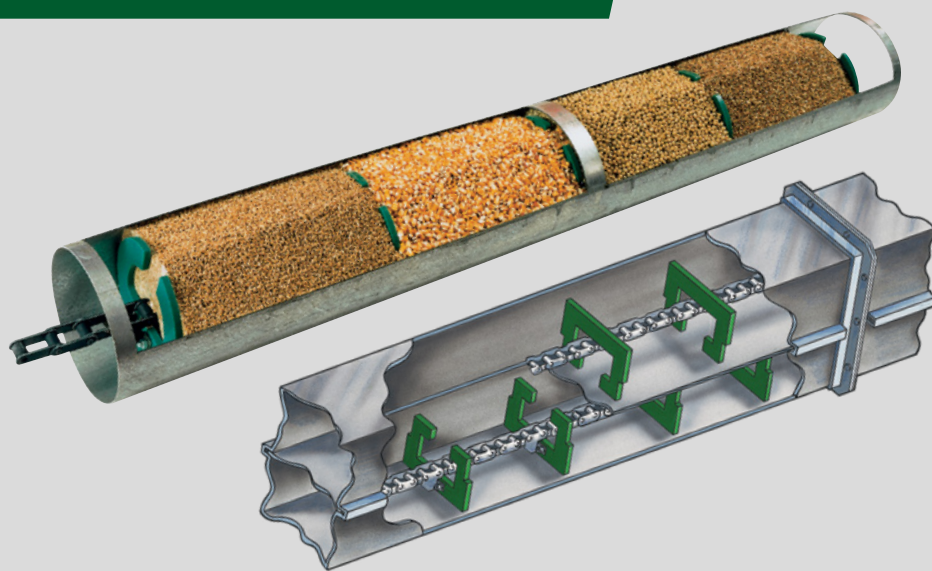


AGI  HUTCHINSON

CHAIN & PADDLE CONVEYORS

*GRAIN PUMP® / COMMERCIAL GRAIN PUMP® / DOUBLE RUN /
MASS-TER MOVER / DUAL HOPPER CHAIN CONVEYORS*



Grain Pump®

Custom Grain Pump® systems tailored to your storage system

AGI Hutchinson's innovative Grain Pump® lets you move grain with gentle efficiency at high capacities, and requires less horsepower than air systems. AGI Hutchinson's en-masse (grain-moving-grain) concept causes less damage to grain and needs less maintenance than traditional conveying systems. The secret is AGI 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", and take the place of traditional auger flighting.

The closed-loop design offers the versatility to create a complete load-in/load-out system that provides recirculation capabilities. One or more bins can be

unloaded at a time into the loop. Reduced drying costs can be achieved 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 (Image A), in an existing in-line row of bins (Image B), or a flat storage structure (Image C).

Image A

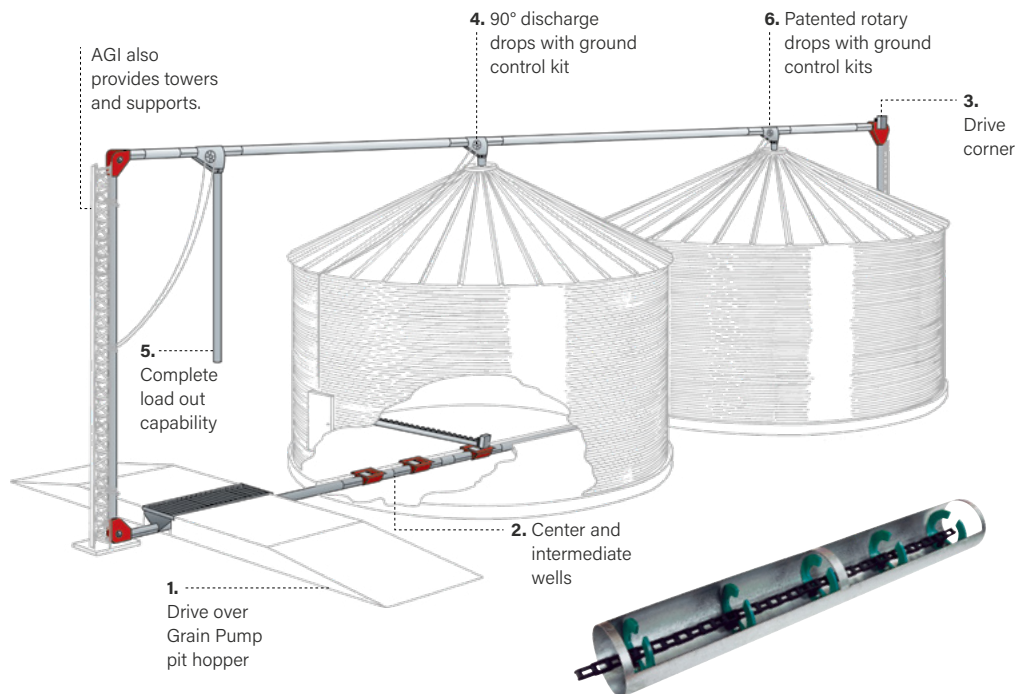


Image B

Installations of loop systems with existing bins

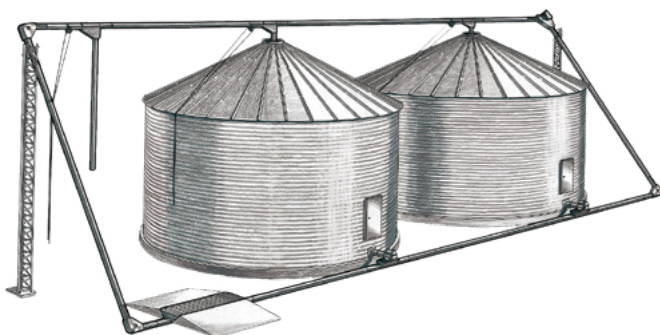
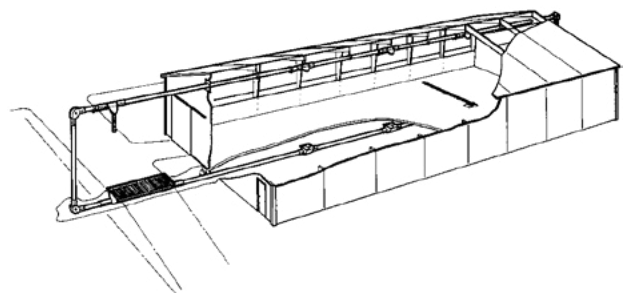


Image C

Installation of loop system in a flat storage structure



Grain Pump



Installation of Grain Pump loop system into existing bin structure.



Installation of Grain Pump loop system with a wet bin and dryer application.

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 - ADDITIONAL THICKNESSES ARE AVAILABLE	12 ga (2.7 mm)	12 ga (2.7 mm)	12 ga (2.7 mm)	10 ga (3.4 mm)
PADDLE THICKNESS	3/8" (9.5 mm)	1/2" (12.7 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)
CONVEYOR HP (KW) REQUIRED* 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
WEIGHT PER FOOT OF TUBULAR CONVEYOR - 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
WEIGHT PER METER OF TUBULAR CONVEYOR - FULL OF 56 LB. PER BU MATERIAL	28.3 kg/m	41.7 kg/m	59.5 kg/m	89.3 kg/m

* Clean, dry, non abrasive grain and free flowing products

Commercial Grain Pump



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



Installation of commercial Grain Pump loop system into flat storage structure.

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 - ADDITIONAL THICKNESSES AVAILABLE	10 ga (3.4 mm)	10 ga (3.4 mm)	7 ga (4.5 mm)
PADDLE THICKNESS (UHMW)	½" (12.7 mm)	½" (12.7 mm)	⅝" (15.9 mm)
CORNER SHAFT DIAMETER	3 ⅞" (87.3 mm)	3 ⅞" (87.3 mm) - thru 60 hp 3 ⅝" (100.0 mm) - 75 & 100 hp	Variable
CONVEYOR CHAIN	81 XHH	81 XHH - thru 60 hp Double WH124 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)
CONVEYOR HP (KW) REQUIRED* 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 - WH124	46.0 lbs/ft
WEIGHT PER FOOT OF TUBULAR CONVEYOR - FULL OF 56 LB. PER BU MATERIAL	48.0 lbs/ft	63.0 lbs/ft - Single Chain 67.5 lbs/ft - WH124	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 - WH124	68.4 kg/m
WEIGHT PER METER OF TUBULAR CONVEYOR - FULL OF 56 LB. PER BU MATERIAL	71.4 kg/m	93.7 kg/m - Single Chain 100.4 kg/m - WH124	198.0 kg/m

* Clean, dry, non abrasive grain and free flowing products

Stationary Double Run



Stationary double run 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 double run filling a dryer and unloading dryer to multiple bins.

STATIONARY DOUBLE RUN | DOUBLE RUN SYSTEM SPECIFICATIONS

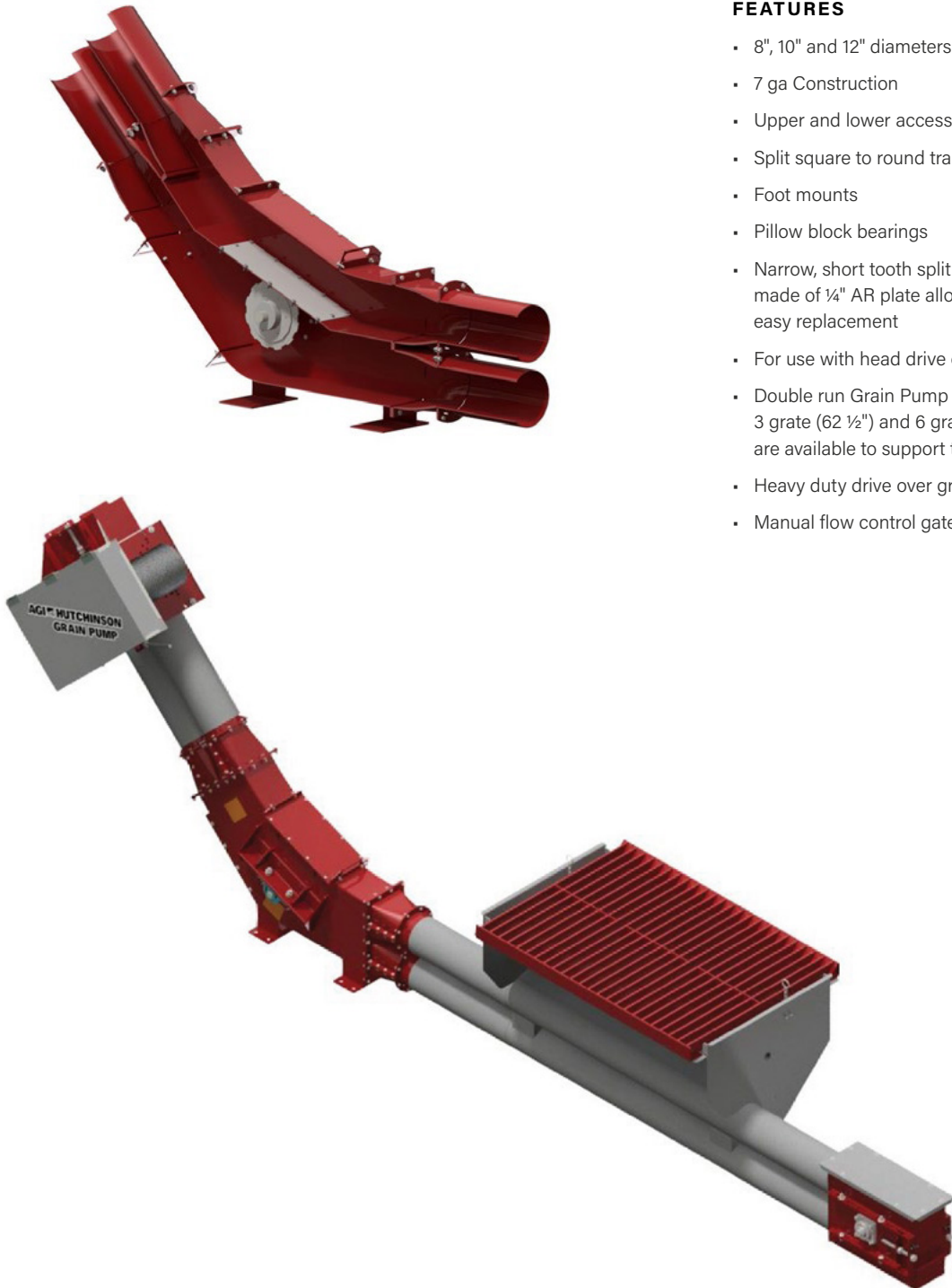
	6" DOUBLE RUN	8" DOUBLE RUN	10" DOUBLE RUN	12" DOUBLE RUN
DIMENSIONS OF CONVEYING CHAMBER	6" (15.2 cm)	8" (20.3 cm)	10" (25.4 cm)	12" (30.5 cm)
MAXIMUM CAPACITY*	1,500 bph (41 tph)	4,000 bph (108 tph)	6,000 bph (162 tph)	10,000 bph (270 tph)
CHAIN TRAVEL	338 fpm (103.0 mpm)	329 fpm (11.3 mpm)	348 fpm (106.1 mpm)	400 fpm (121.9 mpm)
HEAD SHAFT RPM	126	126	114	102
GALVANIZED HOUSING - ADDITIONAL THICKNESSES AVAILABLE	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)	1/2" (12.7 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" (50.8 mm)	2" (50.8 mm)	3 7/16" (87.3 mm)
CONVEYOR CHAIN	81 X	81 X (81 XHH optional upgrade)	81 XHH	81 XHH
CONVEYOR SPROCKET	12 tooth	12 tooth	14 tooth	18 tooth

* Clean, dry, non abrasive grain and free flowing products

DOUBLE RUN SYSTEM | HORSEPOWER TABLE

	ANGLE OF OPERATION	HORIZONTAL	15	30	45	60	90
6" DOUBLE RUN	hp per foot (kW/M)	0.042 (0.102)	0.062 (0.151)	0.085 (0.207)	0.120 (0.292)	0.140 (0.341)	0.35 (0.086)
8" DOUBLE RUN	hp per foot (kW/M)	0.076 (0.185)	0.113 (0.275)	0.167 (0.407)	0.222 (0.541)	0.270 (0.658)	0.35 (0.75)
10" DOUBLE RUN	hp per foot (kW/M)	0.114 (0.278)	0.170 (0.414)	0.250 (0.610)	0.333 (0.812)	0.405 (0.988)	0.5 (1.2)
12" DOUBLE RUN	hp per foot (kW/M)	0.180 (0.439)	0.268 (0.654)	0.397 (0.968)	0.524 (1.278)	0.629 (1.534)	0.75 (0.183)

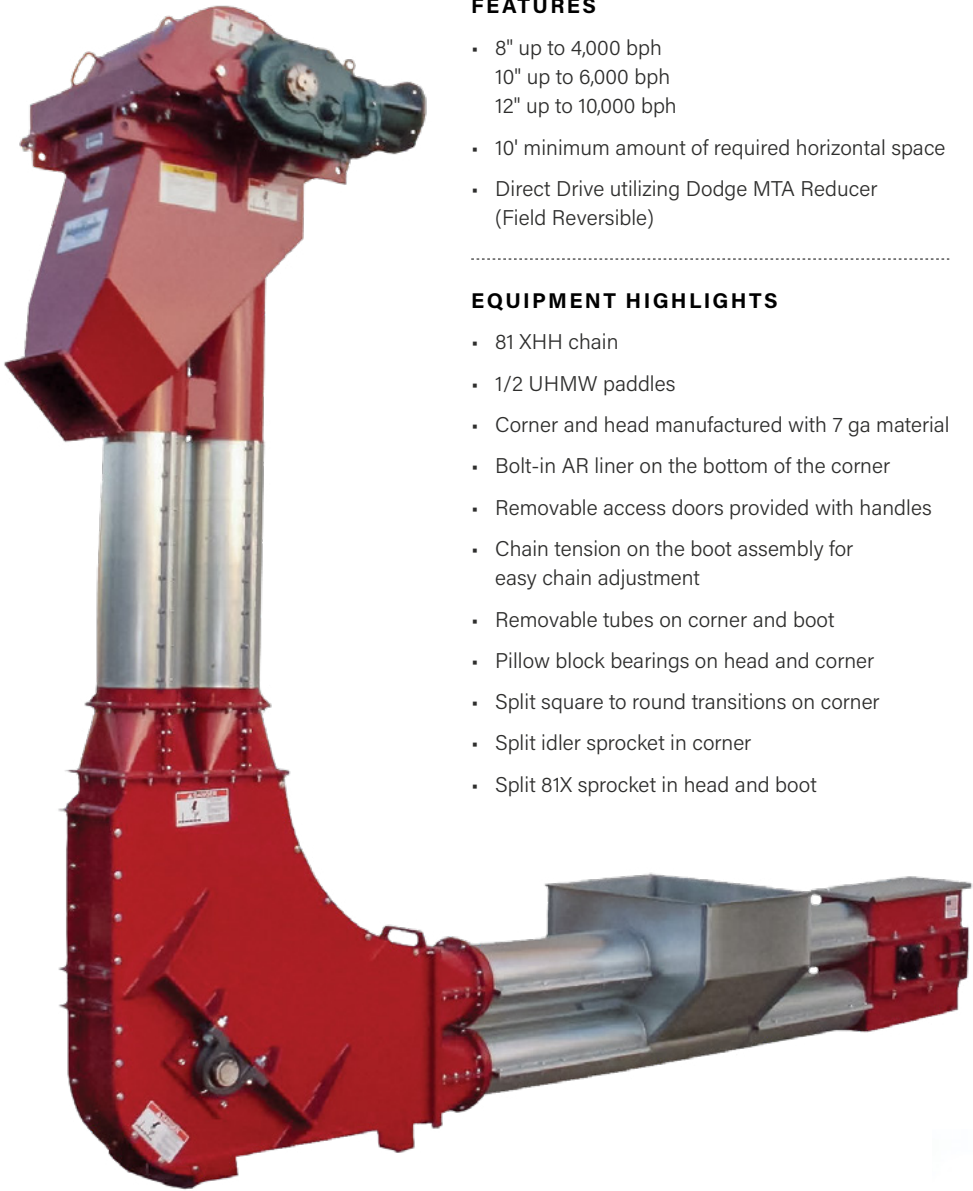
Double Run Grain Pump Corners



FEATURES

- 8", 10" and 12" diameters
- 7 ga Construction
- Upper and lower access panels
- Split square to round transitions
- Foot mounts
- Pillow block bearings
- Narrow, short tooth split sprockets made of ¼" AR plate allowing for easy replacement
- For use with head drive only
- Double run Grain Pump dump hoppers 3 grate (62 ½") and 6 grate (125") are available to support the corners
- Heavy duty drive over grating
- Manual flow control gate

Vertical Double Run Grain Pump



FEATURES

- 8" up to 4,000 bph
10" up to 6,000 bph
12" up to 10,000 bph
- 10' minimum amount of required horizontal space
- Direct Drive utilizing Dodge MTA Reducer (Field Reversible)

EQUIPMENT HIGHLIGHTS

- 81 XHH chain
- 1/2 UHMW paddles
- 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
- Removable tubes on corner and boot
- Pillow block bearings on head and corner
- Split square to round transitions on corner
- Split idler sprocket in corner
- Split 81X sprocket in head and boot

OPTIONAL FEATURES

- Bypass inlet hopper
- 5' and 10' dump hopper
- Boot with bypass inlet hopper
- Short boot

APPLICATIONS

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

VERTICAL DOUBLE RUN GRAIN PUMP SPECIFICATIONS

MODEL	MAX DISCHARGE HEIGHT	DRIVES	CHAIN SPEED
8"	80' (24.38 m)	7.5-30 hp	322 fpm
10"	68' (20.73 m)	15-40 hp	348 fpm
12"	74' (22.55 m)	15-60 hp	393 fpm



Mass-Ter Mover

MASS-TER MOVER FEATURES A UNIQUE CHAIN AND PADDLE DESIGN

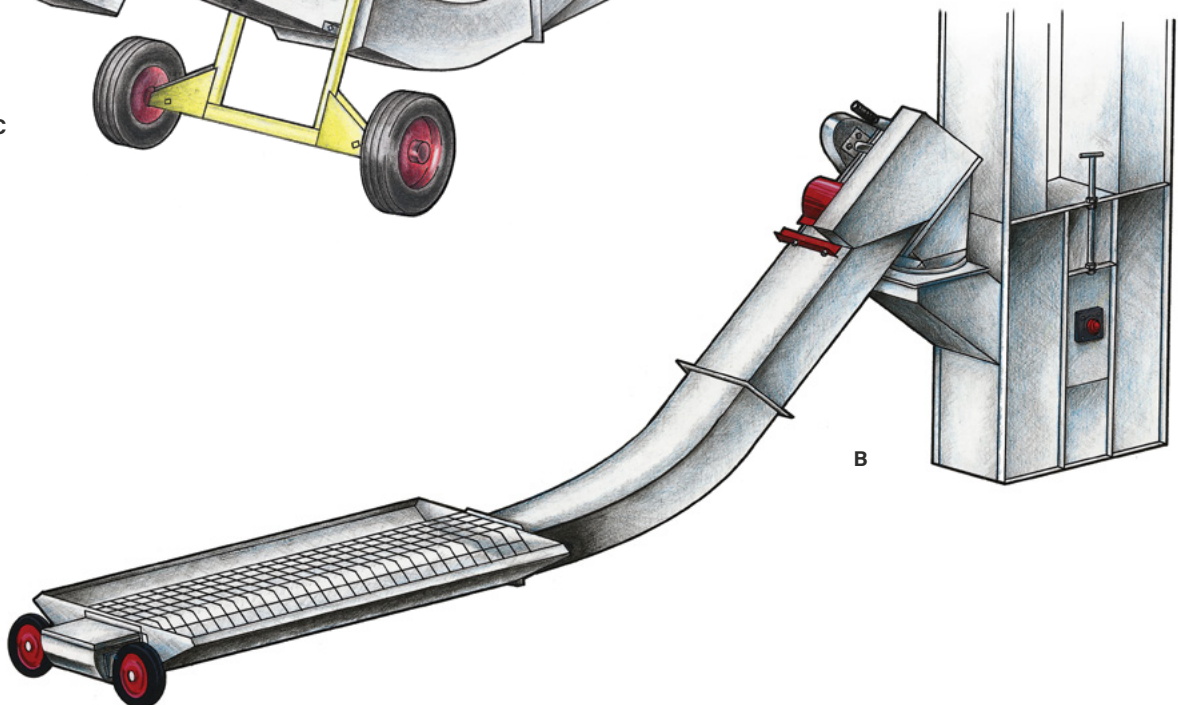
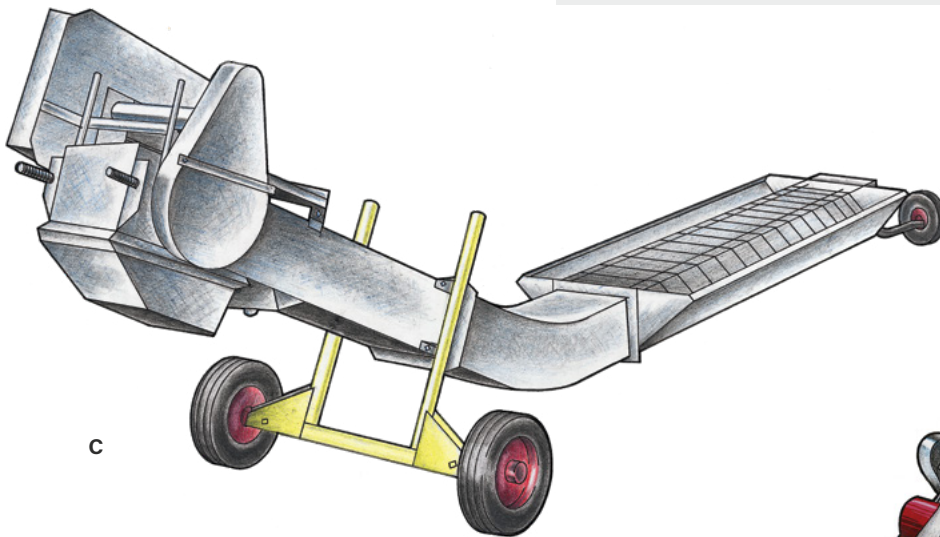
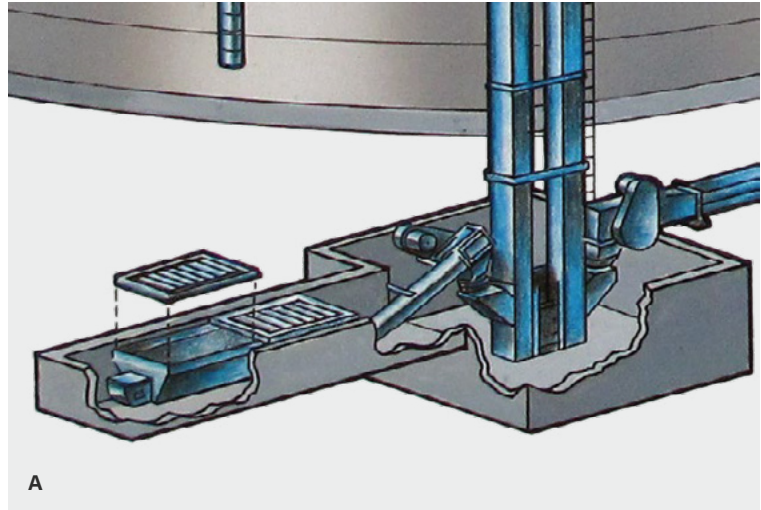
The heart of the AGI Hutchinson Mass-Ter Mover is a continuous chain and paddle combination that utilizes the “en masse” concept. The unique shape of tough Ultra High Molecular Weight (UHMW) paddles maintains full chamber movement of grain – without fall-back. The open centers of the paddles provide relief. The square paddle propulsion system requires less horsepower than a screw conveyor (up to 30% energy savings can be gained).



Mass-Ter Mover Accessories

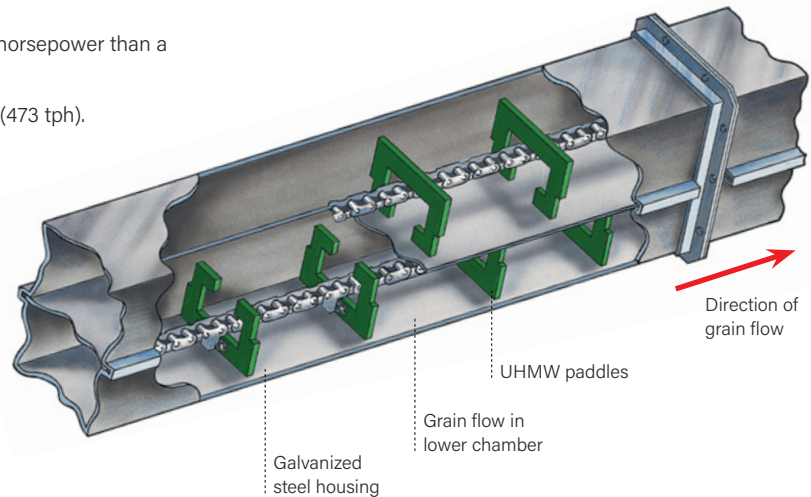
Mass-Ter Mover accessories provide a complete loading and unloading system for storage structures. Bin unloading units typically incorporate multiple inlets with slide gates and sweep pivots where needed.

The choices of drives and elbow combinations are available on the Mass-Ter Mover. 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.



FEATURES

- Mass-Ter Mover powerheads may be used horizontally or in conjunction with the corners for inclined or vertical discharge. (15°, 30°, 45°, and 90° elbows available in select models)
- "Square paddle" propulsion system requires less horsepower than a screw conveyor. (Up to 30% energy savings)
- Capacities from 2,500 bph (68 tph) to 15,000 bph (473 tph). Single horizontal lengths to 200'
- Component system adapts to a variety of uses: drive-over pit; horizontal or inclined storage loading; bottom unloading; filling or unloading from dryer
- Grain slides through a full lower chamber with no pinch points to damage material
- The unique paddle design allows the Mass-Ter Mover to operate at various inclines
- AR liner optional



* Clean, dry, non abrasive grain and free flowing products

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 - 15,000 bph (203 - 405 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 - 114
HOUSING GAUGE, GALVANIZED - GAUGE OF BOTTOM - GAUGE OR PARTITION - GAUGE OF TOP	10 ga (3.4 mm) 12 ga (2.7 mm) 14 ga (1.9 mm)	10 ga (3.4 mm) 12 ga (2.7 mm) 14 ga (1.9 mm)	10 ga (3.4 mm) 12 ga (2.7 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 - LOADED	38.0 lbs/ft 55.0 lbs/ft	57.0 lbs/ft 85.0 lbs/ft	135.0 lbs/ft 185.0 lbs/ft
APPROX. CONVEYOR WEIGHT (KG/M) - EMPTY - LOADED	(57.0 kg/m) (82.0 kg/m)	(84.0 kg/m) (126.0 kg/m)	(201.0 kg/m) (275.0 kg/m)

* Horizontal at 15% moisture

Dual Hopper Chain Conveyor

- Impressive 10,000, 15,000 and 20,000 bph capacities available
 - Clean, dry, non abrasive grain and free flowing products
 - Unload both trailer hoppers at the same time
 - Ability to pair with low profile chain conveyor, Mass-Ter Mover chain conveyor, 12" and 16" Grain Pump loop conveyor, 12" double run Grain Pump conveyor and AGI chain conveyor dump hoppers
-



FEATURES

- Direct drive to prevent slipping, adjustment and breaking of belts
- Heavy duty construction
- 44" width grates
- Spring take-up for constant tension and less maintenance
- Trunk extensions are available
- Use a variable frequency drive controller to adjust speed and capacity
- Able to incorporate with scale (as shown in picture)



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



AGI is a global leader in supplying farm and commercial customers with the manufacturing, planning, and engineering of full equipment solutions for grain, seed, fertilizer, feed, and food. AGI's expertise enables the storage, blending, mixing, conveying, conditioning, processing, and protection of agricultural products and inputs worldwide.

Your safety is our highest priority.

Please read and understand the operator's manual and safety decals before using. Use and maintain products properly, and do not modify. Keep guards in place when operating and follow all product manuals and safety decals. For all AGI products, if guards, safety decals, or manuals are damaged or missing, contact your AGI sales or dealer representative for replacements. Images and information contained in this brochure are presented for general information.

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