

*HIGH SPEED LINKING AND HANGING SYSTEM FOR ALL TYPE CASING*

**HITEC**

*PATENTED*

# **LINKWEL-X**

# **LINKWEL-XL**

*TYPE FOR NATURAL CASING*

*TYPE FOR NATURAL AND ARTIFICIAL CASING*



# **LINKWEL-X**

# **LINKWEL-XL**

**The world's first equal-length, equal-weight, and equal-diameter sausage stuffing machine for natural casing.**

## ***Servo operated metering pump***

**Hitec engineers utilize the servo motor in order to eliminate costly clutch components and maximize sausage count.**

## ***Independent Electrical Control for Drive***

Metering Pump, Twister and Stuffing Tube Rotary Head, Linking Chain, and Conveyor are driven by motors independently and each motor is under separate electrical control. Such independent drive and separate control achieves highspeed stuffing of sausages made with natural casing. In addition, structure of drive transmission made as simple as possible has not only reduced the number of parts used but also improved durability in drive transmission parts, thus preventing occurrence of troubles and cutting substantial time, cost, and difficulty in maintenance.

## ***A redesigned main body***

Housed by a completely redesigned main body, all components are very easily accessible. The new "unibody" construction design of the main body not only offers exceptional strength but also insures no problems due to water invasion.

## ***Improved electrical design***

All electrical components are housed separately in an exclusive stainless steel waterproof box. Thanks to a much wider door opening, operations such as parts exchanging can be performed very easily.



One with an automatic casing feeder processes casings of all types and the other is exclusively used for natural casing. "LINKWEL-X" is the most suitable machine for any kind of casings including sheep, hog, collagen, and cellulose.



**"LINKWEL-X" is the equal-length, equal weight, and equal-diameter sausage stuffing machine for natural casing.**

In the conventional production sausages of natural casing, it was considered impossible to make weight and length of sausages constant. However, our new product "LINKWEL-X" is the world's first sausage stuffing machine that has realized production of natural casing sausages with equal weight as well as equal length.

**"LINKWEL-X" achieved high-speed production of natural casing sausages.**

It is a machine completed with an idea quite different from the conventional stuffing theory for natural casing sausages. It has realized a production with much higher speed than the conventional natural casing sausages stuffing machine. In addition, since it can be connected including an operation of hanging sausages on rods.

**"LINKWEL-X" can minimize breakage of casings during stuffing.**

As it employs a stuffing method different from the conventional ones, it drastically decreases the frequency of casing breakage due to a success in a sharp decrease of pressure on casings during stuffing.

**"LINKWEL-X" has 2types**

This type of "LINKWEL-X" can stuff all casing including sheep casing, hog casing, collagen casing, and cellulose casing. Changeover of a product is very easy and even the changeover from natural casing to artificial casing to natural casing is so simple. This changeover without special tools and skill can be made by an operator and exchange work including all of the parts and change in setting-up can be finished within 10 minutes.



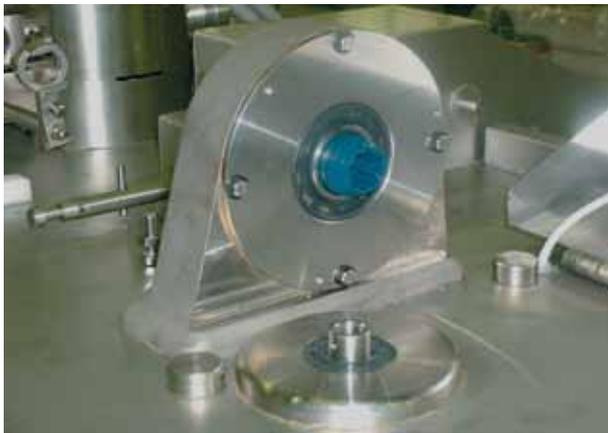
### **Stationary chute**

A revolutionary breakthrough over the conventional looper horn which moves to hang product over hooks. Our system allows precise hanging by simply allowing the product to "side" to the conveyor hooks without the need for more wear parts as on a looper system.



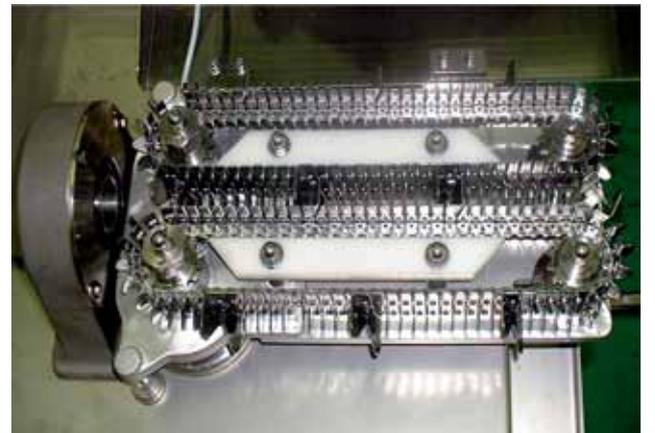
### **More durable metering pump**

The metering pump offers increased durability compared to conventional ones. Our design offers excellent long term weight control with less necessary overhauls. A servo motor starts and stops the pump precisely without slippage offering exact front ends and tails.



### **Maintenance free no oil twisting system**

Never have to concern about leaks. Direct drive from motor with timing belt brings fewer components and extended parts life. When necessary, replacing parts is done quickly and easily without the need to remove the entire twister assembly.



### **Various Linking Chain**

Available in various lengths from 3 pitches (28.56mm), as well as half pitch (4.76mm). Also capable of straight stuffing (no twist).

# **LINKWEL-X**



### Separation of pneumatic parts and electrical parts

Complete separation of pneumatic parts and electrical parts allows easy and safe repair/adjustment.



### OPERATOR FRIENDLY MONITOR

All your necessary information displayed at a moment's notice, quick and easy.

### Easy changing of products

Easy as 1.2.3.

1. Confirm you have the correct linking chain, tube size, chuck, and hopper adjustment.
2. Select the desired preprogrammed product code.
3. Push the start button.

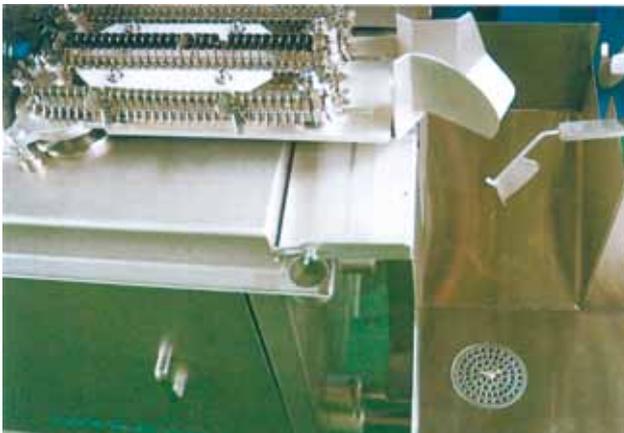
Everything is stored and predetermined. Machine speed, pump speed, front and tail of casing, twist, etc, the same every time!!!

### Production control

All vital data including cycles run, set point, etc can be checked at anytime.

### Maintenance and troubleshooting

If any type of problems occur during operation, its location will be displayed immediately. Also, it can quickly be resolved with a flow chart for the machine.

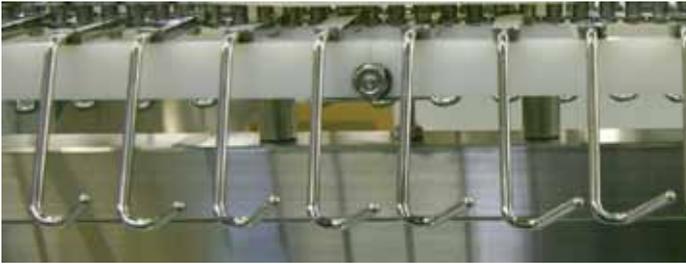


### Sanitary draining system

The standard type is equipped with Water Saucer and Water Chute to get water flow into one place.

# LINKWEL-XL

## Hitec Hook Design Options



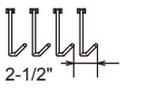
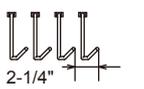
**Multi type casing round bar hook**



**Natural casing plate hook**

Other hook designs available for ring sausage or other specialized applications.

### RS × Pitch

CONVEYOR CHAINS					
Calculation example 1 inch = 25.4mm RS50 = 5/8inch RS60 = 3/4inch RS50 × 3 P =25.4mm × 5/8 × 3 =47.625mm	RS50 × 3 P  1-7/8"	RS50 × 2 P  1-1/4"	RS60 × 2 P  1-1/2"	RS50 × 4 P  2-1/2"	Also available RS60 × 3 P  2-1/4"
	STD HOOK CONVEYOR	CLOSE HOOK CONVEYOR	MEDIUM HOOK CONVEYOR	WIDE HOOK CONVEYOR	
Hook distance	1 7/8 inch 47.625 mm	1 1/4 inch 31.75 mm	1 1/2 inch 38.1 mm	2 1/2 inch 63.5 mm	2 1/4 inch 57.15 mm

## Various electric systems available



**Mitsubishi**



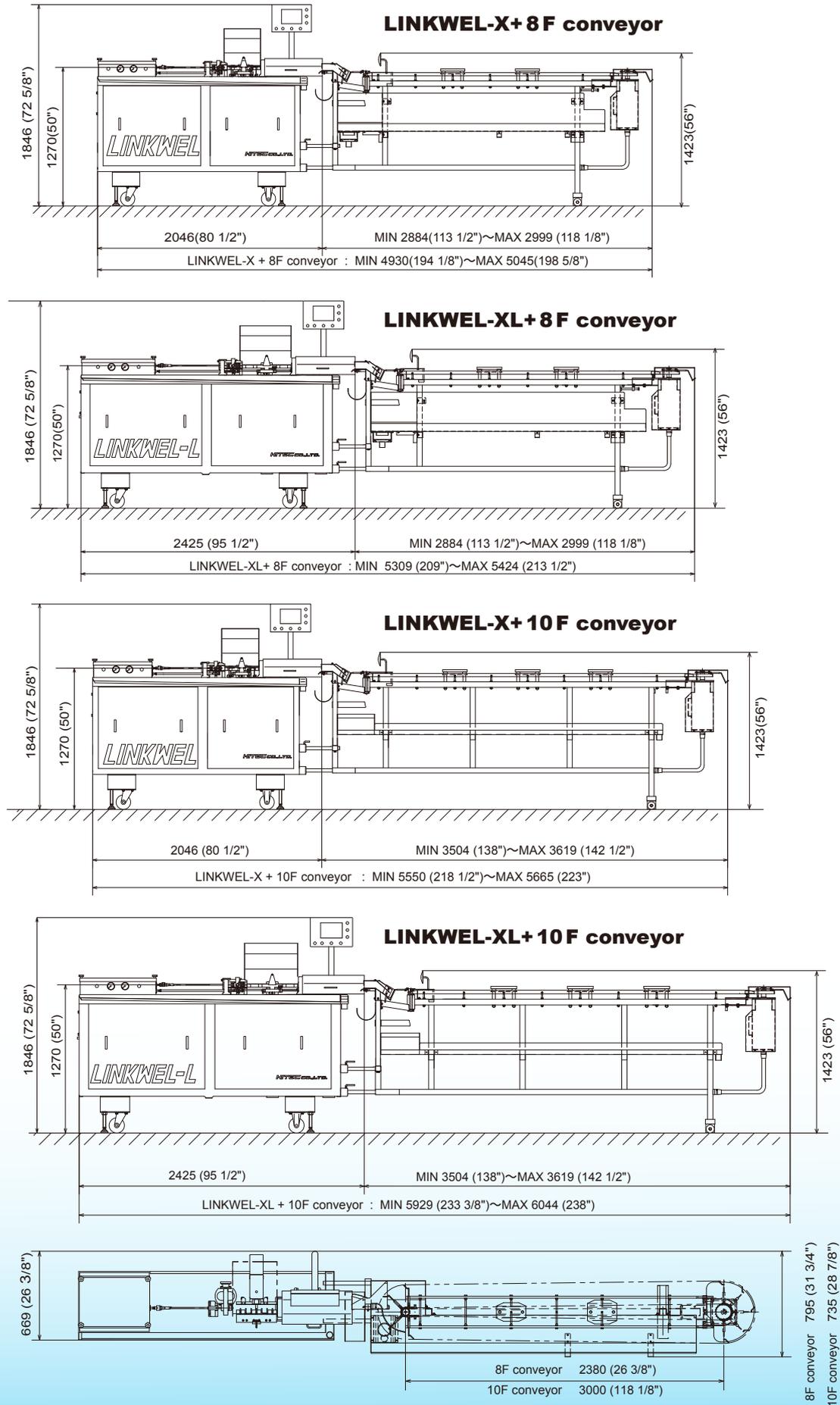
**Omron**



**Allen-Bradley**

Easy to operate, non proprietary electronic components and controls. Omron, Mitsubishi or Allen Bradley, the choice is yours.

# OVERALL DIMENSION



Optional sanitary design hanging conveyor in 8ft or 10ft length available.  
 Sanitary servo conveyor made of round tubing for optimum sanitation.  
 All components are removable without tool usage.  
 No debris or dirt collection surfaces makes sanitation quick and thorough.

## ■ SPECIFICATION

Production Rate	Artificial Casing	Max. 7,000 lb/hr (3,200kg/hg)
	Natural Casing	Max. 800pcs./min

Dependent on casing quality, product size, weight and/or factory conditions.

Product Size	Artificial Casing	3 pitches (28.6 mm , 1 1/8 in ) through 32 pitches (304.8 mm, 12 in) or more.
	Natural Casing	3pitches (28.6 mm , 1 1/8 in ) through 20 pitches (190.5 mm , 7 1/2 in) or more

Longer sizes can be applied with HITEC'S optional unit.

Casing Size		LINKWEL-X	LINKWEL - XL
Diameter	Sheep Casing	14mm ~	25mm
	Hog Casing	26mm ~	36mm
	Collagen	13mm ~	32mm
	Cellulose Casing	14.5mm ~	34mm
Shirred Length	Sheep Casing	180 mm (7 1/16 in)	
	Hog Casing	180 mm (7 1/16 in)	
	Collagen	280 mm (11 in)	300 mm (11 3/4 in)
	Cellulose Casing	325 mm (12 3/4 in)	440 mm (17 3/8 in)

Machine Size				
Total Machine size	LINKWEL-X + 8Fconveyor	LINKWEL-XL + 8Fconveyor	LINKWEL-X +10Fconveyor	LINKWEL-XL +10Fconveyor
Height	1,846mm(72 5/8 in)	1,846mm(72 5/8 in)	1,846mm(72 5/8 in)	1,846mm(72 5/8 in)
Tube height	1,270mm(50 in)	1,270mm(50 in)	1,270mm(50 in)	1,270mm(50 in)
Length MAX	5,045mm(198 5/8 in)	5,424mm(233 1/2 in)	5,665mm(223 in)	6,044mm(238 in)
Width	795mm(31 1/4 in)	795mm(31 1/4 in)	735mm(28 7/8 in)	735mm(28 7/8 in)
Weight	690kg (1,518 lb)	730kg(1,610 lb)	710kg(1,562 lb)	750kg(1,650 lb)
Net (Machine dimension and weight)	LINKWEL-X	LINKWEL-XL	8F conveyor	10F conveyor
Height	1,846mm(72 5/8 in)	1,846mm(72 5/8 in)	1,423mm(56 in)	1,423mm(56 in)
Length MAX	2,046mm(80 1/2 in)	2,425mm(95 1/2 in)	2,999mm(118 1/8 in)	3,619mm(142 1/2 in)
Width	669mm(26 3/8 in)	669mm(26 3/8 in)	795mm(31 1/4 in)	735mm(28 7/8 in)
Weight	500kg(1,110 lb)	540kg(1,188 lb)	190kg(418 lb)	210kg(462 lb)
Gross (Wooden crate) (Box dimensions and weight)	LINKWEL-X	LINKWEL-XL	8F conveyor	10F conveyor
Height	1,830mm(72 in)	1,830mm(72 in)	1,550mm(61 in)	1,550mm(61 in)
Length	2,550mm(100 3/8 in)	2,750mm(108 1/4 in)	3,500mm(137 3/4 in)	4,100mm(161 1/2 in)
Width	900mm(35 1/2 in)	900mm(35 1/2 in)	750mm(29 1/2 in)	750mm(29 1/2 in)
Weight	720kg(1,584 lb)	780kg(1,716 lb)	410kg(902 lb)	470kg(1,034 lb)

Requirements		
Electrical Requirements	Three-Phase 8,200W	
Pneumatical Requirements	Quality	clean and dry
	Pressure	520 kPa (5.2 bar) 75 psi
	Consumption	1 L, (1,000 cm <sup>3</sup> ) per min 60 in <sup>3</sup> per min
Water Requirements	Quality	Clean and drinkable water
	Pressure	280-410 kPa (2.8-4.1 bar) 40-60 psi
	Consumption	1 L, (1,000 cm <sup>3</sup> ) per min 60 in <sup>3</sup> per min
Emulsion Requirements	Pressure	500 kPa (5 bar) 72 psi
	Consumption	Max. 3,200kg/hg Max. 7,000 lb/hr
	Piping	Largest diameter and shortest length

※ Specifications and equipment are subject change without any obligation on the part of manufacturer.

※ The above production rate is subject to change due to the conditions such as production item, factory and other conditions.

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