

STATIONARY MASS-TER MOVER CONVEYORS

Durable. The Mass-Ter Mover line is Hutchinson's answer to "en masse" conveying systems. You get top performance, long life, and reliability with minimum maintenance engineered into each component. Fully enclosed, galvanized steel housing surrounds heavy-duty chain featuring UHMW polyethylene replaceable paddles which assure gentle movement of bulk materials with minimal friction.

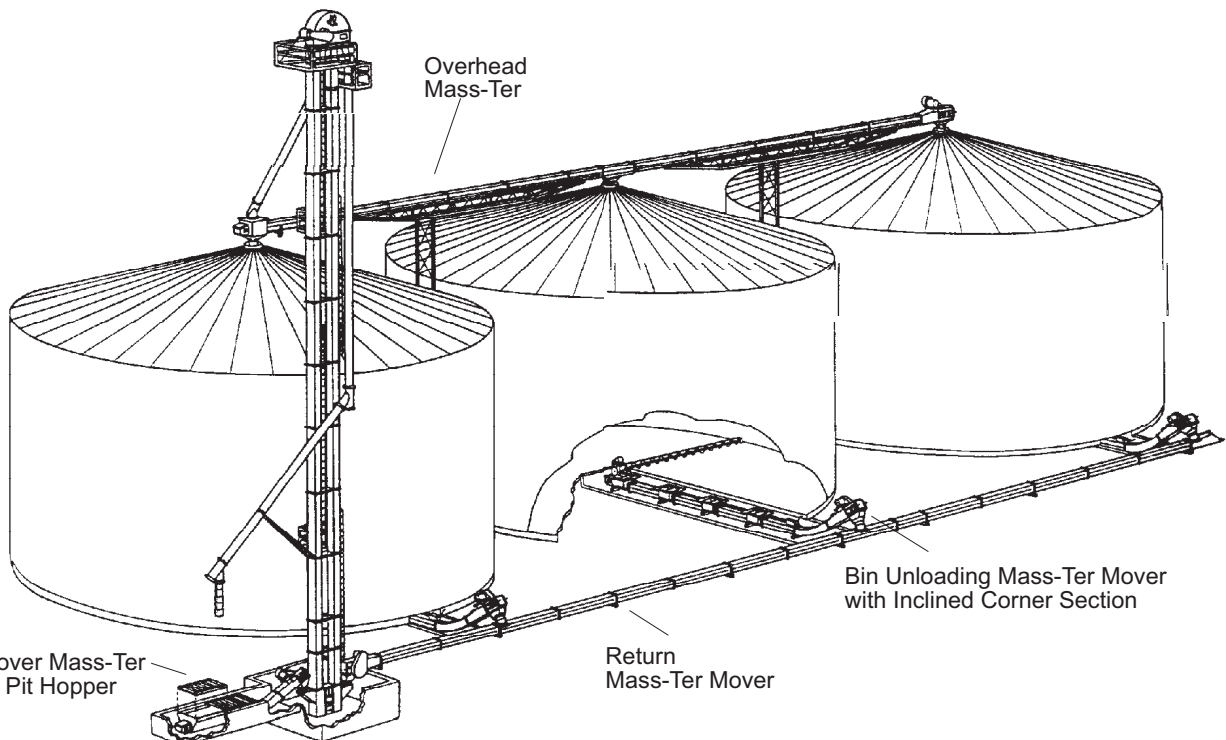
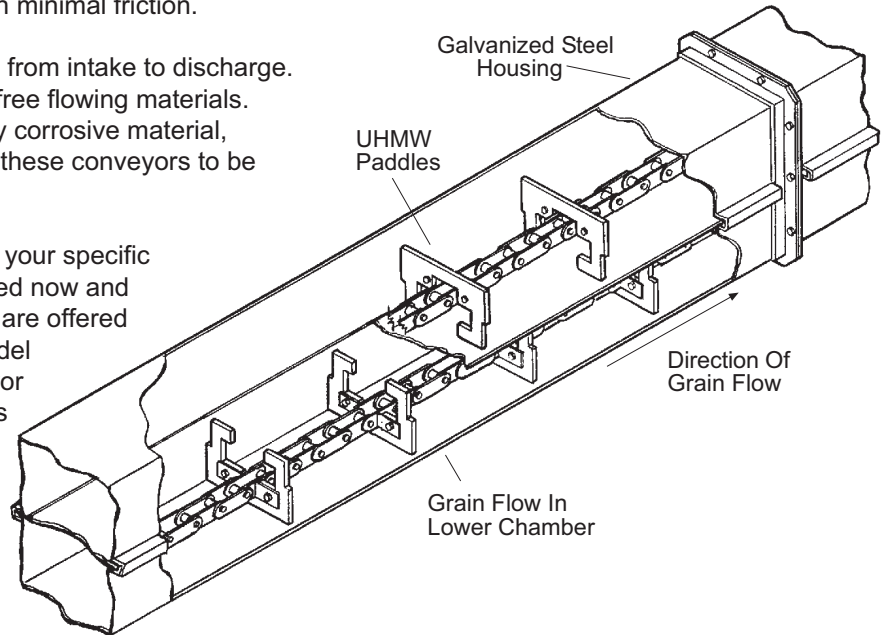
Material is carried in the lower part of trunking from intake to discharge. Mass-Ter Movers will handle a wide range of free flowing materials. They should not, however, be used with highly corrosive material, such as fertilizer. We also do not recommend these conveyors to be operated in reverse direction.

Flexible. These conveyors can be made to fit your specific requirements. Consider what capacity you need now and what you may want in the future. Two models are offered with a wide range of capacities. Individual model capacities are obtained by varying the conveyor chain speed. Do not exceed maximum lengths listed in the Power Requirement Charts.

Select the type system you desire - Horizontal, Incline, Horizontal-to-Incline, or Horizontal-to-Vertical.

Basic Units include a short boot or standard boot with inlet adapter, trunking, chain and paddles, and head with discharge adapter. Add intermediate inlets and outlets as needed. Basic Bin Unloading Systems are also offered. Use either horizontal, inclined or vertical unloading heads. Screw Type take-up on head is standard on all systems.

A corner section utilizes a traction wheel to minimize power requirements, thus allowing greater length systems.



STATIONARY MASS-TER MOVER CONVEYORS

Convenient. Drive Units are complete with gear reducer, sheaves, bushings, "B" section belts, belt guard, and motor mount less electric motor. The Power Tables make it easy to select the proper drive.

Conveyor Sections are available in solid, welded top construction or a bolt-on cover. Bottoms are long-wearing 10 gauge (3.43 mm). The bolt-on cover is convenient for service or inspection. Units must not be run without the cover. If the Mass-Ter Mover is installed out of doors, we recommend trunk flange joints be sealed with liquid-tight sealant (such as caulking) to prevent moisture from entering. Check seals periodically.

Pit Hoppers and Bin Wells allow material flow directly into the lower part of trunking--no need for Drop Through Sections. Flow Control gates are included to avoid overfeeding and plugging.

For Intermediate inlets, use the optional units provided in this catalog. They contain necessary chain and paddle guides and inlet flow control. If random inlets are required, it is recommended that material be allowed to enter the conveying chamber within a short distance without dragging back to the boot. A Drop Through Section allows this to happen. (See Drop Through Diagram on page 8.) Note: the distance the material is conveyed "backward" to a Drop Through or to the boot end should be added to the total conveyor length to properly determine power requirements.

The conveyor must be adequately supported to be rigid and straight. Supports should be on 20' (6.10 m) centers. A maximum span is 30' (9.14 m). A 40' (12.19 m) truss is available for support of spans up to 50' (15.24 m).

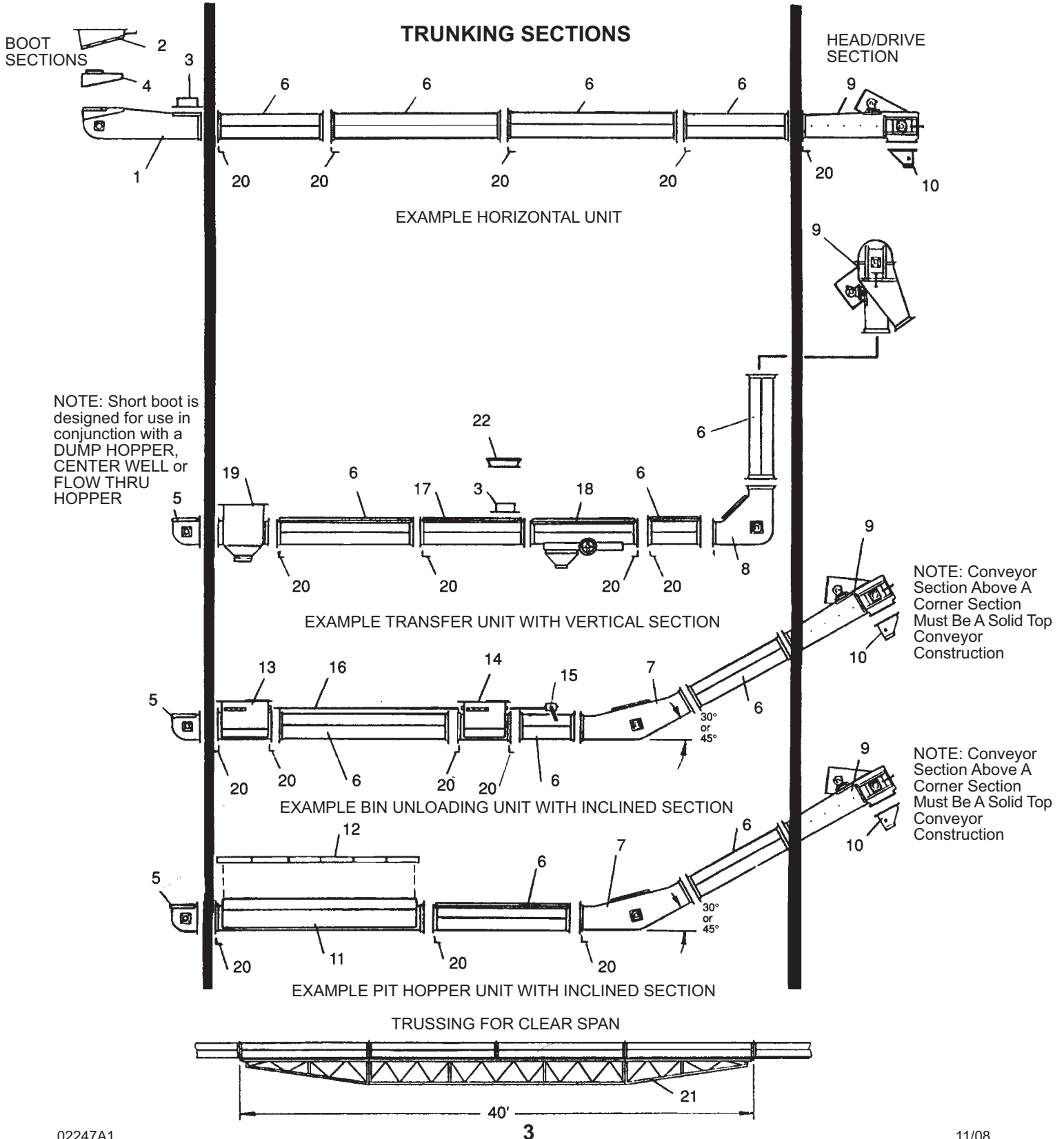
MASS-TER MOVER SPECIFICATIONS

	MODEL 50	MODEL 85
Dimensions of Conveying Chamber	6" x 9" (15.2 cm x 22.9 cm)	7" x 13" (17.8 cm x 33.0 cm)
Capacity - Maximum BPH (TPH)	2500 BPH (68 TPH), 3300 BPH (89 TPH)	4000 BPH (108 TPH), 5500 BPH (149 TPH)
Horizontal at 15% Moisture	4150 BPH (112 TPH) & 5000 BPH (135 TPH)	7000 BPH (189 TPH) & 8500 BPH (230 TPH)
Capacity in Cu. Ft./Hr. (Cu. Meter/Hr.)	3000 (85), 3960 (112),	4800 (135), 6600 (186),
Dry Material Horizontal	4980 (141) & 6000 (169)	8400 (237), & 10,200 (288)
Chain Travel FPM (MPM)	150 FPM (45.72 mpm), 200 FPM (60.96 mpm), 250 FPM (76.20 mpm), & 300 FPM (91.44 mpm)	150 FPM (45.72 mpm), 200 FPM (60.96 mpm), 250 FPM (76.20 mpm), & 300 FPM (91.44 mpm)
Head Shaft RPM	58, 77, 97, & 116 RPM	43, 57, 72, & 86 RPM
Gauge of Bottom	10 Gauge (3.43 mm) Galvanized	10 Gauge (3.43 mm) Galvanized
Gauge of Partition	12 Gauge (2.66 mm) Galvanized	12 Gauge (2.66 mm) Galvanized
Gauge of Top	14 Gauge (1.9 mm) Galvanized	14 Gauge (1.9 mm) Galvanized
Paddles	3/8" (10 mm) UHMW	1/2" (13 mm) UHMW
Head Bearings (Shaft)	1-1/2" to 2" (38 mm to 51 mm) 4-Hole Flange Ball Bearings	2" to 2-7/16" (51 mm to 62 mm) 4-Hole Flange Ball Bearings
Boot Bearings (Shaft)	1-1/2" (38 mm) 4-Hole Flange Ball Bearings	2" (51 mm) 4-Hole Flange Ball Bearings
Take-up Location	Head	Head
Discharge	10" (25.4 cm) Round	14" (35.6 cm) Round
Conveyor Chain	81X	81XHH
Conveyor Sprocket	12 Tooth	16 Tooth
Conveyor Weight	55 lbs./ft (82 kg/m) Loaded	85 lbs./ft (126 kg/m) Loaded

TRUNKING AND TRUNKING ACCESSORIES

FOR HORIZONTAL, INCLINED OR VERTICAL UNITS

TO ORDER - First - lay out your system type - Horizontal, Inclined, Horizontal to Inclined or Horizontal to Vertical (Dimensional information on pages 7, 8 & 9). Second - select the quantity and type of conveyor trunking and accessories needed from page 4. Third - Determine power needs by using chart on page 6. Fourth - Determine drive order number from page 5.



TRUNKING AND TRUNKING ACCESSORIES

FOR HORIZONTAL, INCLINED OR VERTICAL UNITS

(Note: All Conveyor Sections include 81X conveyor chain and paddles)

REF NO.	DESCRIPTION	Model 50 Catalog Number	Weight	Model 85 Catalog Number	Weight
<u>BOOT AND ACCESSORIES</u>					
1	Standard boot - 65" (1.65 m) long (Includes hinged cover)	M50359C	230 lbs. (104 kg)	M85375C	290 lbs. (132 kg)
2	Hopper for inclined inlet (used on standard boot only)	M50417	32 lbs. (15 kg)	M85417	35 lbs. (16 kg)
3	Inlet Adapter	M50364	11 lbs. (5 kg)	M85380	17 lbs. (8 kg)
4	Cover w/Inlet (used on standard boot only)	M50421	23 lbs. (10 kg)	M85421	31 lbs. (14 kg)
5	Short Boot (used only with dump hopper, center well or flow thru hopper trunk section)	M50371C	90 lbs. (41 kg)	M85387C	100 lbs. (45 kg)
<u>STANDARD TRUNKING</u>					
6	2'-6" (.76 m) Trunking with bolt-on top cover	M50362C	98 lbs. (44 kg)	M85378C	121 lbs. (55 kg)
6	5'-0" (1.52 m) Trunking with bolt-on top cover	M50361C	191 lbs. (87 kg)	M85377C	235 lbs. (107 kg)
6	7'-6" (2.29 m) Trunking with bolt-on top cover	M50358C	286 lbs. (130 kg)	M85374C	459 lbs. (208 kg)
6	10'-0" (3.05 m) Trunking with bolt-on top cover	M50360C	373 lbs. (169 kg)	M85376C	
6	2'-6" (.76 m) Trunking with solid top cover	M50404C	92 lbs. (42 kg)	M85407C	114 lbs. (52 kg)
6	5'-0" (1.52 m) Trunking with solid top cover	M50405C	167 lbs. (76 kg)	M85408C	205 lbs. (93 kg)
6	7'-6" (2.29 m) Trunking with solid top cover	M50428C	222 lbs. (101 kg)	M85428C	305 lbs. (138 kg)
6	10'-0" (3.05 m) Trunking with solid top cover	M50406C	325 lbs. (147 kg)	M85409C	401 lbs. (182 kg)
<u>CORNER TRUNKING SECTION FOR INCLINED UNIT</u>					
7	15° Corner Trunking	M50424C	218 lbs. (99 kg)		
7	30° Corner Trunking	M50425C	218 lbs. (99 kg)	M85425C	345 lbs. (156 kg)
7	45° Corner Trunking	M50426C	240 lbs. (109 kg)	M85426C	345 lbs. (156 kg)
8	90° Corner Trunking	M50427C	378 lbs. (171 kg)	N/A	
<u>DRIVE HEAD 65 3/8" (1.66 m) LONG</u>					
9	Proper selection will depend on conveyor length, capacity, and if a corner trunking is used. Use power tables on page 6 and drive chart on page 5 to determine drive order number.				
10	Head Discharge Adapter	M50366	36 lbs. (16 kg)	M85382	42 lbs. (19 kg)
	Head Discharge Adapter - 12" (30.5 cm) Round Outlet	M50366-12	36 lbs. (16 kg)	N/A	
<u>PIT HOPPER TRUNKING AND ACCESSORIES</u>					
11	10'-0" (3.05 m) Trunking with dump hopper	M50370C	575 lbs. (261 kg)	M85386C	621 lbs. (282 kg)
12	Grating - 41 3/4" (1.06 m) wide x 20" (50.8 cm) section - for Dump Hopper	E1221	112 lbs. (51 kg)	E1221	112 lbs. (51 kg)
<u>BIN UNLOADING TRUNKING AND ACCESSORIES</u>					
13	Gated Center Well with Sweep Pivot	M50367C	133 lbs. (60 kg)	M85383C	332 lbs. (151 kg)
14	Gated Intermediate Well	M50368C	128 lbs. (58 kg)	M85384C	214 lbs. (97 kg)
15	Rack and Pinion Control (For Well Gates)	M50369	23 lbs. (10 kg)	M85385	23 lbs. (10 kg)
16	Control Pipe Kits (Please refer to commercial bin unload section)				
<u>SPECIAL TRUNKING SECTION</u>					
17	Inlet Drop Through Section - 60" (1.52 m) Long	M50365C	191 lbs. (87 kg)	M85381C	235 lbs. (107 kg)
18	Intermediate Outlet with Rack & Pinion Control - 60" (1.52 m) Long	M50363C	266 lbs. (121 kg)	M85379C	325 lbs. (147 kg)
		M50418C	220 lbs. (100 kg)	M85418C	380 lbs. (172 kg)
19	Hopper Flow Through Section: - M50 30" (76.2 cm) lg. - M85 42" (1.07 m) lg.				
<u>TRUNKING ACCESSORIES</u>					
20	Mounting Feet	52438	1.2 lbs. (1 kg)	52981	2 lbs. (1 kg)
21	40' (12.19 m) Truss Kit	M50440	475 lbs. (215 kg)	M85440	490 lbs. (222 kg)
22	Inlet Hopper with cover	M50413	23 lbs. (10 kg)	M85414	31 lbs. (14 kg)

STATIONARY MASS-TER MOVER CONVEYOR DRIVE HEADS WITH GEAR REDUCER DRIVES

These are complete conveyor heads with motor mount, motor pulley and drive pulley, belts, shields, shaft mounted gear reducer, and 81X or 81XHH conveyor chain and paddles. Head includes shaft, bearings, and conveyor drive sprocket. Drive components are preassembled at the factory.

MODEL 50 DRIVE HEADS

For use on HORIZONTAL UNITS AND INCLINED UNITS up to 60°.

	150 FPM (46.72 MPM) 2500 BPH (68 TPH)		200 FPM (60.96 MPM) 3300 BPH (89 TPH)		250 FPM (76.20 MPM) 4150 BPH (112 TPH)		300 FPM (91.44 MPM) 5000 BPH (135 TPH)	
HP / (kw)	CAT. NO.	WT.	CAT. NO.	WT.	CAT. NO.	WT.	CAT. NO.	WT.
3 (2.2)	M50300C	420 lbs. (191 kg)	M50305C	405 lbs. (184 kg)	M50310C	403 lbs. (183 kg)	M50315C	401 lbs. (182 kg)
5 (4)	M50301C	475 lbs. (215 kg)	M50306C	419 lbs. (190 kg)	M50311C	417 lbs. (189 kg)	M50316C	419 lbs. (190 kg)
7 1/2 (5.5)	M50302C	501 lbs. (227 kg)	M50307C	472 lbs. (214 kg)	M50312C	467 lbs. (212 kg)	M50317C	467 lbs. (212 kg)
10 (7.5)	M50303C	509 lbs. (231 kg)	M50308C	503 lbs. (228 kg)	M50313C	505 lbs. (229 kg)	M50318C	468 lbs. (212 kg)
15 (11)	M51305C	598 lbs. (271 kg)	M50309C	569 lbs. (258 kg)	M50314C	502 lbs. (228 kg)	M50319C	500 lbs. (227 kg)
20 (15)	NA		M51311C	588 lbs. (267 kg)	M51316C	586 lbs. (266 kg)	M51321C	583 lbs. (264 kg)
25 (18.5)	NA		NA		M51317C	590 lbs. (268 kg)	M51322C	588 lbs. (267 kg)

For use on VERTICAL UNITS (90°).

	3 HP (2.2 kw)	5 HP (4 kw)	7 1/2 HP (5.5 kw)	10 HP (7.5 kw)	15 HP (11 kw)	20 HP (15 kw)	25 HP (18.5 kw)
300FPM (91.44 MPM) 5000 BPH (135 TPH) WT.	M50515C 405 lbs. (184 kg)	M50516C 428 lbs. (194 kg)	M50517C 483 lbs. (219 kg)	M50518C 484 lbs. (220 kg)	M50519C 516 lbs. (234 kg)	M51521C 588 lbs. (267 kg)	M51522C 593 lbs. (269 kg)

MODEL 85 DRIVE HEADS

For use on HORIZONTAL UNITS AND INCLINED UNITS up to 60°.

	150 FPM (46.72 MPM) 4000 BPH (108 TPH)		200 FPM (60.96 MPM) 5500 BPH (149 TPH)		250 FPM (76.20 MPM) 7000 BPH (189 TPH)		300 FPM (91.44 MPM) 8500 BPH (230 TPH)	
HP / (kw)	CAT. NO.	WT.	CAT. NO.	WT.	CAT. NO.	WT.	CAT. NO.	WT.
3 (2.2)	M85321C	474 lbs. (215 kg)	M85329C	478 lbs. (217 kg)	M85337C	465 lbs. (211 kg)	M85345C	464 lbs. (210 kg)
5 (4)	M85322C	534 lbs. (242 kg)	M85330C	537 lbs. (244 kg)	M85338C	480 lbs. (218 kg)	M85346C	480 lbs. (218 kg)
7 1/2 (5.5)	M85323C	597 lbs. (271 kg)	M85331C	599 lbs. (272 kg)	M85339C	533 lbs. (242 kg)	M85347C	533 lbs. (242 kg)
10 (7.5)	M85324C	667 lbs. (303 kg)	M85332C	612 lbs. (278 kg)	M85340C	601 lbs. (273 kg)	M85348C	601 lbs. (273 kg)
15 (11)	M85326C	789 lbs. (358 kg)	M85333C	659 lbs. (299 kg)	M85341C	658 lbs. (298 kg)	M85349C	607 lbs. (275 kg)
20 (15)	NA		M85335C	794 lbs. (360 kg)	M85342C	667 lbs. (303 kg)	M85350C	664 lbs. (301 kg)
25 (18.5)	NA		NA		M85344C	791 (359 kg)	M85351C	789 lbs. (358 kg)
30 (22)	NA		NA		NA		M85352C	770 lbs. (349 kg)

Model 85 Vertical (90°) Drive Head NOT AVAILABLE.

STATIONARY MASS-TER MOVER CONVEYOR

DRIVE - POWER CALCULATION

First - Select the desired capacity and closest angle of operation.

Second - Using the tables below, determine what the "H.P. per foot" (*kw/m*) is for the selected capacity and angle of operation.

Third - Multiply the conveyor length by "H.P. per foot" (*kw/m*) to find the required horsepower (*kw*).

DRIVE POWER FORMULA

Conveyor length x "H.P. per foot" (*kw/m*) = Required H.P. (*kw*)

EXAMPLE

Model 50

60' (18.29 m) Long Conveyor

[Angle of Operation - 30°]

[Capacity - 3300 BPH] (89 TPH)

Table Shows .136 "H.P. per foot" - (.331 *kw/m*)

60' x .136 = 8.16 H.P. (18.29 m x .331 = 6.05 *kw*)

MODEL 50 POWER TABLE

ANGLE OF OPERATION	UP TO 2500 BPH (68 TPH) 150 FPM (45.72 MPM)				UP TO 3300 BPH (89 TPH) 200 FPM (60.96 MPM)				UP TO 4100 BPH (111 TPH) 250 FPM (76.20 MPM)					UP TO 5000 BPH (135 TPH) 300 FPM (91.44 MPM)					
	HOR	15°	30°	45°	HOR	15°	30°	45°	HOR	15°	30°	45°	60°	HOR	15°	30°	45°	60°	90°
HP PER FOOT (<i>kw/m</i>)	.048 (.117)	.072 (.175)	.103 (.251)	.137 (.334)	.063 (.153)	.095 (.231)	.136 (.331)	.181 (.441)	.078 (.190)	.119 (.290)	.169 (.412)	.228 (.556)	.327 (.797)	.095 (.231)	.142 (.346)	.207 (.505)	.275 (.671)	.337 (.822)	.394 (.961)

MODEL 85 POWER TABLE

ANGLE OF OPERATION	UP TO 4100 BPH (111 TPH) 150 FPM (45.72 MPM)				UP TO 5500 BPH (149 TPH) 200 FPM (60.96 MPM)				UP TO 7000 BPH (189 TPH) 250 FPM (76.20 MPM)					UP TO 8500 BPH (230 TPH) 300 FPM (91.44 MPM)				
	HOR	15°	30°	45°	HOR	15°	30°	45°	HOR	15°	30°	45°	60°	HOR	15°	30°	45°	60°
HP PER FOOT (<i>kw/m</i>)	.067 (.163)	.107 (.261)	.158 (.385)	.211 (.514)	.092 (.224)	.147 (.358)	.215 (.524)	.292 (.712)	.118 (.287)	.187 (.456)	.277 (.675)	.372 (.907)	.457 (1.11)	.143 (.348)	.227 (.553)	.336 (.819)	.451 (1.10)	.559 (1.36)

POWER REQUIREMENT FOR A CONVEYOR THAT INCLUDES A CORNER SECTION

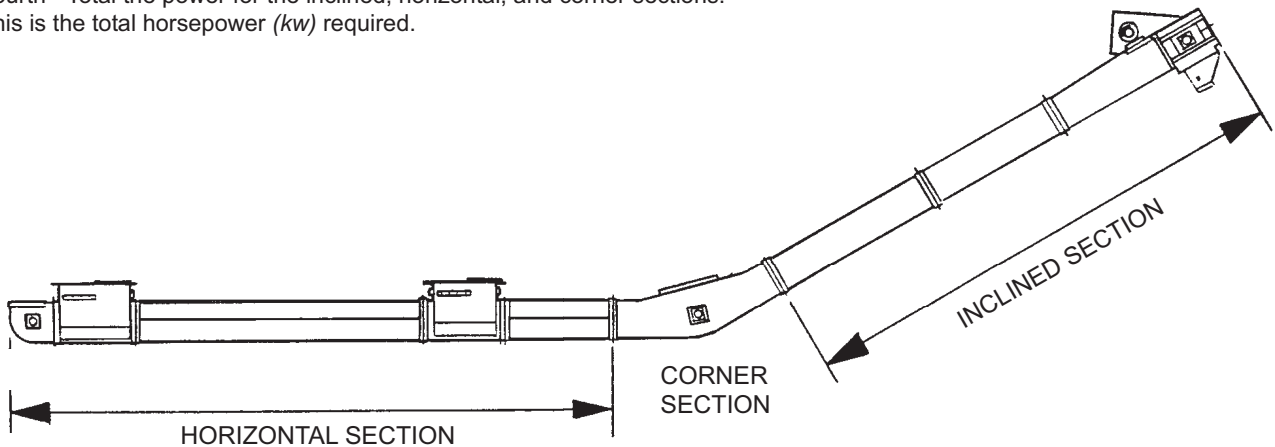
First - Calculate the power for the inclined section using the above instructions.

Second - Calculate the power for the horizontal portion.

Third - For the corner section, calculate the power that would be needed for an additional 20 ft. (6.10 m) of horizontal conveyor.

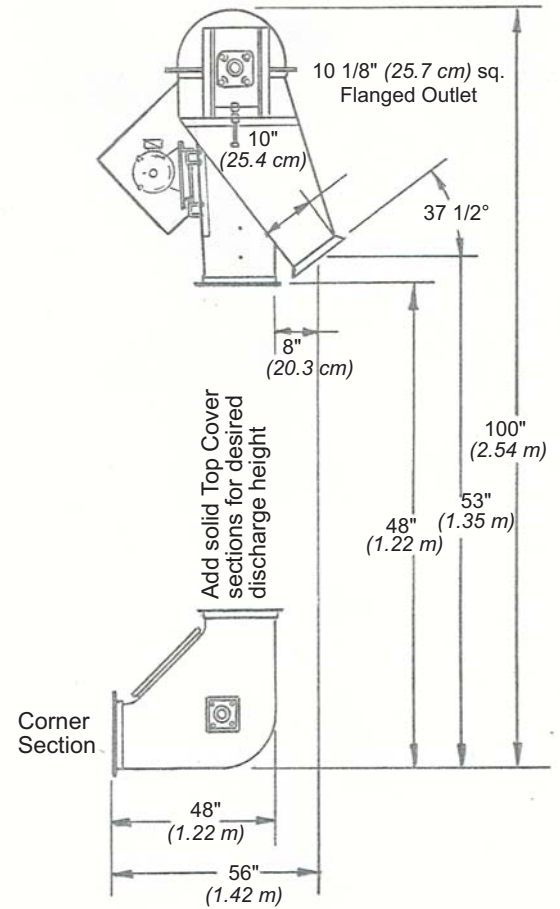
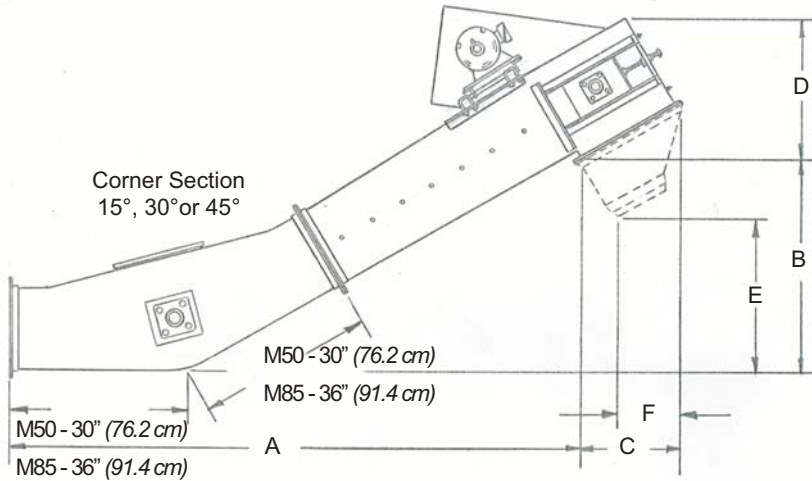
Fourth - Total the power for the inclined, horizontal, and corner sections.

This is the total horsepower (*kw*) required.



VERTICAL HEAD DRIVE MODEL 50 ONLY

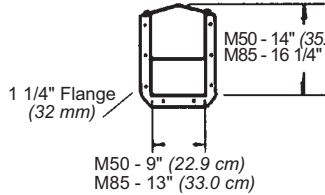
INCLINED HEAD SYSTEM MODEL 50 & 85



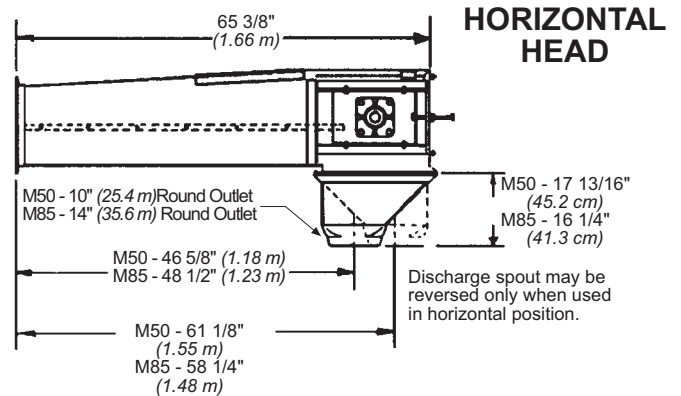
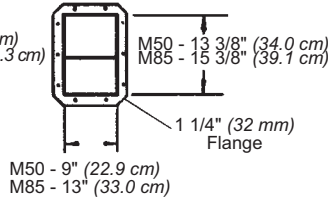
		MODEL 50				MODEL 85				EXTENSIONS		
STD. CORNER WITH:	STD. HEAD	STD. HEAD AND 2'-6" (76.2 cm) EXTENSION	STD. HEAD AND 5'-0" (1.52 m) EXTENSION	STD. HEAD AND 10'-0" (3.05 m) EXTENSION	STD. HEAD	STD. HEAD AND 2'-6" (76.2 cm) EXTENSION	STD. HEAD AND 5'-0" (1.52 m) EXTENSION	STD. HEAD AND 10'-0" (3.05 m) EXTENSION	FOR EACH ADDED 2'-6" (76.2 cm) EXTENSION	FOR EACH ADDED 5'-0" (1.52 m) EXTENSION	FOR EACH ADDED 10'-0" (3.05 m) EXTENSION	
15°	A	96-3/4" (2.46 m)	125-11/16" (3.19 m)	154-11/16" (3.93 m)	212-5/8" (5.40 m)				30" (76 cm)	60" (1.52 m)	120" (3.05 m)	
	B	17-3/16" (43.7 cm)	25-1/16" (63.7 cm)	32-13/16" (83.3 cm)	48-3/8" (1.23 m)				28-15/16" (73.5 cm)	57-15/16" (1.47 m)	115-7/8" (2.94 m)	
	C	23-5/8" (60.0 cm)	23-5/8" (60.0 cm)	23-5/8" (60.0 cm)	23-5/8" (60.0 cm)				7-7/8" (20.0 cm)	15-5/8" (39.7 cm)	31-3/16" (79.2 cm)	
	D	22-1/2" (57.2 cm)	22-1/2" (57.2 cm)	22-1/2" (57.2 cm)	22-1/2" (57.2 cm)							
	E	1/4" (6 mm)	8" (20.3 cm)	15-13/16" (40.2 cm)	31-5/16" (79.5 cm)							
	F	18-11/16" (47.5 cm)	18-11/16" (47.5 cm)	18-11/16" (47.5 cm)	18-11/16" (47.5 cm)							
30°	A	92-1/8" (2.34 m)	118-1/8" (3.00 m)	144-1/8" (3.66 m)	196-1/16" (4.98 m)	103-11/16" (2.63 m)	129-5/8" (3.29 m)	155-5/8" (3.95 m)	207-5/8" (5.27 m)	26" (66.0 cm)	51-15/16" (1.32 m)	103-15/16" (2.64 m)
	B	35-1/6" (89.1 cm)	50-1/16" (1.27 m)	65-1/16" (1.65 m)	95-1/16" (2.41 m)	38-1/8" (96.8 cm)	53-1/8" (1.35 m)	68-1/8" (1.73 m)	98-1/8" (2.49 m)	15" (38.1 cm)	30" (76.2 cm)	60" (1.52 m)
	C	21-3/8" (54.3 cm)	21-3/8" (54.3 cm)	21-3/8" (54.3 cm)	21-3/8" (54.3 cm)	21-3/8" (54.3 cm)	21-3/8" (54.3 cm)	21-3/8" (54.3 cm)	21-3/8" (54.3 cm)			
	D	27-5/8" (70.2 cm)	27-5/8" (70.2 cm)	27-5/8" (70.2 cm)	27-5/8" (70.2 cm)	30" (76.2 cm)	30" (76.2 cm)	30" (76.2 cm)	30" (76.2 cm)			
	E	19-5/8" (49.8 cm)	34-5/8" (87.9 cm)	49-5/8" (1.26 m)	79-5/8" (2.02 m)	24-1/8" (61.3 cm)	39-1/8" (99.4 cm)	54-1/8" (1.37 m)	84-1/8" (2.14 m)			
	F	12-1/2" (31.8 cm)	12-1/2" (31.8 cm)	12-1/2" (31.8 cm)	12-1/2" (31.8 cm)	13-1/4" (33.7 cm)	13-1/4" (33.7 cm)	13-1/4" (33.7 cm)	13-1/4" (33.7 cm)			
45°	A	81-7/8" (2.08 m)	103" (2.62 m)	124-1/8" (3.15 m)	166-5/8" (4.23 m)	91-5/8" (2.33 m)	112-3/4" (2.86 m)	134" (3.40 m)	176-7/16" (4.48 m)	21-3/16" (53.8 cm)	42-7/16" (1.08 m)	84-7/8" (2.16 m)
	B	50" (1.27 m)	71-3/16" (1.81 m)	92-1/2" (2.35 m)	134-7/8" (3.43 m)	54-3/8" (1.38 m)	75-5/8" (1.92 m)	96-7/8" (2.46 m)	139-1/4" (3.54 m)	21-3/16" (53.8 cm)	42-7/16" (1.08 m)	84-7/8" (2.16 m)
	C	17" (43.2 cm)	17" (43.2 cm)	17" (43.2 cm)	17" (43.2 cm)	17-7/8" (45.4 cm)	17-7/8" (45.4 cm)	17-7/8" (45.4 cm)	17-7/8" (45.4 cm)			
	D	29-11/16" (75.4 cm)	29-11/16" (75.4 cm)	29-11/16" (75.4 cm)	29-11/16" (75.4 cm)	31-5/8" (80.3 cm)	31-5/8" (80.3 cm)	31-5/8" (80.3 cm)	31-5/8" (80.3 cm)			
	E	37-3/8" (94.9 cm)	58-5/8" (1.49 m)	79-7/8" (2.03 m)	122-5/16" (3.11 m)	42-15/16" (1.09 m)	64-1/8" (1.63 m)	85-3/8" (2.17 m)	127-3/4" (3.24 m)			
	F	5-1/4" (13.3 cm)	5-1/4" (13.3 cm)	5-1/4" (13.3 cm)	5-1/4" (13.3 cm)	6-3/8" (16.2 cm)	6-3/8" (16.2 cm)	6-3/8" (16.2 cm)	6-3/8" (16.2 cm)			

STATIONARY MASS-TER MOVER CONVEYORS CONVEYOR COMPONENT DIMENSIONAL INFORMATION

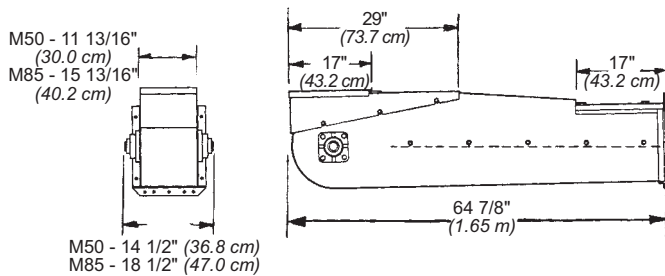
TRUNKING Bolt-on Cover



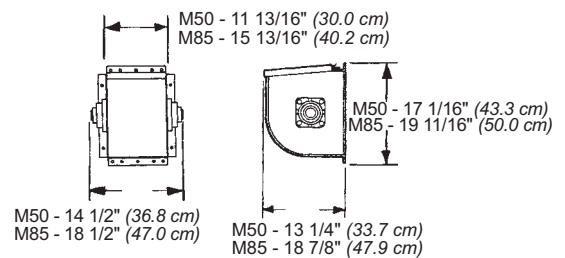
TRUNKING Solid Top



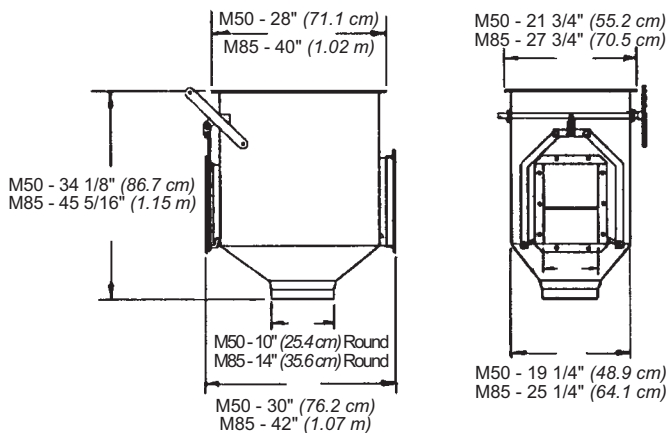
STANDARD BOOT



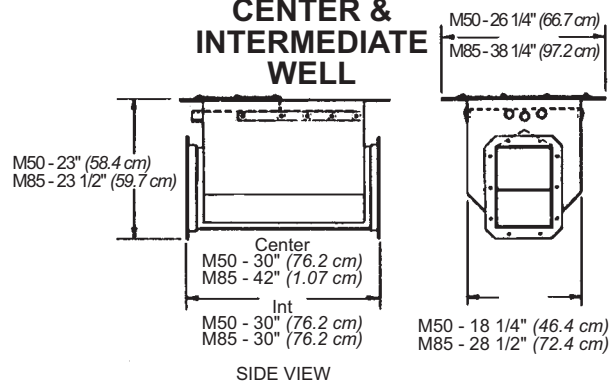
SHORT BOOT



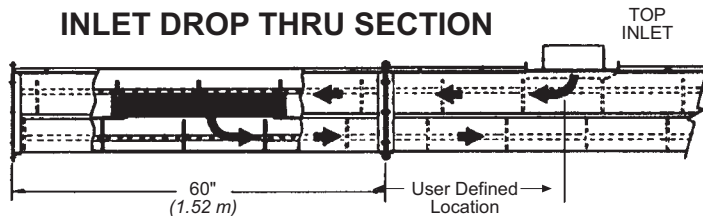
FLOW THRU HOPPER



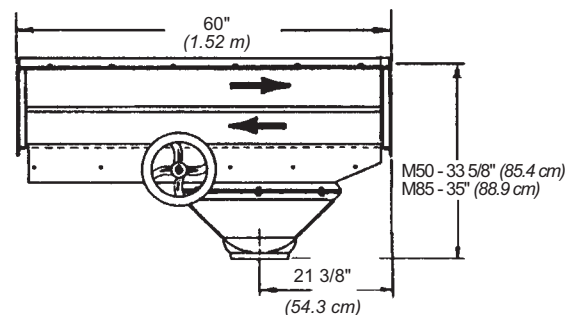
CENTER & INTERMEDIATE WELL



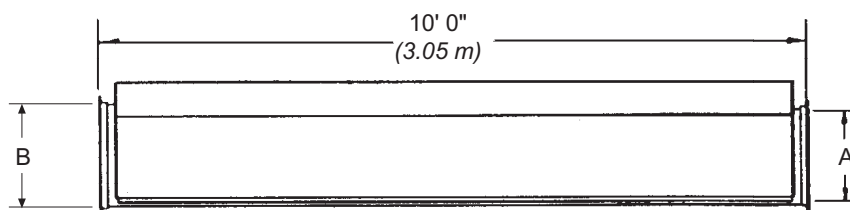
INLET DROP THRU SECTION



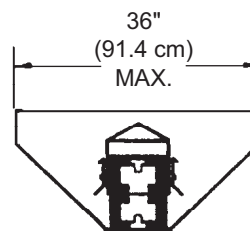
INTERMEDIATE OUTLET



PIT HOPPER

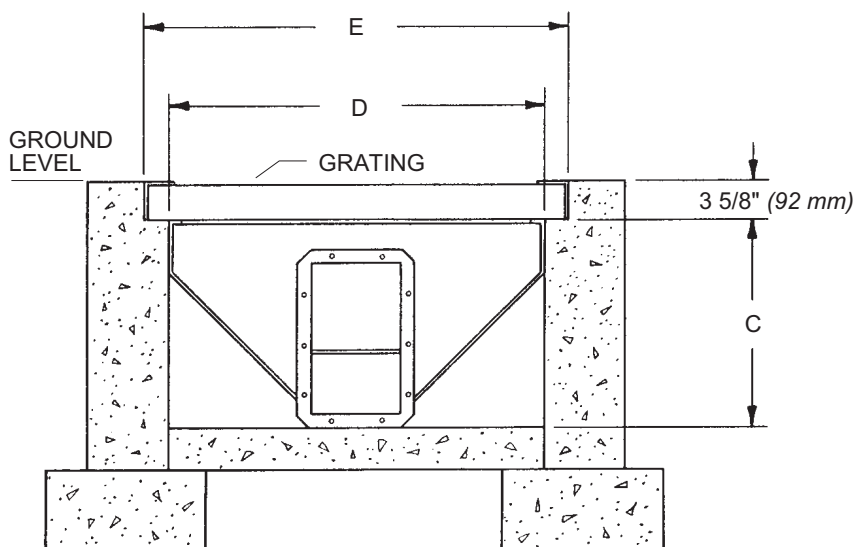


This end is designed to attach to short boot.

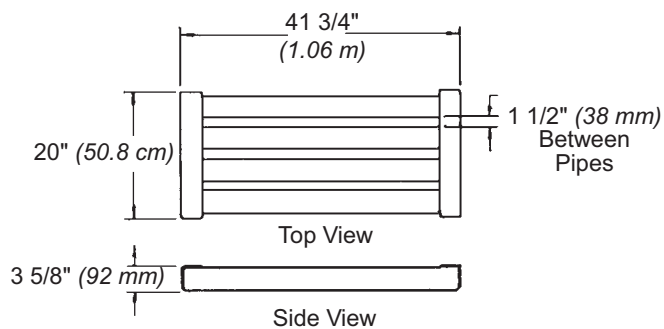


CROSS SECTION OF PIT HOPPER

CONCRETE PIT SPECIFICATIONS



HOPPER GRATING



Model	A	B		C	D		E
		INSIDE	OUTSIDE		CONCRETE DIMENSIONS		
50	13 3/8" (34.0 cm)	14 9/16" (37.0 cm)	17 1/16" (43.3 cm)	20 3/4" (52.7 cm)	36.5" (92.7 cm)	42.5" (1.08 m)	
85	15 3/8" (39.1 cm)	17 5/16" (44.0 cm)	19 11/16" (50.0 cm)	23" (58.4 cm)	36.5" (92.7 cm)	42.5" (1.08 m)	

BOOT AND BOOT ACCESSORIES

MODEL 50		
M50359C	Standard Boot	\$ 1,549.00
M50417	Hopper	429.00
M50364	Inlet Adapter	121.00
M50421	Cover w/Inlet	174.00
M50371C	Short Boot	720.00
MODEL 85		
M85375C	Standard Boot	1,823.00
M85417	Hopper	460.00
M85380	Inlet Adapter	114.00
M85421	Cover w/Inlet	192.00
M85387C	Short Boot	895.00

STANDARD TRUNKING

MODEL 50		
M50362C	2'-6" (76.2 cm) Trunk w/bolt on cover	\$ 584.00
M50361C	5' (1.52 m) Trunk w/bolt on cover	915.00
M50358C	7'-6" (2.29 m) Trunk w/bolt-on cover	1,241.00
M50360C	10' (3.05 m) Trunk w/bolt on cover	1,422.00
M50404C	2'-6" (76.2 cm) Trunk w/solid cover	514.00
M50405C	5' (1.52 m) Trunk w/solid cover	813.00
M50428C	7'-6" (2.29 m) Trunk w/solid cover	1,023.00
M50406C	10' (3.05 m) Trunk w/solid cover	1,274.00
MODEL 85		
M85378C	2'-6" (76.2 cm) Trunk w/bolt on cover	1,188.00
M85377C	5' (1.52 m) Trunk w/bolt on cover	1,521.00
M85374C	7'-6" (2.29 m) Trunk w/bolt on cover	2,028.00
M85376C	10' (3.05 m) Trunk w/bolt on cover	2,534.00
M85407C	2'-6" (76.2 cm) Trunk w/solid cover	1,074.00
M85408C	5' (1.52 m) Trunk w/solid cover	1,402.00
M85428C	7'-6" (2.29 m) Trunk w/solid cover	1,866.00
M85409C	10' (3.05 m) Trunk w/solid cover	2,336.00

CORNER TRUNKING

MODEL 50		
M50424C	15° Corner	\$2,086.00
M50425C	30° Corner	2,086.00
M50426C	45° Corner	2,111.00
M50427C	90° Corner	2,610.00
MODEL 85		
M85425C	30° Corner	2,565.00
M85426C	45° Corner	2,739.00

PIT HOPPER TRUNKING

MODEL 50		
M50370C-5	5' (1.52 m) Trunk w/dump hopper	\$1,712.00
M50370C	10' (3.05 m) Trunk w/dump hopper	2,351.00
MODEL 85		
M85386C-5	5' (1.52 m) Trunk w/dump hopper	2,190.00
M85386C	10' (3.05 m) Trunk w/dump hopper	2,994.00
E1221	Grating	355.00

BIN UNLOAD TRUNKING

MODEL 50		
M50367C	Center Well	\$ 1,475.00
M50368C	Intermediate Well	1,368.00
M50369	Rack & Pinion Control	429.00
MODEL 85		
M85383C	Center Well	1,844.00
M85384C	Intermediate Well	1,585.00
M85385	Rack & Pinion Control	502.00

SPECIAL TRUNKING

MODEL 50		
M50365C	Inlet Drop Thru Section	\$1,119.00
M50363C	Intermediate Outlet	1,780.00
M50418C	Flow Thru Hopper	1,448.00
MODEL 85		
M85381C	Inlet Drop Thru Section	1,326.00
M85379C	Intermediate Outlet	2,133.00
M85418C	Flow Thru Hopper	1,569.00

TRUNKING ACCESSORIES

MODEL 50		
52438	Mounting Feet	\$ *PPB
M50440	40' (12.19 m) Truss Kit	3,060.00
M50413	Inlet hopper w/cover	238.00
MODEL 85		
52981	Mounting Feet	*PPB
M85440	40' (12.19 m) Truss Kit	3,085.00
M85414	Inlet hopper w/cover	264.00

HEAD DISCHARGE ADAPTER

MODEL 50		
M50366	Head Discharge Adapter	\$ 241.00
MODEL 85		
M85382	Head Discharge Adapter	308.00

AR PLATE

MODEL 50	14.50 per ft. (30.5 cm)
MODEL 85	17.00 per ft. (30.5 cm)

*PPB - See 2010 Parts Price Book for List Price

MODEL 50 HORIZONTAL AND INCLINE DRIVE HEAD

2500 BPH (68 TPH) 58 RPM			
M50300C	3 HP (2.2 kw)	TXT115	\$ 3,537.00
M50301C	5 HP (4 kw)	TXT225	4,551.00
M50302C	7 1/2 HP (5.5 kw)	TXT325	5,443.00
M50303C	10 HP (7.5 kw)	TXT315	5,733.00
M51305C	15 HP (11 kw)	TXT415	6,619.00
3300 BPH (89 TPH) 77 RPM			
M50305C	3 HP (2.2 kw)	TXT115	3,779.00
M50306C	5 HP (4 kw)	TXT215	4,558.00
M50307C	7 1/2 HP (5.5 kw)	TXT215	4,712.00
M50308C	10 HP (7.5 kw)	TXT315	5,783.00
M50309C	15 HP (11 kw)	TXT415	6,799.00
M51311C	20 HP (15 kw)	TXT515	7,942.00
4150 BPH (112 TPH) 97 RPM			
M50310C	3 HP (2.2 kw)	TXT115	3,550.00
M50311C	5 HP (4 kw)	TXT115	3,550.00
M50312C	7 1/2 HP (5.5 kw)	TXT215	4,541.00
M50313C	10 HP (7.5 kw)	TXT315	5,683.00
M50314C	15 HP (11 kw)	TXT315	5,683.00
M51316C	20 HP (15 kw)	TXT415	6,812.00
M51317C	25 HP (18.5 kw)	TXT515	7,995.00
5000 BPH (135 TPH) 116 RPM			
M50315C	3 HP (2.2 kw)	TXT115	3,547.00
M50316C	5 HP (4 kw)	TXT115	3,547.00
M50317C	7 1/2 HP (5.5 kw)	TXT215	4,492.00
M50318C	10 HP (7.5 kw)	TXT215	4,614.00
M50319C	15 HP (11 kw)	TXT315	5,711.00
M51321C	20 HP (15 kw)	TXT415	6,854.00
M51322C	25 HP (18.5 kw)	TXT415	6,933.00
M51323C	30 HP (22 kw)	TXT515	8,283.00

MODEL 50 VERTICAL DRIVE HEAD

5000 BPH (135 TPH) 116 RPM			
M50515C	3 HP (2.2 kw)	TXT115	\$ 3,948.00
M50516C	5 HP (4 kw)	TXT115	3,948.00
M50517C	7 1/2 HP (5.5 kw)	TXT215	4,770.00
M50518C	10 HP (7.5 kw)	TXT215	4,870.00
M50519C	15 HP (11 kw)	TXT315	5,924.00
M51521C	20 HP (15 kw)	TXT415	7,093.00
M51522C	25 HP (18.5 kw)	TXT415	7,112.00

MODEL 50 HORIZONTAL AND INCLINED DRIVE BOOT WITH 4-1 REDUCTION DRIVE

5000 BPH (135 TPH) 125 RPM			
M52005C	5 HP (4 kw)	4-1	\$ 3,159.00
M52007C	7 1/2 HP (5.5 kw)	4-1	3,159.00
M52010C	10 HP (7.5 kw)	4-1	3,187.00
M52015C	15 HP (11 kw)	4-1	3,209.00
M52020C	20 HP (15 kw)	4-1	3,258.00

MODEL 50 HEAD WITHOUT DRIVE (USE WITH BOOT DRIVE)

M52100C	Head with Take-up	\$ 1,520.00
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MODEL 85 HORIZONTAL AND INCLINE DRIVE HEAD

4000 BPH (108 TPH) 43 RPM			
M85321C	3 HP (2.2 kw)	TXT225	\$ 4,844.00
M85322C	5 HP (4 kw)	TXT325	5,696.00
M85323C	7 1/2 HP (5.5 kw)	TXT315	5,777.00
M85324C	10 HP (7.5 kw)	TXT415	7,071.00
M85326C	15 HP (11 kw)	TXT515	8,142.00
5500 BPH (149 TPH) 57 RPM			
M85329C	3 HP (2.2 kw)	TXT115	3,975.00
M85330C	5 HP (4 kw)	TXT215	4,803.00
M85331C	7 1/2 HP (5.5 kw)	TXT325	5,888.00
M85332C	10 HP (7.5 kw)	TXT325	5,888.00
M85333C	15 HP (11 kw)	TXT415	7,102.00
M85335C	20 HP (15 kw)	TXT515	8,158.00
7000 BPH (189 TPH) 72 RPM			
M85337C	3 HP (2.2 kw)	TXT115	4,016.00
M85338C	5 HP (4 kw)	TXT215	4,858.00
M85339C	7 1/2 HP (5.5 kw)	TXT315	4,824.00
M85340C	10 HP (7.5 kw)	TXT315	5,919.00
M85341C	15 HP (11 kw)	TXT415	7,148.00
M85342C	20 HP (15 kw)	TXT515	8,242.00
M85344C	25 HP (18.5 kw)	TXT515	8,242.00
8500 BPH (230 TPH) 86 RPM			
M85345C	3 HP (2.2 kw)	TXT115	4,009.00
M85346C	5 HP (4 kw)	TXT215	4,824.00
M85347C	7 1/2 HP (5.5 kw)	TXT215	4,824.00
M85348C	10 HP (7.5 kw)	TXT315	5,919.00
M85349C	15 HP (11 kw)	TXT415	7,111.00
M85350C	20 HP (15 kw)	TXT415	7,111.00
M85351C	25 HP (18.5 kw)	TXT515	8,468.00
M85352C	30 HP (22 kw)	TXT515	8,468.00
M85354C	40 HP (30 kw)	TXT615	10,892.00

Note: Model 85 Vertical Drive Head is NOT AVAILABLE.

For dodge head drives mounted on right-hand side of trunk instead of standard left-hand side, Add "-RH" to catalog number and add \$150.00 to List Price.

MODEL 85 HORIZONTAL & INCLINED DRIVE BOOT WITH 4-1 REDUCTION DRIVE

10,000 BPH (270 TPH) 114 RPM			
M85025C	25 HP (18.5 kw)	4-1	\$ 6,440.00
M85030C	30 HP (22 kw)	4-1	6,440.00
M85040C	40 HP (30 kw)	4-1	6,440.00

Inlet Hopper Extension - M8503A - \$285.00
Inlet Hopper Cover - M8504A - \$120.00

MODEL 85 HEAD WITHOUT DRIVE (USE WITH BOOT DRIVE)

M85100C	Head with Take-up	\$ 2,026.00
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Overflow Relief Door & Switch for Model 50 & Model 85 - \$456.00.

STATIONARY MASS-TER MOVER CONVEYORS

Convenient. Drive Units are complete with gear reducer, sheaves, bushings, "B" section belts, belt guard, and motor mount less electric motor. The Power Tables make it easy to select the proper drive.

Conveyor Sections are available in solid, welded top construction or a bolt-on cover. Bottoms are long-wearing 10 gauge (3.43 mm). The bolt-on cover is convenient for service or inspection. Units must not be run without the cover. If the Mass-Ter Mover is installed out of doors, we recommend trunk flange joints be sealed with liquid-tight sealant (such as caulking) to prevent moisture from entering. Check seals periodically.

Pit Hoppers and Bin Wells allow material flow directly into the lower part of trunking--no need for Drop Through Sections. Flow Control gates are included to avoid overfeeding and plugging.

For Intermediate inlets, use the optional units provided in this catalog. They contain necessary chain and paddle guides and inlet flow control. If random inlets are required, it is recommended that material be allowed to enter the conveying chamber within a short distance without dragging back to the boot. A Drop Through Section allows this to happen. (See Drop Through Diagram on page 8.) Note: the distance the material is conveyed "backward" to a Drop Through or to the boot end should be added to the total conveyor length to properly determine power requirements.

The conveyor must be adequately supported to be rigid and straight. Supports should be on 20' (6.10 m) centers. A maximum span is 30' (9.14 m). A 40' (12.19 m) truss is available for support of spans up to 50' (15.24 m).

MASS-TER MOVER SPECIFICATIONS

MODEL 150	
Dimensions of Conveying Chamber	10" x 17" (25.4 cm x 43.2 cm)
Capacity - Maximum	7500 BPH (203 TPH) 10,000 BPH (270 TPH) 12,500 BPH (338 TPH) 15,000 BPH (405 TPH) 17,500 BPH (473 TPH)
Chain Speed Feet Per Minute	150 (45.72 mpm) 200 (60.96 mpm) 250 (76.20 mpm) 300 (91.44 mpm) 350 (106.88 mpm)
Head Shaft RPM	28 RPM 37 RPM 46 RPM 55 RPM 64 RPM
Gauge of Bottom	10 Gauge (3.43 mm) Galvanized
Paddles	5/8" (16 mm) UHMW
Head Bearings	3-7/16" (87 mm) and 2-7/16" (62 mm) Pillow Block
Head Sprocket	25 Tooth, 3-7/16" (87 mm) Bore
Boot Bearings	2-7/16" (62 mm) Flange
Boot Shaft	3" (76 mm)
Take-up Location	Head
Conveyor Chain	Double 81XHH
Conveyor Trunking Weight (empty)	74 pounds per foot (110 kg per meter)
Conveyor Trunking Weight (loaded)	185 pounds per foot (275 kg per meter)
Maximum Power	75 HP (55 kw)
Drive	Dodge, Double Reduction

STATIONARY MASS-TER MOVER CONVEYOR

DRIVE - POWER CALCULATION

First - Select the desired capacity and closest angle of operation.

Second - Using the tables below, determine what the "H.P. per foot" (*kw/m*) is for the selected capacity and angle of operation.

Third - Multiply the conveyor length by "H.P. per foot" (*kw/m*) to find the required horsepower (*kilowatts*).

DRIVE POWER FORMULA

Conveyor length x "H.P. per foot" (*kw/m*) = Required H.P. (*kw*)

EXAMPLE

Model 150

60' (18.29 m) Long Conveyor [Angle of Operation - 30°]
 [Capacity - 10,000 BPH] (270 TPH)
 Table Shows .398 "H.P. per foot" (.971 *kw/m*)
 60' x .398 = 23.88 H.P. (18.29 m x .971 = 17.7 *kw*)

MODEL 150 POWER TABLE

ANGLE OF OPERATION	UP TO 7500 BPH (203 TPH) 150 FPM (45.72 MPM)				UP TO 10,000 BPH (270 TPH) 200 FPM (60.96 MPM)				UP TO 12,500 BPH (338 TPH) 250 FPM (76.20 MPM)				UP TO 15,000 BPH (405 TPH) 300 FPM (91.44 MPM)				UP TO 17,500 BPH (473 TPH) 350 FPM (106.68 MPM)			
	HOR	15°	30°	45°	HOR	15°	30°	45°	HOR	15°	30°	45°	HOR	15°	30°	45°	HOR	15°	30°	45°
H.P./FOOT (<i>kw/m</i>)	.128 (.312)	.203 (.495)	.298 (.727)	.400 (.976)	.171 (.417)	.271 (.661)	.398 (.971)	.534 (1.30)	.214 (.522)	.339 (.827)	.462 (1.12)	.667 (1.62)	.256 (.624)	.406 (.990)	.596 (1.45)	.800 (1.95)	.300 (.732)	.474 (1.15)	.696 (1.69)	.934 (2.27)

MODEL 150 HORIZONTAL AND INCLINED DRIVE HEAD

7500 BPH (203 TPH) - 150 FPM (45.72 mpm) - 28 RPM		
M150321	5 HP (4 kw)	Contact the Factory for Drive Pricing
M150322	7 1/2 HP (5.5 kw)	
M150323	10 HP (7.5 kw)	
M150324	15 HP (11 kw)	
M150325	20 HP (15 kw)	
M150326	25 HP (18.5 kw)	
M150327	30 HP (22 kw)	
10,000 BPH (270 TPH) - 200 FPM (60.96 mpm) - 37 RPM		
M150331	7 1/2 HP (5.5 kw)	Contact the Factory for Drive Pricing
M150332	10 HP (7.5 kw)	
M150333	15 HP (11 kw)	
M150334	20 HP (15 kw)	
M150335	25 HP (18.5 kw)	
M150336	30 HP (22 kw)	
M150337	40 HP (30 kw)	
12,500 BPH (338 TPH) - 250 FPM (76.20 mpm) - 46 RPM		
M150341	10 HP (7.5 kw)	Contact the Factory for Drive Pricing
M150342	15 HP (11 kw)	
M150343	20 HP (15 kw)	
M150344	25 HP (18.5 kw)	
M150345	30 HP (22 kw)	
M150346	40 HP (30 kw)	
M150347	50 HP (37 kw)	\$ 21,146.00
15,000 BPH (405 TPH) - 300 FPM (91.44 mpm) - 55 RPM		
M150350	10 HP (7.5 kw)	\$ 14,480.00
M150351	15 HP (11 kw)	
M150352	20 HP (15 kw)	\$ 15,637.00
M150353	25 HP (18.5 kw)	
M150354	30 HP (22 kw)	\$ 18,788.00
M150355	40 HP (30 kw)	\$ 18,788.00
M150356	50 HP (37 kw)	\$ 22,364.50
M150357	60 HP (45 kw)	\$ 29,017.00
M150358	75 HP (55 kw)	Contact Factory f/Pricing
17,500 BPH (473 TPH) - 350 FPM (106.88 mpm) - 64 RPM		
M150361	20 HP (15 kw)	Contact the Factory for Drive Pricing
M150362	25 HP (18.5 kw)	
M150363	30 HP (22 kw)	
M150364	40 HP (30 kw)	
M150365	50 HP (37 kw)	
M150366	60 HP (45 kw)	
M150367	75 HP (55 kw)	

MODEL 150 MASS-TER MOVER COMPONENTS

M150201	Standard Boot	\$ 7,046.00
M150202	Short Boot (f/Pit Hopper)	4,781.00
M150211	10' (3.05 m) Trunk w/solid cover	2,927.00
M150212	5' (1.52 m) Trunk w/solid cover	1,806.00
M150213	2'-6" (.76 m) Trunk w/solid cover	1,171.00
M150426	45° Corner	6,252.00
M150386	10' (3.05 m) Pit Hopper	5,328.00
M150387	Grating f/10' (3.05 m) Pit Hopper	2,300.00
M150101	Head Discharge Adapter 90°	259.00
M150106	Inlet Hopper	162.00
M150107	Cover - Inlet Hopper	139.00

AR PLATE (BOTTOM AND SIDES)

Model 150		\$ 40.00 per ft. (30.5 cm)
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