure Conveyor Shutter

Innovative development through the field-based R&D aiming for a poultry house that is free rats and avian influenza

The critical point where rats and vermin are coming, is an opening for a manure conveyor. Rats are the worst enemy of the good flock management. A recent field research reported that one of the major causes of avian influenza was such as weasels that were exposed to the faces of wild birds infected with avian influenza virus. The complete closure at the outlet has been realized against vermin by making a frameless section that can pass through the poultry house wall.



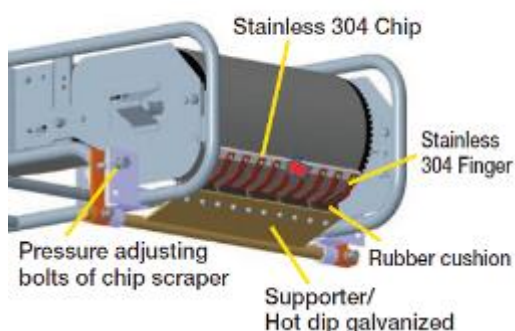
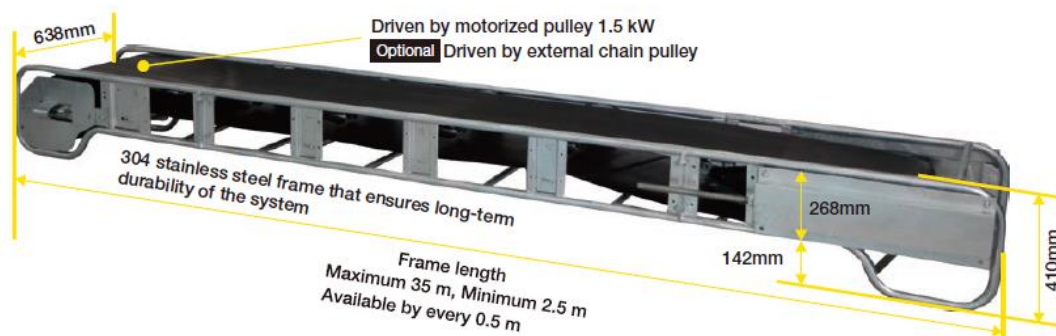
By automatically closing a shutter when the conveyor stops, rats and vermin are completely kept off

The shutter opens when the conveyor starts to run.

### Stainless Steel Manure Conveyor

Newly Developed Product

**HYTEM Stainless Steel Chicken Manure Conveyor** is a system developed exclusively to transport layer manure through repeated field tests at the egg farm



Stainless 304 Chip Scraper with Stainless finger and Rubber cushion scrapes manure cleanly





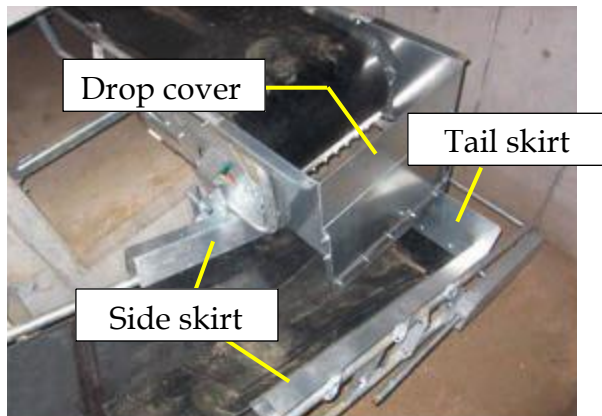
### Nylon carrier roller

Supports smooth belt running, stainless 304 shaft



### Separate nylon return roller

Reduces manure accumulation by reducing areas in contact with the belt, stainless 304 shaft



### Anti-manure scattering kits at transit points

Combination use of a drop cover, scraper cover, Tail skirt, side skirt, side cover, etc.



### Weather Cover Optional

Supportive structures are a part of building work.

## Chain Conveyor

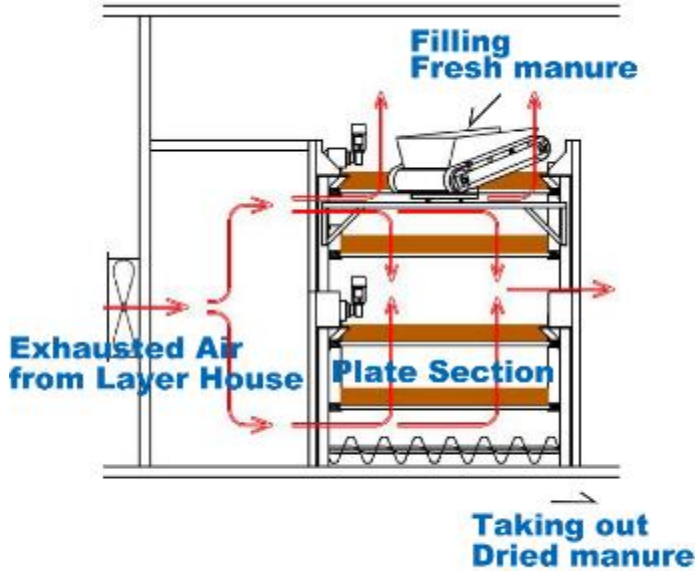
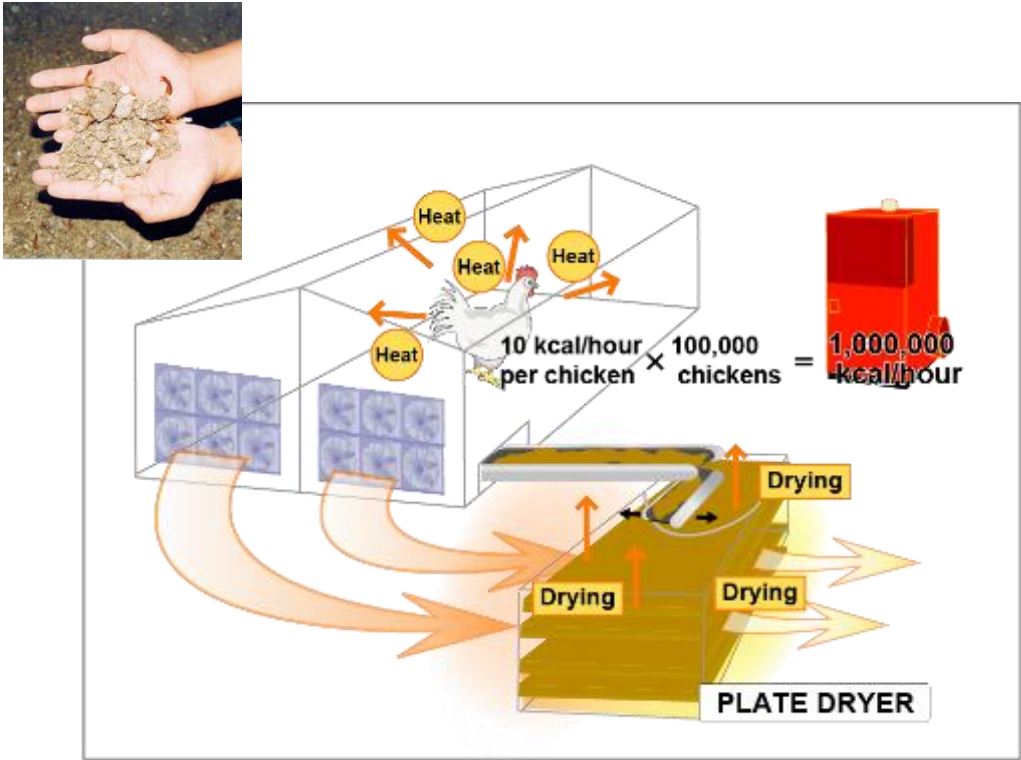


The chain conveyor is installed under the floor level. This structure facilitates easy cleaning of the conveyor and surroundings. The transfer capacity is about half the belt conveyor. The 304 stainless steel chains and troughs and the hot-dip-galvanized bars are maintenance free. This conveyor also features a slope requiring no pit as well as a shutter on the manure drop, which helps keep rats out.

**Part 3**

# HYTEM Plate Dryer poultry house waste-heat manure drying system

Plate Dryer is a next-generation manure drying system that dries manure to a water content of 15% after a 48 hour period by taking advantage of the waste heat from chickens in the exhaust air from the poultry house. Layers are radiating lots of due to no sweating. Ammonia pollution problem by composting will be solved by introducing HYTEM Plate Dryer.





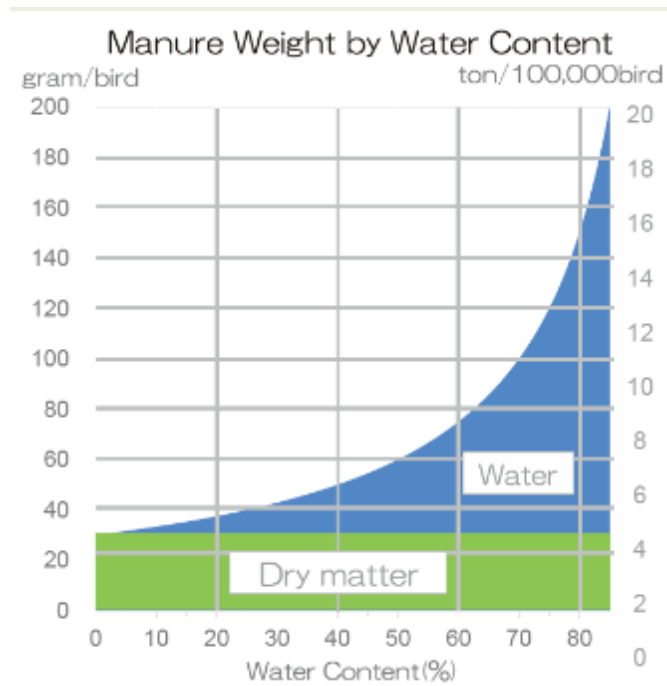
Out of four tiers, the top two tiers used for manure in higher water content is made of 304 stainless.



Spreader evenly filling manure on the plate



Reverse unit delivering manure to the lower tier



The volume of dried manure in 20% water content is 1/4 of that in 80% water content.



# Soilborn

Mixing the dry manure by Plate Dryer into wet manure will help efficient composting.

Future, when HYTEM Chiyoda CCS Pellet Plant is introduced, production of Soilborn **INTL trade mark registered** high quality 100% organic fertilizer will become possible, features of which are ① three major fertilizer components guaranteed, 4% Nitrogen, 3% Phosphorus and 2% Potassium ② disinfected

③moisture 10% ④Pellet hardness suitable for spreading by machine.

**SUSTAINABLE GOALS** High Quality 100% Organic Fertilizer **Soil Revitalizer**

Next-generation, all-purpose pellet fertilizer using innovative technology to dry and sterilize fresh poultry manure. Gentle to soil, crops, and the environment.

# Soilborn

**Soilborn** is a next-generation, all-purpose pellet fertilizer. All 3 major fertilizer components are guaranteed. It is disinfected and has a moisture content of 10%. It is suitable for spreading by machine.

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**Fertilizing Standards for 10 areas**

Vegetables	10-12 bags
Plants	5-7 bags

**NET 15kg**

