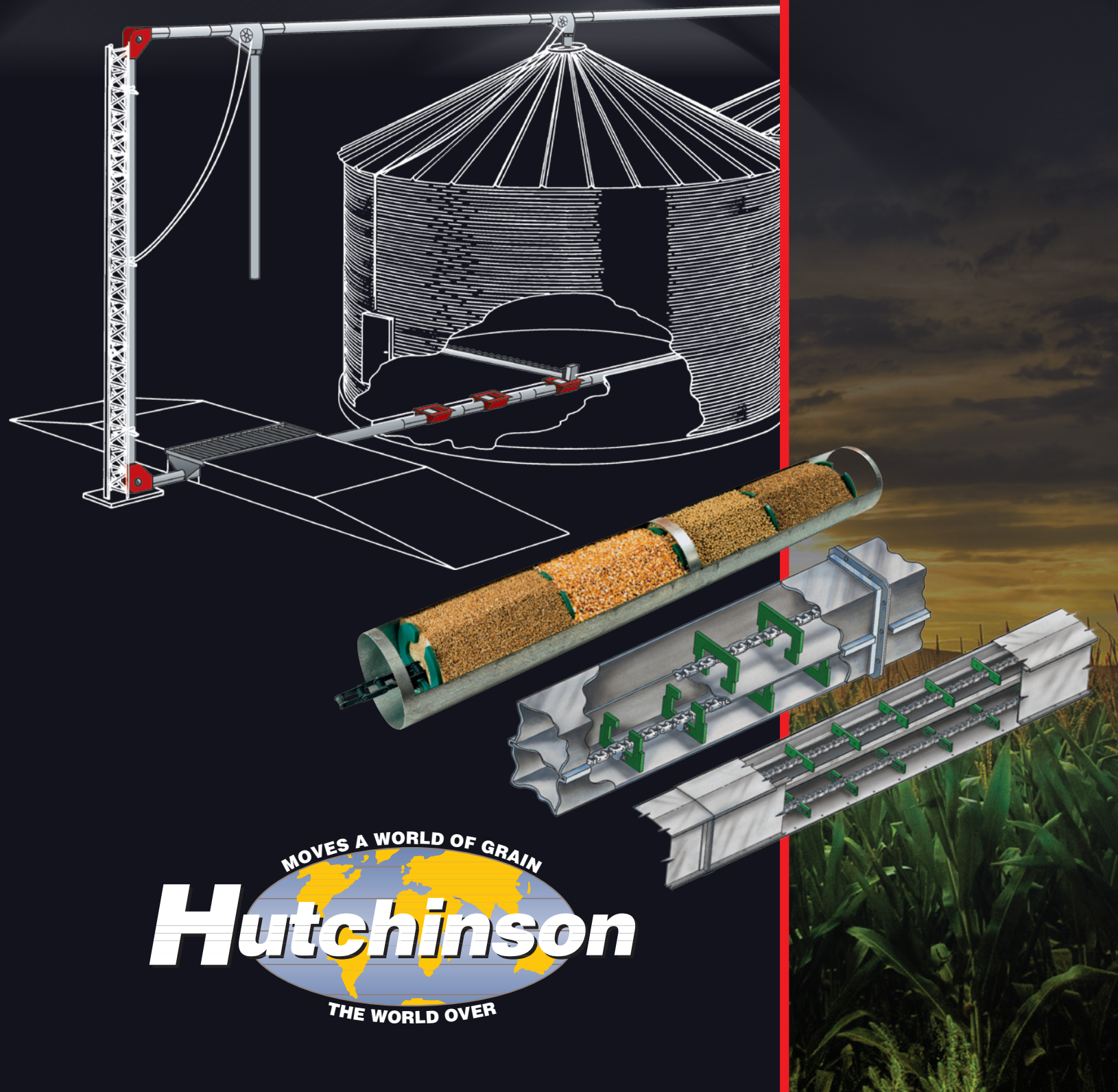


HUTCHINSON

CHAIN & PADDLE CONVEYORS

Grain Pump
Commercial Grain Pump
Double Run
Mass-Ter Mover
Mass-Ter Flow
Dual Hopper
Chain Conveyor



MOVES A WORLD OF GRAIN
Hutchinson
THE WORLD OVER

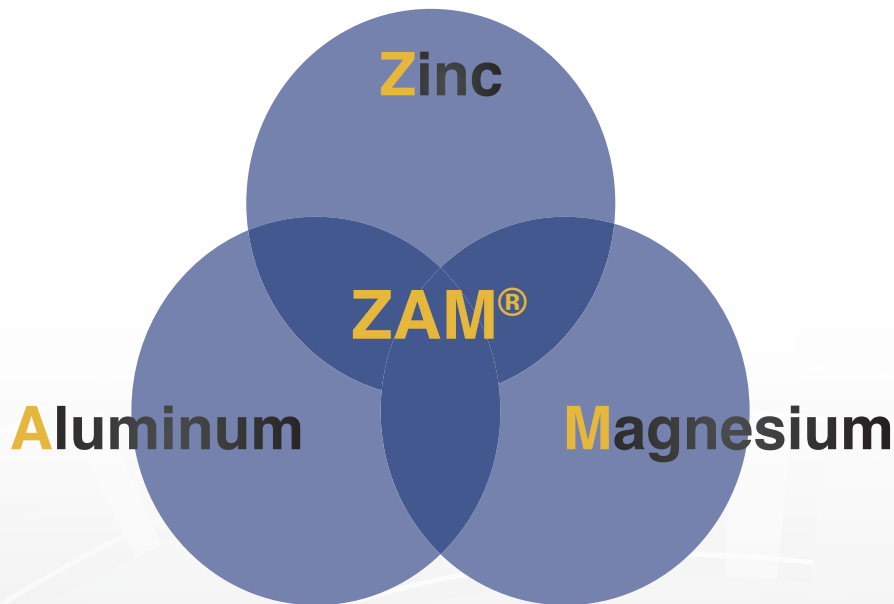


ZAM GALVANIZING

ZAM®, a registered trademark and produced in the U.S. by Wheeling-Nisshin, is a highly corrosion-resistant hot-dipped coated steel sheet that has a layer of zinc, aluminum, and magnesium.

Effective November 1, 2015, Hutchinson/Mayrath will start using ZAM® coated steel instead of galvanized steel to better protect the steel product.

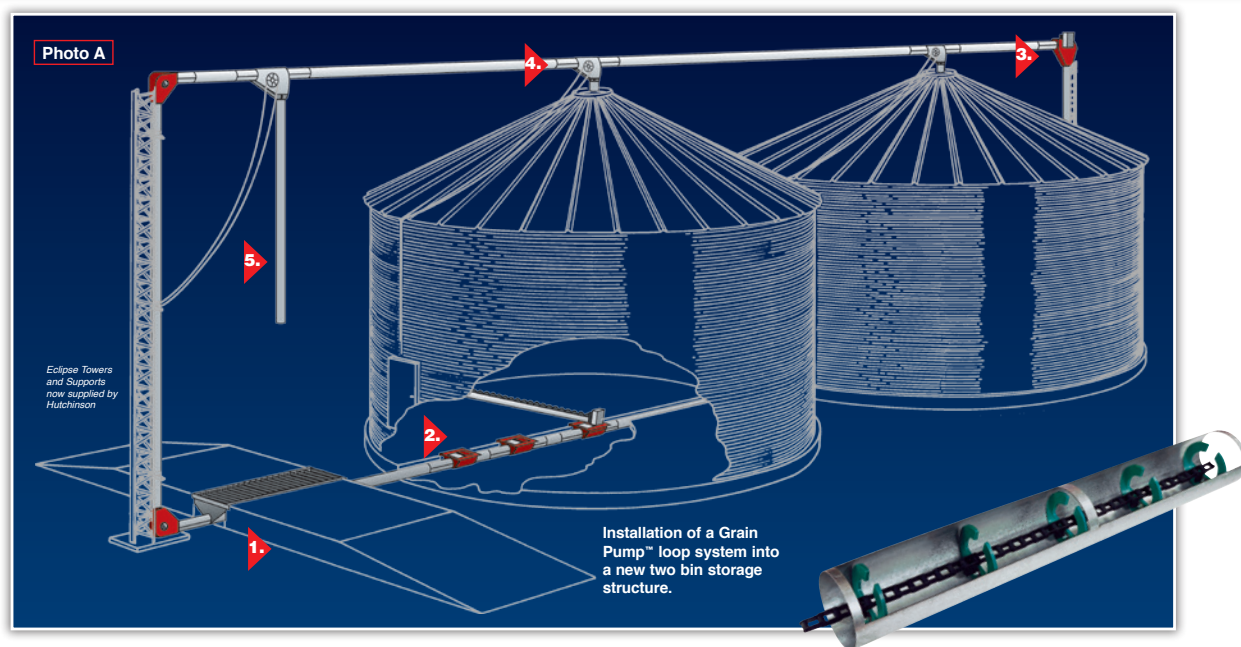
- Longer service life than other coated products
- Cut edge rust protection — the hallmark feature of ZAM®
- Thinner coating yet more protection — ecologically friendly
- Excellent in severe environments — especially in coastal and agricultural
- Eliminates the need for post dip (batch) galvanizing
- Superior formability due to coating characteristics
- Cost savings through longer service life and reduced maintenance
- Bridges the product gap between heavily coated galvanized and costly stainless steel



Catalog Numbers: ZAM® coated steel will be substituted in place of all galvanized coated steel.

**All products that include the ZAM® logo as shown above are modified with the galvanized steel.*

ZAM® is a registered trademark of Nisshin Steel Co., Ltd.



Let Hutchinson tailor a Grain Pump™ to your storage system.

The innovative Hutchinson Grain Pump™ lets you move grain with gentle efficiency and at high capacities. It requires less horsepower than air systems and Hutchinson's en masse (grain-moving-grain) concept causes less damage to grain and needs less maintenance than traditional conveying systems. The secret is Hutchinson's unique Ultra High Molecular Weight (UHMW) paddle, designed to keep your grain flowing gently and evenly from inlet to discharge source. These round plastic paddles are spaced every 10 1/2", taking the place of traditional auger flighting. These paddles are notched to go around corners. Grain Pump™ owners have found a reduction in grain damage when compared to traditional conveying systems.

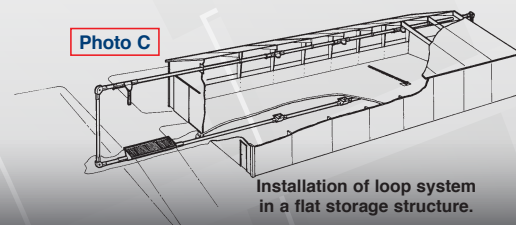
The closed-loop design offers the versatility to create a complete load-in/load-out system that also provides recirculation capabilities. One or more bins can be unloaded at a time into the loop. Reduced drying costs can be achieved with this innovative system by blending higher moisture and dried grain from one bin to another. Possibilities are nearly unlimited. Install the Grain Pump™ underneath a row of bins (Photo A), in an existing in-line row of bins (Photo B), or in a flat storage structure (Photo C). The loop system may provide future expansion capabilities.

Photo B



Installations of loop systems with existing bins.

Photo C



Installation of loop system in a flat storage structure.

- ▶ **1. Drive over Grain Pump pit hopper**
- ▶ **2. Center and intermediate wells**
- ▶ **3. Drive corner**
- ▶ **4. 90° discharge drops with ground control kit**
- ▶ **5. Complete load out capability**



Eclipse Towers and Catwalks now available through Hutchinson

Installation of Grain Pump Loop System with a wet bin and dryer application.



Installation of Grain Pump loop system into existing bin structure

GRAIN PUMP SPECIFICATIONS

	6" LOOP	8" LOOP	10" LOOP	12" LOOP
DIMENSIONS OF CONVEYING CHAMBER	6" (15.2 cm)	8" (20.3 cm)	10" (25.4 cm)	12" (30.5 cm)
MAXIMUM CAPACITY*	1,500 BPH (41 TPH)	4,000 BPH (108 TPH)	6,000 BPH (162 TPH)	10,000 BPH (270 TPH)
CHAIN TRAVEL	325 FPM (99.1 MPM)	325 FPM (99.1 MPM)	325 FPM (99.1 MPM)	400 FPM (121.9 MPM)
HEAD SHAFT RPM	124	109	94	83
HOUSING GAUGE, GALVANIZED	12 Ga. (2.7 mm)	12 Ga. (2.7 mm)	12 Ga. (2.7 mm)	10 Ga. (3.4 mm)
PADDLE THICKNESS (UHMW)	3/8" (9.5 mm)	3/8" (9.5 mm)	1/2" (12.7 mm)	1/2" (12.7 mm)
CORNER SHAFT DIAMETER	1-1/2" (38.1 mm)	2" (50.8 mm)	3" (76.2 mm)	3-7/16" (87.3 mm)
CONVEYOR CHAIN	81 X	81 XHH	81 XHH	81 XHH
CONVEYOR SPROCKET	12 Tooth	14 Tooth	16 Tooth	22 Tooth
CONVEYOR HP (kW) REQUIRED*				
-PER FOOT (METER) VERTICAL	.20 HP (.48 kW)	.35 HP (.85 kW)	.50 HP (1.20 kW)	.75 HP (1.80 kW)
-PER FOOT (METER) HORIZONTAL	.05 HP (.12 kW)	.08 HP (.19 kW)	.11 HP (.27 kW)	.18 HP (.44 kW)
WEIGHT PER FOOT OF TUBULAR CONVEYOR				
-EMPTY	10.5 lbs./ft.	18.0 lbs./ft.	20.0 lbs./ft.	26.5 lbs./ft.
-FULL OF 56 LB. PER BU MATERIAL	19.5 lbs./ft	34.0 lbs./ft	45.0 lbs./ft	63.0 lbs./ft
WEIGHT PER METER OF TUBULAR CONVEYOR				
-EMPTY	(14.9 kg/m)	(17.9 kg/m)	(22.0 kg/m)	(35.7 kg/m)
-FULL OF 720 KG PER CU. METER MATERIAL	(28.3 kg/m)	(41.7 kg/m)	(59.5 kg/m)	(89.3 kg/m)

* Clean, dry, and non abrasive grain



COMMERCIAL GRAIN PUMP

***10" and 12" NEW ZAM Galvanizing**

**The Hutchinson Grain Pump™
is designed for new or existing
storage installations.**



**Eclipse Towers and Catwalks
now available through
Hutchinson**

**Installation of Commercial Grain
Pump loop system into flat
storage structure.**



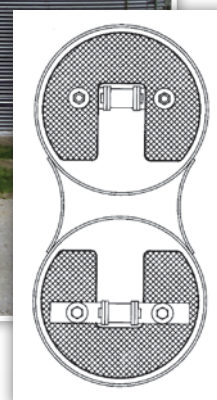
COMMERCIAL GRAIN PUMP SPECIFICATIONS

	10" LOOP	12" LOOP	16" LOOP
DIMENSIONS OF CONVEYING CHAMBER	10" (25.4 cm)	12" (30.5 cm)	16" (40.6 cm)
MAXIMUM CAPACITY*	6,000 BPH (162 TPH)	10,000 BPH (270 TPH)	18,000 BPH (486 TPH)
CHAIN TRAVEL	325 FPM (99.1 MPM)	400 FPM (121.9 MPM)	400 FPM (121.9 MPM)
HEAD SHAFT RPM	67	83	63
HOUSING GAUGE, GALVANIZED	10 Ga. (3.4 mm)	10 Ga. (3.4 mm)	7 Ga. (4.5 mm)
PADDLE THICKNESS (UHMW)	1/2" (12.7 mm)	1/2" (12.7 mm)	5/8" (15.9 mm)
CORNER SHAFT DIAMETER	3-7/16" (87.3 mm)	3-7/16" (87.3 mm) - thru 60 HP 3-15/16" (100.0 mm) - 75 & 100 HP	Variable
CONVEYOR CHAIN	81 XHH	81 XHH - thru 60 HP Double 81 XHH 75 & 100 HP	WH 124
CONVEYOR SPROCKET	16 Tooth (Non-Drive Corners) 22 Tooth (Drive Corners)	22 Tooth	19 Tooth
CONVEYOR HP (kW) REQUIRED*			
-PER FOOT (METER) VERTICAL	.50 HP (1.20 kW)	.75 HP (1.80 kW)	1.35 HP (3.30 kW)
-PER FOOT (METER) HORIZONTAL	.11 HP (.27 kW)	.18 HP (.44 kW)	.30 HP (.73 kW)
WEIGHT PER FOOT OF TUBULAR CONVEYOR			
-EMPTY	23.0 lbs./ft.	26.5 lbs./ft. - Single Chain 31.0 lbs./ft. - Double Chain	46.0 lbs./ft
-FULL OF 56 LB. PER BU MATERIAL	48.0 lbs./ft	63.0 lbs./ft. - Single Chain 67.5 lbs./ft. - Double Chain	133.0 lbs./ft
WEIGHT PER METER OF TUBULAR CONVEYOR			
-EMPTY	(34.2 kg/m)	(39.4 kg/m) - Single Chain (46.1 kg/m) - Double Chain	(68.4 kg/m)
-FULL OF 720 KG PER CU. METER MATERIAL	(71.4 kg/m)	(93.7 kg/m) - Single Chain (100.4 kg/m) - Double Chain	(198.0 kg/m)

* Clean, dry, and non abrasive grain



Cross section of housing



Stationary grain pumps can be used in various applications at angles from horizontal to 60°. Lengths available in 5' increments. A flow through inlet is convenient for overhead applications.

STATIONARY GRAIN PUMP SPECIFICATIONS • DOUBLE RUN SYSTEM

	6" DOUBLE RUN	8" DOUBLE RUN	10" DOUBLE RUN	12" DOUBLE RUN
DIMENSIONS OF CONVEYING CHAMBER	6" (15.2 cm)	8" (20.3 cm)	10" (25.4 cm)	12" (30.5 cm)
MAXIMUM CAPACITY*	1,500 BPH (41 TPH)	4,000 BPH (108 TPH)	6,000 BPH (162 TPH)	10,000 BPH (270 TPH)
CHAIN TRAVEL	338 FPM (103.0 MPM)	329 FPM (100.3 MPM)	348 FPM (106.1 MPM)	400 FPM (121.9 MPM)
HEAD SHAFT RPM	126	126	114	102
ZAM GALVANIZED HOUSING	12 Ga. (2.7 mm)	12 Ga. (2.7 mm)	12 Ga. (2.7 mm)	10 Ga. (3.4 mm)
PADDLE THICKNESS (UHMW)	3/8" (9.5 mm)	3/8" (9.5 mm)	1/2" (12.7 mm)	1/2" (12.7 mm)
HEAD SHAFT DIAMETER	1-1/2" (38.1 mm)	2" (50.8 mm)	2" (50.8 mm)	3-7/16" (87.3 mm)
BOOT SHAFT DIAMETER	1-1/2" (38.1 mm)	2" (50.8mm)	2" (50.8 mm)	3-7/16" (87.3 mm)
CONVEYOR CHAIN	81 X	81 X	81 XHH	81 XHH
CONVEYOR SPROCKET	12 Tooth	12 Tooth	14 Tooth	18 Tooth

* Clean, dry, and non abrasive grain



Stationary Double Run filling a dryer and unloading dryer to multiple bins. Eclipse Towers and Hutchinson Truss Kits are now available.

DOUBLE RUN SYSTEM — HORSEPOWER TABLE

MODEL	ANGLE OF OPERATION	HORIZONTAL	15	30	45	60	90
6" DOUBLE RUN	HP per Foot	0.042	0.062	0.085	0.120	0.140	N/A
	(kW per Meter)	(0.102)	(0.151)	(0.207)	(0.292)	(0.341)	
8" DOUBLE RUN	HP per Foot	0.076	0.113	0.167	0.222	0.270	N/A
	(kW per Meter)	(0.185)	(0.275)	(0.407)	(0.541)	(0.658)	
10" DOUBLE RUN	HP per Foot	0.114	0.170	0.250	0.333	0.405	0.5
	(kW per Meter)	(0.278)	(0.414)	(0.610)	(0.812)	(0.988)	(1.2)
12" DOUBLE RUN	HP per Foot	0.180	0.268	0.397	0.524	0.629	N/A
	(kW per Meter)	(0.439)	(0.654)	(0.968)	(1.278)	(1.534)	

**Features**

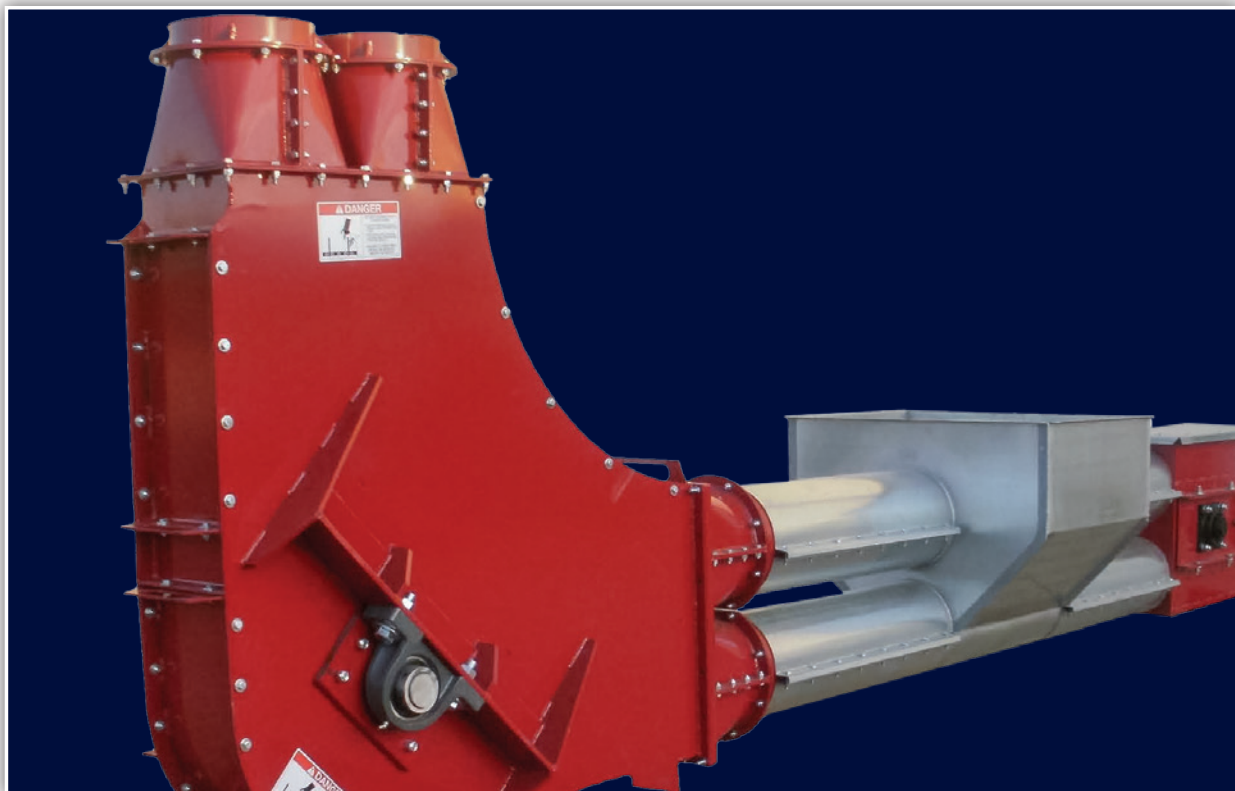
- Up to 6,000 BPH Capacity
- 10' minimum amount of required horizontal space
- Maximum discharge height of 68' with total equipment height of 72'
- Drives 15-40 HP (Dodge Reducer)
- Chain Speed 348 FPM

Applications

- Wet fill systems to dryers
- Dry grain transfer from dryers
- Receiving grain



Wet filling a dryer



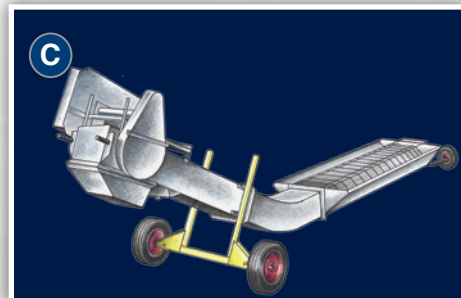
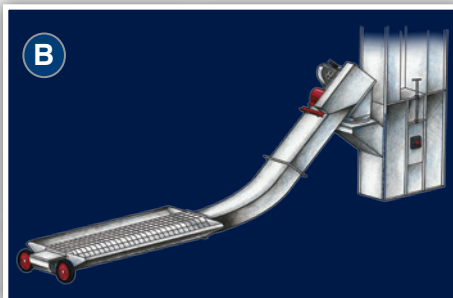
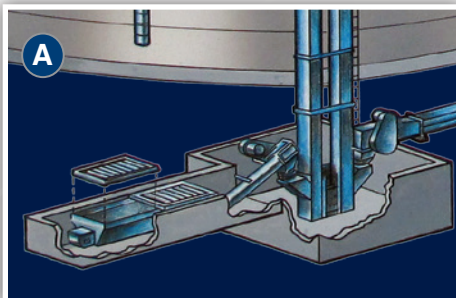
Equipment Highlights

- 81XHH Chain
- 1/2 UHMW Paddles
- Bypass Inlet
- Corner and head manufactured with 7 ga. material
- Bolt-In AR Liner on the bottom of the corner
- Removable access doors provided with handles
- Chain tension on the boot assembly for easy chain adjustment
- 5' and 10' Dump Hoppers

10" Vertical Double Run Grain Pump

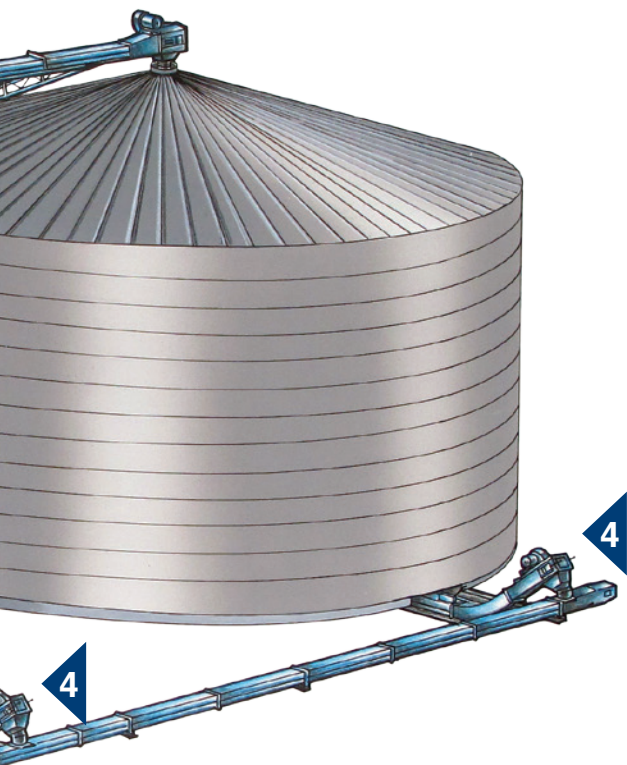
MODEL	MAX DISCHARGE HEIGHT	DRIVES	CHAIN SPEED
10" DOUBLE RUN	68' (20.73 m)	15-40 HP	348 FPM

MASS-TER MOVER & MASS-TER FLOW



Accessories that make Hutchinson the MASS-TER of material moving systems.

Mass-ter Mover® and Mass-ter Flow® accessories provide a complete loading and unloading system for storage structures. Bin unloading units normally incorporate multiple inlets with slide gates and sweep pivots where needed. The usual choices of drives and elbow combinations are available on the Mass-ter Mover® (Mass-ter Flow is horizontal only). Drive-over pit hopper (photo A) with 30°, 45° or 90° incline sections for a dump-and-go operation without a costly holding pit. Swing-away hopper (photo B) and portable hopper (photo C) allow you to custom design your handling system.



Mass-Ter Mover's® secret is its unique chain and paddle design.

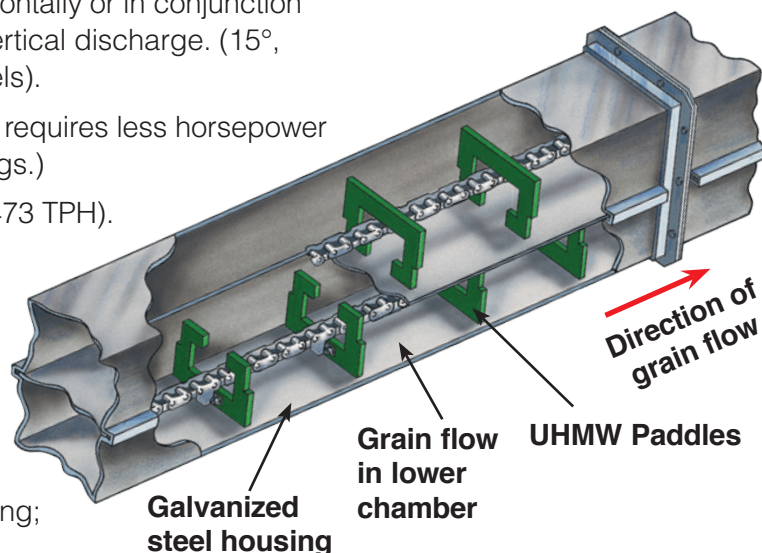
The heart of the Hutchinson Mass-ter Mover® is a continuous chain and paddle combination that utilizes the "en masse" concept. The unique shape of tough Ultra High Molecular Weight (UHMW) paddles maintains full chamber movement of grain...without fall-back. The open centers of the paddles provide relief when starting under a full load. And, our "square paddle" propulsion system requires less horsepower than a screw conveyor (up to 30% energy savings can be gained)! Whether you're starting from the ground up, or updating your present facilities, you'll find the Hutchinson Mass-ter Mover" ready to meet your demands.

Mass-Ter Flow® Drag Conveyor economy and quality in a horizontal conveyor.

The Mass-ter Flow® Drag Conveyor is designed with the same quality features as the Mass-ter Mover®. The Mass-ter Flow is most economical in the higher capacities and where design allows a strictly horizontal conveyor. High working strength roller chain is combined with tough Ultra High Molecular Weight (UHMW) polyethylene paddles for long life and smooth operation. Optional bottom AR plate liner is available for extra life, particularly in very dirty grain conditions.

- ▶ 1. Drive-over Mass-ter Mover® pit hopper
- ▶ 2. Bin sweep
- ▶ 3. Return Mass-ter Mover® or Mass-ter Flow (Mass-ter Mover illustrated)
- ▶ 4. Bin unloading Mass-ter Mover® with incline drive
- ▶ 5. Overhead Mass-ter Mover® or Mass-Ter Flow (Mass-ter Mover illustrated)

- Mass-ter Mover® powerheads may be used horizontally or in conjunction with the newly designed elbows for inclined or vertical discharge. (15°, 30°, 45° and 90° elbows available in select models).
- Hutchinson's "square paddle" propulsion system requires less horsepower than a screw conveyor. (Up to 30% energy savings.)
- Capacities from 2,500 (68 TPH) to 17,500 BPH (473 TPH). Single horizontal lengths to 200'.
- Grain slides through a full lower chamber... no pinch points to damage material.
- The unique paddle design allows the Mass-ter Mover® to operate at various inclines.
- Component system adapts to a variety of uses: drive-over pit; horizontal or inclined storage loading; bottom unloading; filling or unloading from dryer.



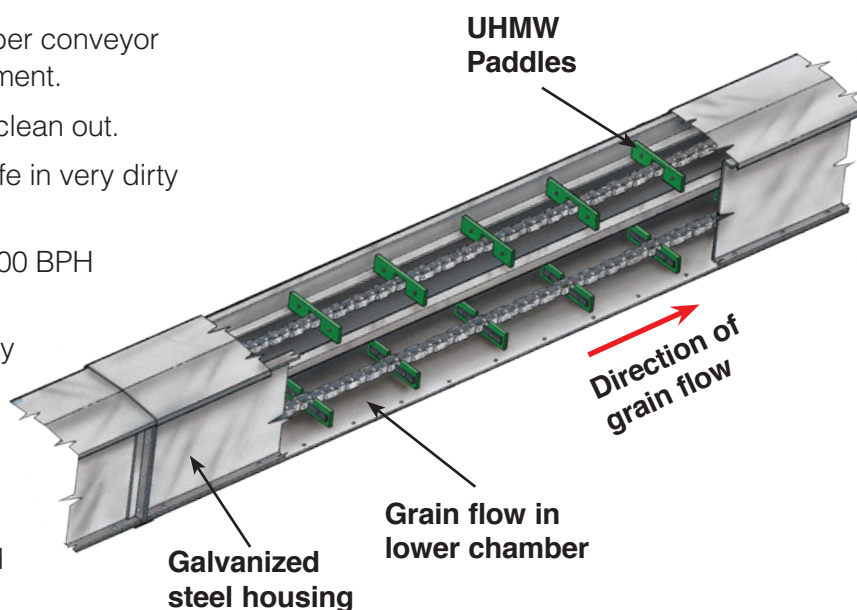
MASS-TER MOVER® SPECIFICATIONS

	MODEL 50	MODEL 85	MODEL 150
DIMENSIONS OF CONVEYING CHAMBER	6" x 9" (15.2 cm x 22.9 cm)	7" x 13" (17.8 cm x 33.0 cm)	10" x 17" (25.4 cm x 43.2 cm)
CAPACITY IN BPH*	2,500 - 5,000 BPH (68 - 135 TPH)	4,100 - 10,000 BPH (111 - 270 TPH)	7,500 - 17,500 BPH (203 - 473 TPH)
CHAIN TRAVEL	150 - 325 FPM (45.7 - 99.1 MPM)	150 - 400 FPM (45.7 - 122.0 MPM)	150 - 350 FPM (45.7 - 106.9 MPM)
HEAD SHAFT RPM	58 - 125	43 - 114	28 - 64
HOUSING GAUGE, GALVANIZED			
- GAUGE OF BOTTOM	10 Ga. (3.4 mm)	10 Ga. (3.4 mm)	10 Ga. (3.4 mm)
- GAUGE OF PARTITION	12 Ga. (2.7 mm)	12 Ga. (2.7 mm)	12 Ga. (2.7 mm)
- GAUGE OF TOP	14 Ga. (1.9 mm)	14 Ga. (1.9 mm)	14 Ga. (1.9 mm)
PADDLE THICKNESS (UHMW)	3/8" (9.5 mm)	1/2" (12.7 mm)	5/8" (15.9 mm)
TAKE-UP LOCATION	Head	Head	Head
DISCHARGE	12" (30.48 cm) Round	14" (35.6 cm) Round	16" (40.6 cm) Square
CONVEYOR CHAIN	81 X	81 XHH	Double 81 XHH
CONVEYOR SPROCKET	12 Tooth	16 Tooth	25 Tooth
APPROX. CONVEYOR WEIGHT (LBS/FT)			
-EMPTY	38.0 lbs./ft.	57.0 lbs./ft.	135.0 lbs./ft.
-LOADED	55.0 lbs./ft.	85.0 lbs./ft.	185.0 lbs./ft.
APPROX. CONVEYOR WEIGHT (KG/M)			
-EMPTY	(57.0 kg/m)	(84.0 kg/m)	(201.0kg/m)
-LOADED	(82.0 kg/m)	(126.0 kg/m)	(275.0 kg/m)

*Horizontal @ 15% Moisture

MASS-TER FLOW FEATURES

- Shallow paddles running in this single chamber conveyor provide deep layer, high volume grain movement.
- The conveyor covers are easily removed for clean out.
- Optional AR plate liner is available for extra life in very dirty grain conditions.
- Capacity is from 2,500 BPH (68 TPH) to 15,000 BPH (405 TPH). Single runs to 240'.
- Mass-ter Flow units are available as stationary overhead or return conveyors and bottom unloading systems.
- Optional reversible drive available for two-way operation.
- Electrically Controlled Intermediate Rack and Pinion Gates Available



MASS-TER FLOW® SPECIFICATIONS

	9" MASS-TER FLOW	13" MASS-TER FLOW
DIMENSIONS OF CONVEYING CHAMBER	9" x 14-3/4" (22.9 cm x 37.5 cm)	13" x 16-7/8" (33.0 cm x 42.9 cm)
CAPACITY IN BPH*	2,500 - 10,000 BPH (68 - 270 TPH)	7,500 - 15,000 BPH (203 - 405 TPH)
CHAIN TRAVEL	80 - 320 FPM (24.4 - 97.5 MPM)	130 - 260 FPM (39.6 - 79.3 MPM)
HEAD SHAFT RPM	30 - 120	37 - 75
HOUSING GAUGE, GALVANIZED		
- GAUGE OF BOTTOM	10 Ga. (3.4mm)	10 Ga. (3.4mm)
- GAUGE OF SIDES	12 Ga. (2.7 mm)	12 Ga. (2.7 mm)
- GAUGE OF TOP	16 Ga. (1.5 mm)	16 Ga. (1.5 mm)
- GAUGE OF HEAD	12 Ga. (2.7 mm)	12 Ga. (2.7 mm)
- GAUGE OF BOOT	10 Ga. (3.4 mm)	10 Ga. (3.4 mm)
PADDLE THICKNESS (UHMW)	3/8" (9.5 mm)	3/8" (9.5 mm)
TAKE-UP LOCATION	Head	Head
CONVEYOR CHAIN	81 X	81 X
CONVEYOR SPROCKET	12 Tooth	16 Tooth

*Approximately 1/3 capacity loss on highly abrasive grains (soybeans, popcorn, rice, feed stuffs, etc.). Moisture from dryer vent and humidity can affect capacity.

DUAL HOPPER CHAIN CONVEYOR



The All New Dual Hopper Chain Conveyor

- Impressive 10,000, 15,000 and 20,000 BPH Capacities available
- Unload both trailer hoppers at the same time
- Matches the capacity of 12" Double Run Grain Pump, Low Profile Chain Conveyor, Mass-ter Mover® Chain Conveyor, 16" Loop and Model 150 Mass-ter Mover



Additional Features and Benefits

- Direct Drive to prevent slipping, adjustment and breaking
- Heavy Duty Construction
- 44" Width Grates
- Spring Take Up for constant tension and less maintenance
- Trunk Extensions are available
- Uses 15:1 main gearbox connected to a 1:1 right angle gearboxes to drive two separate conveyors
- Use a Variable Frequency Drive Controller to adjust speed and flow

Heavy Duty Construction

- 7 Ga. Laser cut sheet steel
- 3/8" Laser cut flange connections
- AR wear plate for divider panel

Grates

- 44" Width opening
- Drive-over grating meets OSHA Standards 1910.272

HUTCHINSON

PORTABLE SYSTEMS

- 8", 10" & 12" Swing Away Augers
- 12" Swing-Away Augers & Hydraulic Drive Motor Kit
- Top Drive Augers
- Weld Drive Augers
- Portable Grain Pumps
- Portable Mass-Ter Motor
- Trac Mass-Ter
- Portable Equipment Ball

MOVES A WORLD OF GRAIN

HUTCHINSON

BIN UNLOADING SYSTEMS

- Swing Options
- Chain Drive
- Conveyor Drives
- Swing Options
- Top Drive Auger
- HD Power Swivel
- Conveyor Power Swivel
- Unloading Options
- Swivel Auger Unload
- Conveyor Auger Unload
- U-Trough
- Unloading Options
- Mass-Ter Motor
- Mass-Ter Flow
- Grain Pump
- Dual Type Power Swivel
- Drives
- Provenance
- Augers

MOVES A WORLD OF GRAIN

HUTCHINSON

CHAIN & PADDLE CONVEYORS

- Grain Pump
- Mass-Ter Motor
- Mass-Ter Flow

MOVES A WORLD OF GRAIN

HUTCHINSON

DISTRIBUTING CUSTOM AUGER / U-TROUGH AUGER

- Custom Built Distributing Augers
- Accessory Loaders
- Head Augers
- Utility and Bulk Tank Augers
- Custom Built U-Trough Augers

MOVES A WORLD OF GRAIN



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