

# Elevators & Conveyors

*Commercial Series 1*



"Your Complete  
Systems Manufacturer."

## GSI Chain Conveyors

*Our material handling division can provide you with an extensive line of chain conveyors to meet your material handling needs. GSI's Series I chain conveyors come standard with a galvanized finish for lasting durability. Whether your business is industrial or agricultural, whether your requirements are for receiving or unloading, pre-processing or post processing, count on GSI for your grain conveyor needs.*

2" dia. x 4" long UHMW return rollers with 3/4" shafts are bolted to the trough every 30" for easy maintenance and replacement.



### Tail Section

- Extended mount pillow block bearings on all conveyors.
- Machined 1/4" (6.35 mm) thick UHMW shaft seals.
- Heavy duty chain tension take-up system utilizing corrosion resistant threaded rods.
- Flame cut hardened steel sprockets.
- Removable panels ease the maintenance of shaft, bearing and sprocket assembly.
- Hinged inspection door.



### Intermediate Trough Sections

- Weather tight 14 gauge covers on head, tail and trough.
- Removable bolted bottom construction.
- Standard 8 Ga. trough bottoms.
- Standard 10 Ga. trough sides on 9", 13", and 17" sides.\*
- Trough sections are fixture assembled for accurate alignment and ease of installation.
- Staggered bottoms and splice plates provide rigidity and accurate alignment.
- 2.609" SBR and 4.0" pitch chain is engineered for each specific conveyor to maximize working load and expected life.
- 3/8" thick UHMW flights prevent steel to steel contact.
- Return cups standard on 2.609" pitch chain.



# Head Section

- Extended mount pillow block bearings on all conveyors.
- Machined 1/4" (6.35 mm) thick UHMW shaft seals.
- Flame cut hardened steel sprockets.
- Removable panels ease the maintenance of shaft, bearing and sprocket assembly.
- Discharge transition.
- Hinged inspection door.



## *Options:*

- *Replaceable 3/16" abrasion resistant bottom with 16 gauge galvanized cover sheet.*
- *Replaceable, 10 gauge abrasion resistant side liners.*
- *Shock relay.*
- *Bypass inlets - 28" long.*
- *Bypass dump hoppers in 6', 8', and 10' lengths.*
- *Manual or electric intermediate discharge gates.*
- *Split sprockets.*

## GSI Bucket Elevators

*Another reason to make GSI your complete system manufacturer is our material handling division providing you with an extensive line of bucket elevators to meet all of your material handling needs.*

*GSI Series I bucket elevators come standard with a galvanized finish for lasting durability.*

*Whether your business is industrial or agricultural, whether your requirements are for receiving or unloading, pre-processing, processing or post processing, count on GSI for your bucket elevator needs.*



### Head Section

- Contoured hood to minimize wear and improve material discharge flow.
- Structural angle for head bearing mount on 24", 30", & 36" models.
- Pressure relief panels located on the side of the hood.
- Weather tight internal lip seal between head housing and hood to minimize moisture problems.
- Fully adjustable UHMW discharge baffle.
- Standard urethane liner for head and discharge area on 30" and 36" models.
- Pulley lagging inspection doors on both sides of head housing for 24", 30", and 36" models.

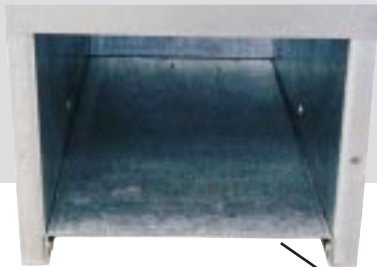
### Two-Piece Hood Design

- Two piece hood for easy interior accessibility.
- Heavy duty externally mounted pillow block bearings.
- Machined 1/4" (6.35mm) UHMW shaft seals.
- Heavy duty crowned face double disc drum pulley with SOFR (static conductive, oil resistant, fire retardant) slide lagging.
- Jack bolts for final installation alignment.



# Boot Section

- Belt tension take-up screw utilizing a corrosion resistant threaded rod.
- Externally mounted pillow block bearings.
- One standard boot inlet provided.
- Machined 1/4" (6.35mm) thick full length UHMW shaft seal and take-up plate bearing surface.
- Tapped boot shaft.



Elevated boot bottom.



# Trunking



- 14 Gauge (1.90 mm) galvanized steel with riveted vertical seams.
- Fixture welded galvanized structural angle iron flanges continuously welded on trunks.
- Maintenance friendly 5' (1524 mm) inspection section with 4' (1219.2 mm) long opening. Removable front panels are interchangeable to provide an inspection door at 2 possible locations.
- Trunking is furnished as independent trunk sections with tie angles for efficient field erection & increased shipping capacity.
- Durable non-conductive, MOR (moderate oil resistant) PVC belting and non-sparking polyethylene buckets.
- Silicon bronze, corrosion resistant welds.

# Options:

- SOR rubber belts.
- 12 gauge galvanized trunking.
- Elevator buckets available in steel, nylon or urethane.
- Belt alignment and speed monitors.
- 1/4" (6.35 mm) urethane liner for head and discharge area on request for 10", 16", and 24".
- Large galvanized head service platform and galvanized distributor service platforms - 6' x 6' and 4' x 5'.
- Galvanized ladder, safety cage, and rest platform packages.
- Winged self cleaning boot pulley (standard on 10").
- Down leg boot inlet hopper.
- Flared boot hoppers.



## GSI Inclined Drag Conveyors

All Series 1 incline conveyors include these standard features:

- Galvanized construction.
- Take-up assembly on head for accessibility.
- Large profile UHMW paddles.
- 2.609" or 4" pitch roller bushed chain.
- 10 gauge center pan.
- Removable 8 gauge bottom.
- 10 gauge sides on 13" & 17" tall conveyor. 8 gauge sides on 21" tall conveyor.
- Head and tail slotted for shaft removal.
- Pillow block bearings head & tail.
- 1/4" UHMW shaft seals head and tail.
- Flame cut hardened steel sprockets head & tail.

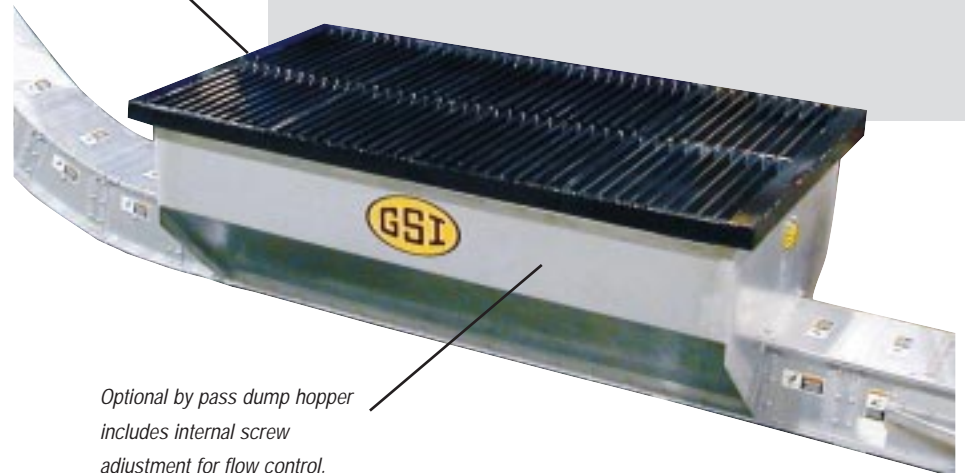
Size	BPH	MTH
9" x 13" (228 x 330)	2,000	51
13" x 13" (330 x 330)	3,500	88
13" x 17" (330 x 432)	4,000	102
15" x 17" (381 x 432)	5,500	140
15" x 21" (381 x 533)	7,500	191
21" x 17" (533 x 432)	7,500	191
21" x 21" (533 x 533)	10,000	254

Optional welded bar grating with grain deflectors provided in 2' wide sections.

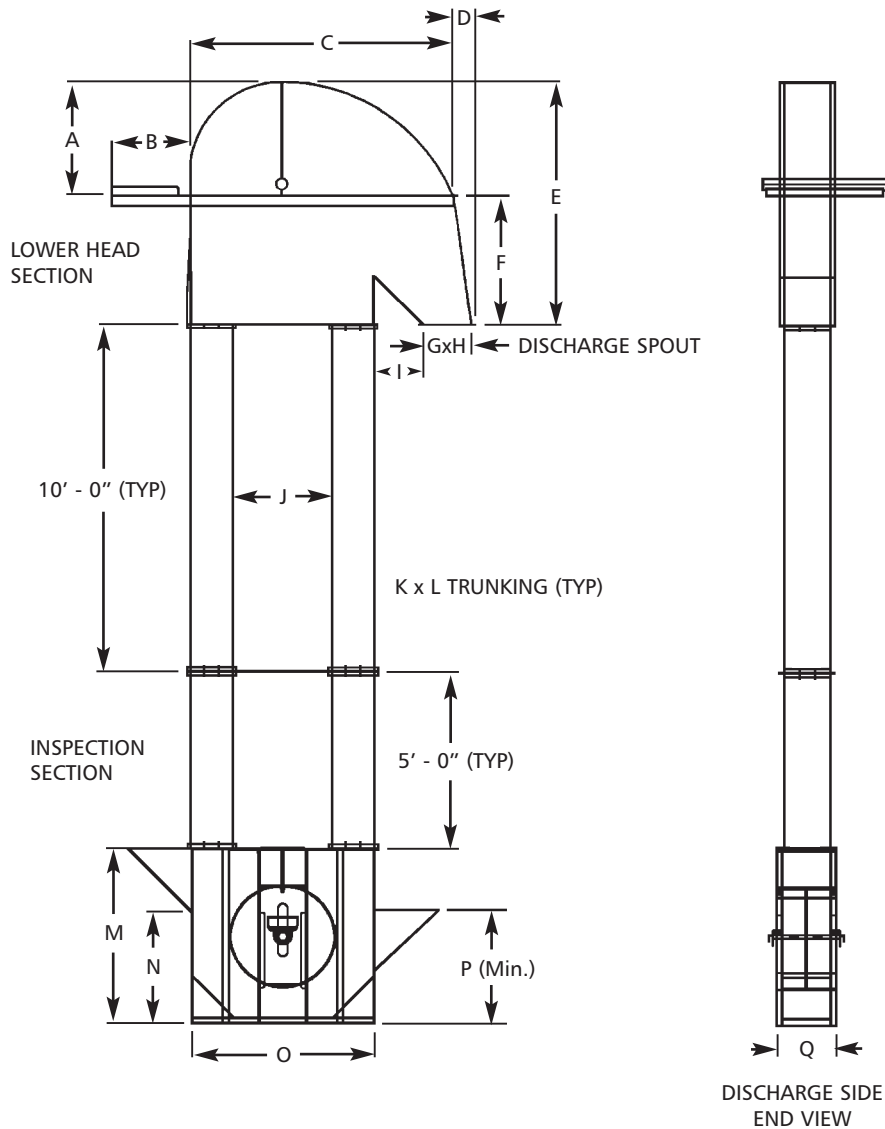
## Pit Conveyor

Optional Features:

- Bend sections - 15°, 30°, or 45°.
- By pass dump hoppers in 6', 8', and 10' Lengths.
- By pass inlet - 28" long.
- Sectional dump hopper grating.
- Class I or Class II drives.
- Replaceable 3/16" abrasion resistant bottom with 16 gauge galvanized cover sheet.
- Shock relay.
- Split sprockets.
- Manual or electric discharge gates.



# Bucket Elevator Specifications



## General Notes:

Capacities based on dry, free flowing, granular material with proper loading and unloading conditions at 45#/CF. (721kg/m<sup>3</sup>).

General specifications and dimensions are subject to change without notice.

General specifications and dimensions are intended to provide sales assistance and preliminary guide to system layout only.

**Note:** 10" Pulley has single legging. Capacities Based on dry, free flowing, grain with proper loading and unloading conditions at 45#/CF.

Pulley Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	Bucket Spacing	CFH	BPH	MTH
10"	15	23	34	7	34	19	8	10	8	*NA	10	25	36	22	25	26	13	9	625	500	12
254mm	381	584	864	179	864	483	203	254	203	*NA	254	635	914	22	635	660	330	6	937	750	19
10" Pulley will run 116 RPM @ 311 FPM with Low Profile 6 x 4 Buckets (152mm x 102mm)																		4.5	1250	1000	25
																		3	1875	1500	38
16"	22	22	49	5	44	22	13	13	7	14	13	10	48	32	37	29	16	16	1875	1500	38
406mm	559	559	1245	127	1118	559	330	330	179	356	330	254	1219	813	940	737	406	12	2500	2000	51
16" Pulley will run 114 RPM @ 485 FPM with 9 x 6 Buckets (229mm x 152mm)																		10	3125	2500	63
																		8	3750	3000	76
24"	26	22	59	6	48	22	16	16	7	22	16	10	48	32	42	35	20	10	4375	3500	89
610mm	660	559	1499	152	1219	559	406	406	179	559	406	254	1219	813	1062	889	508	8.5	5000	4000	102
24" Pulley will run 81 RPM @ 514 FPM with 12 x 6 Buckets (305mm x 152mm)																		7	6250	5000	127
30"	32	27	75	5	69	37	16	16	12	28	16	12	60	44	55	37	20	10.5	6250	5000	127
762mm	813	686	1905	127	1753	940	406	406	305	711	406	305	1524	1118	1397	940	508	8.5	7500	6000	153
30" Pulley will run 72 RPM @ 562 FPM with 12 x 7 Buckets (305mm x 178mm)																					
36"	39	27	89	6	83	44	16	16	17	34	16	14	60	44	65	41	20	12.5	7500	6000	153
914mm	991	686	2261	152	2108	1118	406	406	432	864	406	356	1524	1118	1651	1041	508	10.5	8750	7000	178
36" Pulley will run 66 RPM @ 627 FPM with Low Profile 12 x 8 Buckets (305mm x 203mm)																		9.5	10000	8000	204
																		7.5	12500	10000	255

# Chain Conveyor Specifications

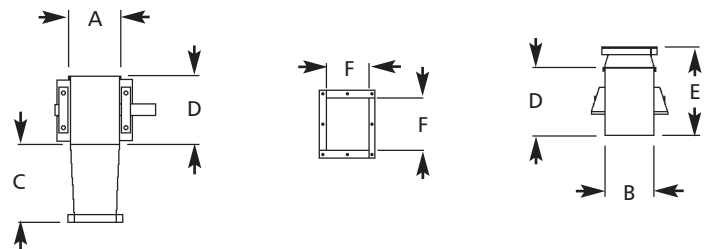
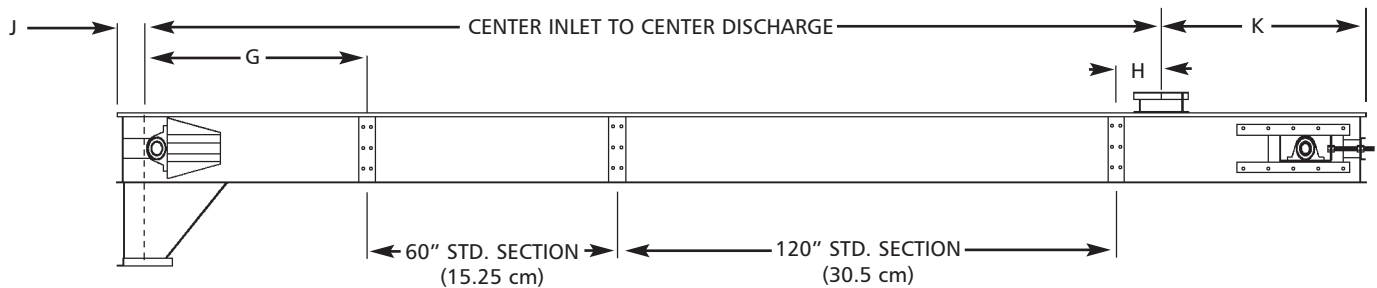
Size W X H	A	B	C	D	E	F	G	H	J	K	RPM	FPM	CFH	BPH	MTH
9 x 9	13	9	17	9	13	10	53	11	7	49	41	71	1257	1000	25
(228 x 228)	330	228	432	228	330	254	1346	279	178	1244	61	106	1876	1500	38
											82	143	2531	2000	51
											102	177	3133	2500	63
9 x 13	13	9	17	13	17	10	53	11	7	49	51	111	3141	2500	64
(228 x 330)	330	228	432	330	432	254	1346	279	178	1244	61	132	3736	3000	76
											71	154	4358	3500	88
											82	178	5037	4000	102
13 x 13	17	13	21	13	17	12	52	12	8	48	56	121	5046	4000	102
(330 x 330)	432	330	533	330	432	305	1321	305	203	1219	69	150	6255	5000	127
											83	180	7506	6000	153
13 x 17	17	13	21	17	21	12	52	12	8	48	31	121	7563	6000	154
(330 x 432)	432	330	533	432	533	305	1321	305	203	1219	36	141	8813	7000	179
											41	160	10000	8000	204
15 x 17	19	15	23	17	21	16	50	14	10	46	31	121	8773	7000	179
(381 x 432)	482	381	584	432	533	406	1270	355	254	1168	36	141	10223	8000	208
											40	157	11383	9000	232
											44	172	12470	10000	254
15 x 21	19	15	23	21	25	16	50	14	10	46	33	129	12474	10000	254
(381 x 533)	482	381	584	533	635	406	1270	355	254	1168	40	157	15182	12000	309
21 x 17	25	21	27	17	21	18	49	15	11	45	37	146	14965	12000	305
(533 x 432)	635	533	686	432	533	457	1244	381	279	1143	47	183	18758	15000	382
21 x 21	25	21	27	21	25	18	49	15	11	45	35	137	18728	15000	382
(533 x 533)	635	533	686	533	635	457	1244	381	279	1143	47	183	25016	20000	510

## General Notes:

Capacities based on dry, free flowing, granular material with proper loading and discharging conditions at 45#/CF. (721 kg/m<sup>3</sup>).

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