

Chain Twinline

Norstar's Chain Twinline is a versatile chain conveyor consisting of a head and boot section connected by two galvanized tubes allowing a chain and paddle system to convey material to the head discharge and back through to the boot for receiving. The Twinline's paddle and chain system is more gentle on product than an auger. The Twinline is capable of conveying at angles up to 60°

Key Info:

Models:

Standard Powder Coat with Galvanized Tubing

Common Applications:

Twinline's are commonly used in situations where material must be moved at an angle to a drop point (ie. bin filling, feeding a grain dryer, etc.).

Sizes:

6", 8", 10", 12"

Maximum Capacities:

6" - 1,500 BPH

8" - 4,000 BPH

10" - 6,000 BPH

12" - 10,000 BPH

Key Features:

- Galvanized tubing and Powder Coated Head and Boot for exceptional corrosion and damage resistance.
- AR Plate Square-To-Round Transitions for unmatched durability.
- UHMW Paddle and Steel Chain assembly with reinforced backing plates on every other paddle.
- Capable of conveying at angles up to 60°

Key Options:

- 81X or 81XHH Chain
- Catwalks
- Transitions
- Support Towers

Specification

MODEL	CHAIN TRAVEL	CONVEYOR CHAIN	CONVEYOR SPROCKET	HEAD SHAFT RPM	PADDLES UHMW	SPAN (FT) 12 GA*	SPAN (FT) 10 GA*	CAPACITY
6"	325 FPM	81X	12	125	3/8"	37'	40'	1500 BPH
(152 mm)	(99 MPD)				(10 mm)			(41 TPH)
8"	325 FPM	81XHH	14	107	3/8"	45'	49'	4000 BPH
(203 mm)	(99 MPD)				(10 mm)			(108 TPH)
10"	325 FPM	81XHH	16	94	1/2"	N/A	55'	6000 BPH
(254 mm)	(99 MPD)				(13 mm)			(162 TPH)
12"	400 FPM	81XHH	20	92	1/2"	N/A	63'	10000 BPH
(305 mm)	(122 MPD)				(13 mm)			(270 TPH)

*The Span Values in this table are calculated in accordance with ASCE 7-16. The values are provided as a conservative measure and are not appropriate for all locations. These spans assume Risk Category 1, 90 mph base wind speed, 30 psf ground snow load, 55 lbs per bushel grain load, at normal fill conditions. Installed height of equipment not to exceed 100' above grade. No terrain shaping factors are considered in these spans.

WEIGHT (lbs)	6" 12GA	6" (10GA)	8" (12GA)	8" (10GA)	10" (10GA)	12" (10GA)
EMPTY/FT	25	27	29	33	52	63
LOADED/FT	34	36	46	49	77	99

Twinline Power Requirements						
Conveyor Length x HP/ft (kw/m) = Required HP (kw)	Conveyor Size	Angle of Operation				
		Horizontal	15°	30°	45°	60°
Horsepower per ft (kw per meter)	6"	0.044 (0.108)	0.067(0.164)	0.095 (0.232)	0.125 (0.306)	0.15 (0.367)
	8"	0.083 (0.203)	0.129 (0.316)	0.186 (0.455)	0.243 (0.595)	0.286 (0.700)
	10"	0.122 (0.298)	0.186 (0.455)	0.278 (0.680)	0.358 (0.876)	0.45 (1.101)
	12"	0.191 (0.467)	0.3 (0.734)	0.445 (1.09)	0.6 (1.468)	0.667 (1.632)
Maximum Recommended Conveyor Length in Feet (meters)						
	6"	277 (84)	149 (45)	105 (32)	80 (24)	67 (20)
	8"	301 (92)	194 (59)	134 (41)	103 (31)	87 (27)
	10"	246 (75)	161 (49)	108 (33)	84 (26)	67 (20)
	12"	314 (96)	200 (61)	135 (41)	100 (30)	90 (27)

Belt Drive Section

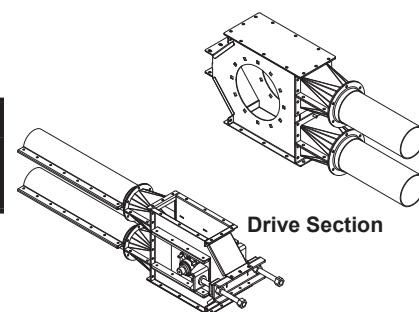
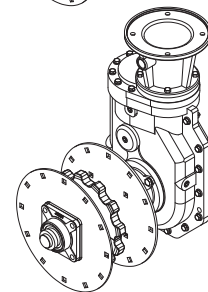
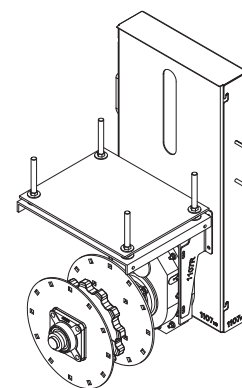
Part #	Description	Weight (lbs)	List Price
73073	TL Drive 6" TA0107L09 1.5" 1/1.5HP	n/a	\$ 3,373.00
73074	TL Drive 6" TA0107L09 1.5" 2HP	n/a	\$ 3,373.00
70377	TL Drive 6" TA0107L09 1.5" 3/5HP	n/a	\$ 3,373.00
70378	TL Drive 6" TA1107H09 1.5" 5HP	n/a	\$ 3,690.00
70379	TL Drive 6" TA1107H09 1.5" 7.5hp	n/a	\$ 3,755.00
70380	TL Drive 6" TA1107H09 2" 10HP	n/a	\$ 4,171.00
70381	TL Drive 6" TA2115H09 2" 10HP	n/a	\$ 5,937.00

Direct Drive Section

Part #	Description	Weight (lbs)	List Price
70382	TL Drive 6" M2H25T18C 1.5" 3/5HP	n/a	\$ 7,763.00
70383	TL Drive 6" M2H25T21C 1.5" 7.5HP	n/a	\$ 7,763.00
70384	TL Drive 6" M2H25T21C 2" 10HP	n/a	\$ 7,848.00

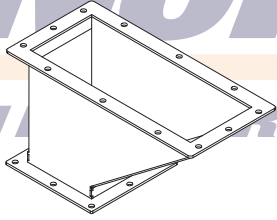
End Section

Part #	Description	Weight (lbs)	List Price
63848	Twinline 6in Drive End Section	n/a	\$ 1,217.00
63855	Twinline 6in Take-up End Section	n/a	\$ 3,310.00
63862	Twinline 6in Self-Cleaning Take-up End Section	n/a	\$ 3,310.00

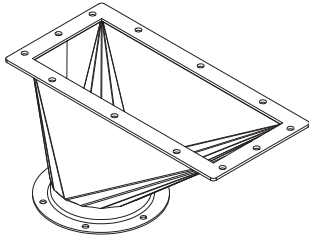


Drive Section

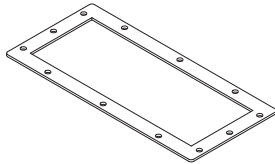
Takeup Section

Discharge to Square Transitions

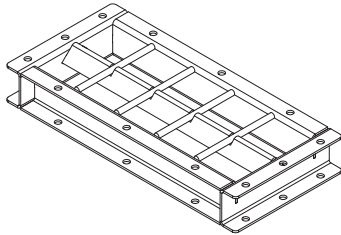
Part #	Description	Weight (lbs)	List Price
64011	6" Tinline Discharge Transition to 6" Square 0 deg	n/a	\$ 266.00
64012	6" Tinline Discharge Transition to 6" Square 15 deg	n/a	\$ 261.00
64013	6" Tinline Discharge Transition to 6" Square 30 deg	n/a	\$ 261.00
64014	6" Tinline Discharge Transition to 6" Square 45 deg	n/a	\$ 267.00
64015	6" Tinline Discharge Transition to 6" Square 60 deg	n/a	\$ 275.00

Discharge to Round Transitions

Part #	Description	Weight (lbs)	List Price
64109	6" Tinline Discharge Transition to 6" Round 0 deg	n/a	\$ 282.00
64110	6" Tinline Discharge Transition to 6" Round 15 deg	n/a	\$ 273.00
64111	6" Tinline Discharge Transition to 6" Round 30 deg	n/a	\$ 271.00
64112	6" Tinline Discharge Transition to 6" Round 45 deg	n/a	\$ 277.00
64113	6" Tinline Discharge Transition to 6" Round 60 deg	n/a	\$ 280.00

Discharge Flange

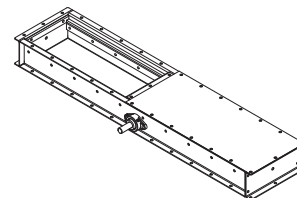
Part #	Description	Weight (lbs)	List Price
64093	6" Discharge Flange	n/a	\$ 79.00

Inlet Grating

Part #	Description	Weight (lbs)	List Price
64169	Tinline 6in Grating	n/a	\$ 105.00

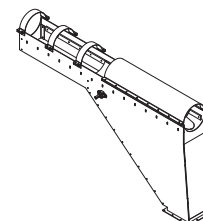
End Section Slide Gate

Part #	Description	Weight (lbs)	List Price
79926	6" Standard End Plastic Slider Slide Gate	n/a	\$ 1,785.00
79930	6" Self-Cleaning Take-up End Plastic Slider Slide Gate	n/a	\$ 2,142.00

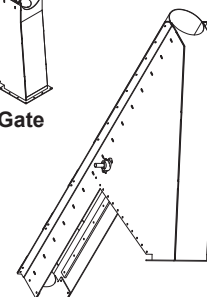


Discharge Gate

Part #	Description	Weight (lbs)	List Price
58139	6" 0 Deg Discharge Gate	n/a	\$ 3,220.00
81842	6" 15 Deg Discharge Gate	n/a	\$ 3,113.00
81843	6" 30 Deg Discharge Gate	n/a	\$ 3,075.00
81844	6" 45 Deg Discharge Gate	n/a	\$ 3,075.00
58143	6" 0 Deg Discharge Gate, Liner Ready	n/a	\$ 3,256.00
81854	6" 15 Deg Discharge Gate, Liner Ready	n/a	\$ 3,149.00
81855	6" 30 Deg Discharge Gate, Liner Ready	n/a	\$ 3,110.00
81856	6" 45 Deg Discharge Gate, Liner Ready	n/a	\$ 3,110.00
60371	Discharge Gate Chain Guide Assembly	n/a	\$ 941.00
21983	Chain Wheel Chain*	n/a	\$ 4.00/ft



0° Discharge Gate



45° Discharge Gate

*Discounts DO NOT apply to these items

0 Deg Discharge Gate Liners

10ga				3/16"				1/4"			
	Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price
AR200	59441	n/a	\$ 203.00		59442	n/a	\$ 374.00		-	-	-
AR400	59443	n/a	\$ 386.00		59444	n/a	\$ 422.00		-	-	-
UHMW	-	-	-		-	-	-		59440	n/a	\$ 345.00

15 Deg Discharge Gate Liners

10ga				3/16"				1/4"			
	Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price
AR200	82960	n/a	\$ 185.00		82961	n/a	\$ 318.00		-	-	-
AR400	82995	n/a	\$ 347.00		82996	n/a	\$ 380.00		-	-	-
UHMW	-	-	-		-	-	-		82959	n/a	\$ 310.00

30 Deg Discharge Gate Liners

10ga				3/16"				1/4"			
	Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price
AR200	82963	n/a	\$185.00		82964	n/a	\$ 321.00		-	-	-
AR400	82997	n/a	\$ 351.00		82998	n/a	\$ 383.00		-	-	-
UHMW	-	-	-		-	-	-		82962	n/a	\$ 314.00

45 Deg Discharge Gate Liners

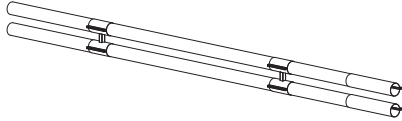
10ga				3/16"				1/4"			
	Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price
AR200	82966	n/a	\$ 188.00		82967	n/a	\$ 327.00		-	-	-
AR400	82999	n/a	\$ 358.00		83000	n/a	\$ 391.00		-	-	-
UHMW	-	-	-		-	-	-		82965	n/a	\$ 320.00

Norstar

INDUSTRIE

Tube Section

Packages include:
*Tube Length *Pipe Splice



Part #	Description	Weight (lbs)	List Price
64796	Tinline Section Assembly 6in 12ga 5ft	n/a	\$ 579.00
64797	Tinline Section Assembly 6in 12ga 10ft	n/a	\$ 818.00
64798	Tinline Section Assembly 6in 12ga 20ft	n/a	\$ 1,401.00
64799	Tinline Section Assembly 6in 12ga 30ft	n/a	\$ 1,985.00
64800	Tinline Section Assembly 6in 12ga 40ft	n/a	\$ 2,568.00
64801	Tinline Section Assembly 6in 10ga 5ft	n/a	\$ 626.00
64802	Tinline Section Assembly 6in 10ga 10ft	n/a	\$ 912.00
64803	Tinline Section Assembly 6in 10ga 20ft	n/a	\$ 1,590.00
64804	Tinline Section Assembly 6in 10ga 30ft	n/a	\$ 2,268.00
64805	Tinline Section Assembly 6in 10ga 40ft	n/a	\$ 2,946.00

Tube Kit (Tube Not Included)

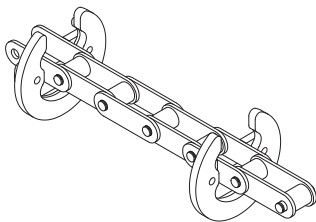
Package includes:
Tube splices and spacer brackets

Part #	Description	Weight (lbs)	List Price
64846	6" Tinline Pipe Splice	n/a	\$ 166.00
67737	6" Tinline Tube Spacer Bracket	n/a	\$ 320.00
06TL10	6" Tinline tube kit less tube 5'-10"	n/a	\$ 972.00
06TL20	6" Tinline tube kit less tube 15'-20"	n/a	\$ 1,292.00
06TL30	6" Tinline tube kit less tube 30'	n/a	\$ 1,612.00
06TL40	6" Tinline tube kit less tube 40'	n/a	\$ 1,932.00

Chain and Paddles

Complete Chain includes:

*Chain Weldment *UHMW Paddles *Steel Backing Plates *Paddle Hardware



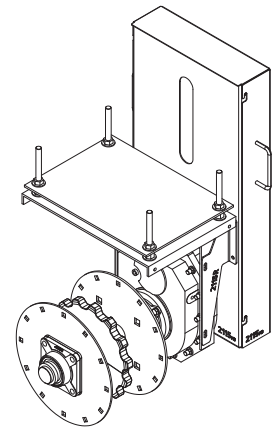
Part #	Description	Weight (lbs)	List Price
58327-10	6" 81X Complete Chain Assembly 10' section	n/a	\$ 500.00
58333-10	6" 81X Chain Weldment 10' section	n/a	\$ 148.00
58345	6" 81X UHMW Paddle	n/a	\$ 13.00
58351	6" 81X Paddle Backing Plate	n/a	\$ 1.00

Chain is sold in 10' rolls complete.

To arrive at the amount of chain needed, take the tube length plus 10' and round up to the next multiple of 10 to determine rolls of chain.

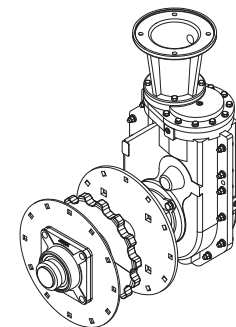
Belt Drive Section

Part #	Description	Weight (lbs)	List Price
73075	TL Drive 8" TA0107L15 2" 2HP	n/a	\$ 4,536.00
73076	TL Drive 8" TA0107L15 2" 3/5HP	n/a	\$ 4,536.00
73077	TL Drive 8" TA1107H15 2" 5HP	n/a	\$ 4,536.00
70385	TL Drive 8" TA1107H15 2" 7.5/10HP	n/a	\$ 4,536.00
70386	TL Drive 8" TA2115H15 2" 10HP	n/a	\$ 5,220.00
70387	TL Drive 8" TA2115H15 2" 15HP	n/a	\$ 5,394.00
70388	TL Drive 8" TA3203H15 2" 15HP	n/a	\$ 5,941.00
70389	TL Drive 8" TA4207H15 2.4375" 20HP	n/a	\$ 7,781.00
70390	TL Drive 8" TA4207H15 2.4375" 25hp	n/a	\$ 8,009.00



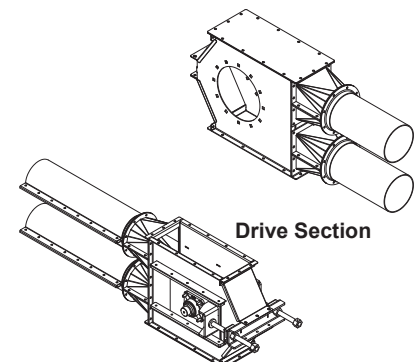
Direct Drive Section

Part #	Description	Weight (lbs)	List Price
73078	TL Drive 8" M2H32T18C 2" 3/5HP	n/a	\$ 7,959.00
70391	TL Drive 8" M2H32T21C 2" 7.5/10HP	n/a	\$ 7,959.00
70392	TL Drive 8" M2H32T25C 2" 15HP	n/a	\$ 8,115.00
70393	TL Drive 8" M3H32T25C 2" 15HP	n/a	\$ 9,065.00
70394	TL Drive 8" M3H32T25C 2.4375" 20HP	n/a	\$ 9,265.00
70395	TL Drive 8" M3H29T28TSC 2.4375" 25HP	n/a	\$ 9,343.00
70396	TL Drive 8" M4H30T25C 2.4375" 20HP	n/a	\$ 11,499.00
70397	TL Drive 8" M4H30T28TSC 2.4375" 25HP	n/a	\$ 11,577.00



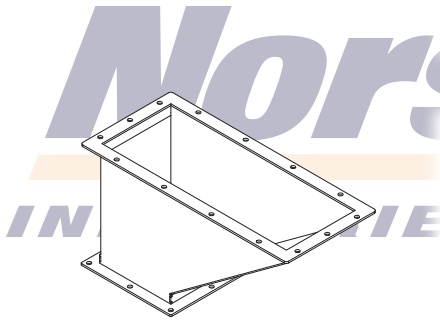
End Section

Part #	Description	Weight (lbs)	List Price
63849	Twinline 8in 12ga Drive End Section	n/a	\$ 1,612.00
63850	Twinline 8in 10ga Drive End Section	n/a	\$ 1,789.00
63856	Twinline 8in 12ga Take-up End Section	n/a	\$ 5,065.00
63857	Twinline 8in 10ga Take-up End Section	n/a	\$ 5,299.00
63863	Twinline 8in 12ga Self-Cleaning Take-up End Section	n/a	\$ 5,065.00
63864	Twinline 8in 10ga Self-Cleaning Take-up End Section	n/a	\$ 5,299.00

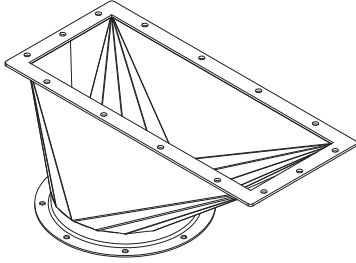


Drive Section

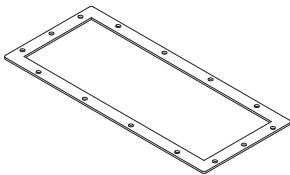
Takeup Section

Discharge to Square Transitions

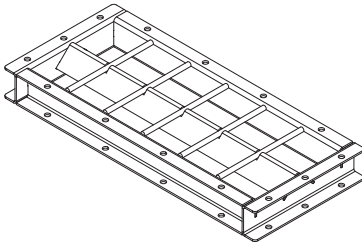
Part #	Description	Weight (lbs)	List Price
64016	8" Tinline Discharge Transition to 8" Square 0 deg	n/a	\$ 439.00
64017	8" Tinline Discharge Transition to 8" Square 15 deg	n/a	\$ 417.00
64018	8" Tinline Discharge Transition to 8" Square 30 deg	n/a	\$ 429.00
64019	8" Tinline Discharge Transition to 8" Square 45 deg	n/a	\$ 431.00
64020	8" Tinline Discharge Transition to 8" Square 60 deg	n/a	\$ 448.00

Discharge to Round Transitions

Part #	Description	Weight (lbs)	List Price
64114	8" Tinline Discharge Transition to 10" Round 0 deg	n/a	\$ 434.00
64115	8" Tinline Discharge Transition to 10" Round 15 deg	n/a	\$ 424.00
64116	8" Tinline Discharge Transition to 10" Round 30 deg	n/a	\$ 428.00
64117	8" Tinline Discharge Transition to 10" Round 45 deg	n/a	\$ 431.00
64118	8" Tinline Discharge Transition to 10" Round 60 deg	n/a	\$ 484.00

Discharge Flange

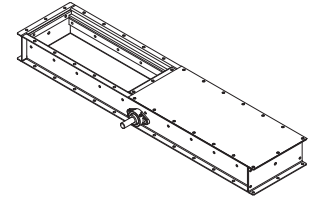
Part #	Description	Weight (lbs)	List Price
64098	8" Discharge Flange	n/a	\$ 104.00

Inlet Grating

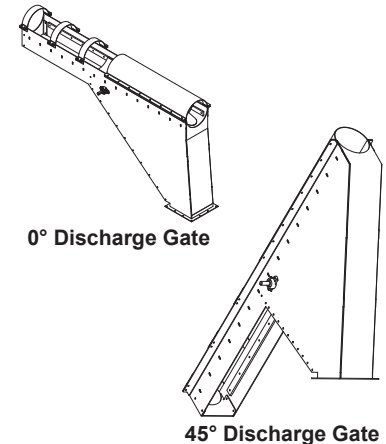
Part #	Description	Weight (lbs)	List Price
64171	Tinline 8in Grating	n/a	\$ 152.00

End Section Slide Gate

Part #	Description	Weight (lbs)	List Price
79927	8" Standard End Plastic Slider Slide Gate	n/a	\$ 2,081.00
79931	8" Self-Cleaning Take-up End Plastic Slider Slide Gate	n/a	\$ 2,497.00

**Discharge Gate**

Part #	Description	Weight (lbs)	List Price
58140	8" 0 Deg Discharge Gate	n/a	\$ 3,390.00
81845	8" 15 Deg Discharge Gate	n/a	\$ 3,264.00
81846	8" 30 Deg Discharge Gate	n/a	\$ 3,224.00
81847	8" 45 Deg Discharge Gate	n/a	\$ 3,224.00
58144	8" 0 Deg Discharge Gate, Liner Ready	n/a	\$ 3,426.00
81857	8" 15 Deg Discharge Gate, Liner Ready	n/a	\$ 3,299.00
81858	8" 30 Deg Discharge Gate, Liner Ready	n/a	\$ 3,258.00
81859	8" 45 Deg Discharge Gate, Liner Ready	n/a	\$ 3,258.00
60371	Discharge Gate Chain Guide Assembly	n/a	\$ 941.00
21983	Chain Wheel Chain*	n/a	\$ 4.00 /ft



*Discounts DO NOT apply to these items

0 Deg Discharge Gate Liners

10ga				3/16"				1/4"			
	Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price
AR200	59446	n/a	\$ 283.00		59447	n/a	\$ 481.00		-	-	-
AR400	59448	n/a	\$ 526.00		59449	n/a	\$ 575.00		-	-	-
UHMW	-	-	-		-	-	-		59445	n/a	\$ 467.00

15 Deg Discharge Gate Liners

10ga				3/16"				1/4"			
	Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price
AR200	82969	n/a	\$ 249.00		82970	n/a	\$ 433.00		-	-	-
AR400	83001	n/a	\$ 474.00		83002	n/a	\$ 518.00		-	-	-
UHMW	-	-	-		-	-	-		82968	n/a	\$ 421.00

30 Deg Discharge Gate Liners

10ga				3/16"				1/4"			
	Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price
AR200	82972	n/a	\$ 252.00		82973	n/a	\$ 437.00		-	-	-
AR400	83003	n/a	\$ 479.00		83004	n/a	\$ 523.00		-	-	-
UHMW	-	-	-		-	-	-		82971	n/a	\$ 425.00

45 Deg Discharge Gate Liners

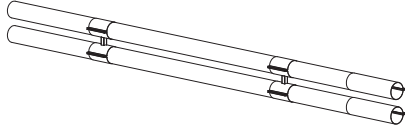
10ga				3/16"				1/4"			
	Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price
AR200	82975	n/a	\$ 257.00		82976	n/a	\$ 446.00		-	-	-
AR400	83005	n/a	\$ 488.00		83006	n/a	\$ 533.00		-	-	-
UHMW	-	-	-		-	-	-		82974	n/a	\$ 433.00

Norstar

Tube Section

Packages include:
*Tube Length *Pipe Splice

INDUSTRIE



Part #	Description	Weight (lbs)	List Price
64806	Tinline Section Assembly 8in 12ga 5ft	n/a	\$ 727.00
64807	Tinline Section Assembly 8in 12ga 10ft	n/a	\$ 1,046.00
64808	Tinline Section Assembly 8in 12ga 20ft	n/a	\$ 1,816.00
64809	Tinline Section Assembly 8in 12ga 30ft	n/a	\$ 2,586.00
64810	Tinline Section Assembly 8in 12ga 40ft	n/a	\$ 3,356.00
64811	Tinline Section Assembly 8in 10ga 5ft	n/a	\$ 791.00
64812	Tinline Section Assembly 8in 10ga 10ft	n/a	\$ 1,174.00
64813	Tinline Section Assembly 8in 10ga 20ft	n/a	\$ 2,071.00
64814	Tinline Section Assembly 8in 10ga 30ft	n/a	\$ 2,969.00
64815	Tinline Section Assembly 8in 10ga 40ft	n/a	\$ 3,866.00

Tube Kit (Tube Not Included)

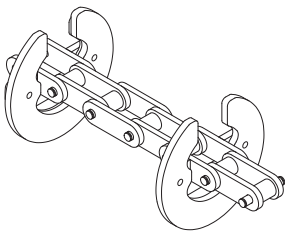
Package includes:
Tube splices and spacer brackets

Part #	Description	Weight (lbs)	List Price
64847	8" Tinline Pipe Splice	n/a	\$ 140.00
67738	8" Tinline Tube Spacer Bracket	n/a	\$ 155.00
08TL05	8" Tinline tube kit less tube 5'-10"	n/a	\$ 590.00
08TL10	8" Tinline tube kit less tube 15'-20"	n/a	\$ 745.00
08TL30	8" Tinline tube kit less tube 30'	n/a	\$ 900.00
08TL40	8" Tinline tube kit less tube 40'	n/a	\$ 1,055.00

Chain and Paddles

Complete Chain includes:

*Chain Weldment *UHMW Paddles *Steel Backing Plates *Paddle Hardware



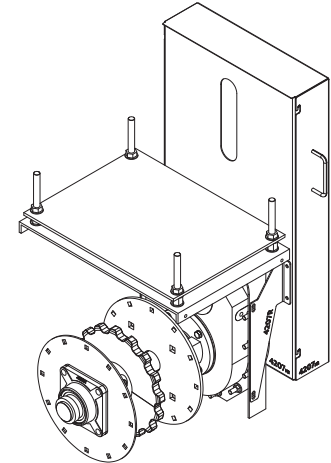
Part #	Description	Weight (lbs)	List Price
58328-10	8" 81XHH Complete Chain Assembly 10' section	n/a	\$ 862.00
58334-10	8" 81XHH Chain Weldment 10' section	n/a	\$ 312.00
58346	8" 81XHH UHMW Paddle	n/a	\$ 21.00
58352	8" 81XHH Paddle Backing Plate	n/a	\$ 2.00

Chain is sold in 10' rolls complete.

To arrive at the amount of chain needed, take the tube length plus 10' and round up to the next multiple of 10 to determine rolls of chain.

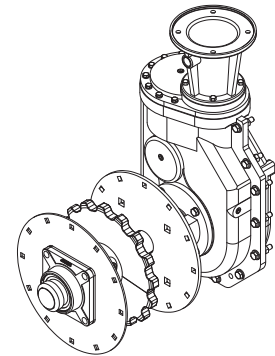
Belt Drive Section

Part #	Description	Weight (lbs)	List Price
73079	TL Drive 10" 81X TA0107L15 2.4375" 3HP	n/a	\$ 4,308.00
73080	TL Drive 10" 81X TA0107L15 2.4375" 5HP	n/a	\$ 4,308.00
73081	TL Drive 10" 81X TA1107H15 2.4375" 5HP	n/a	\$ 4,924.00
73082	TL Drive 10" 81X TA1107H15 2.4375" 7.5HP	n/a	\$ 4,924.00
73083	TL Drive 10" 81X TA2115H15 2.4375" 7.5/10HP	n/a	\$ 6,154.00
70398	TL Drive 10" 81X TA2115H15 2.4375" 15HP	n/a	\$ 6,154.00
70399	TL Drive 10" 81X TA3203H15 2.4375" 15HP	n/a	\$ 6,870.00
70400	TL Drive 10" 81X TA3203H15 2.4375" 20HP	n/a	\$ 6,870.00
70401	TL Drive 10" 81X TA4207H15 2.4375" 20HP	n/a	\$ 8,603.00
70402	TL Drive 10" 81X TA4207H15 3" 25HP	n/a	\$ 8,603.00
70403	TL Drive 10" 81X TA4207H15 3" 30HP	n/a	\$ 8,603.00
70404	TL Drive 10" 81X TA5215H15 3" 30HP	n/a	\$ 11,360.00



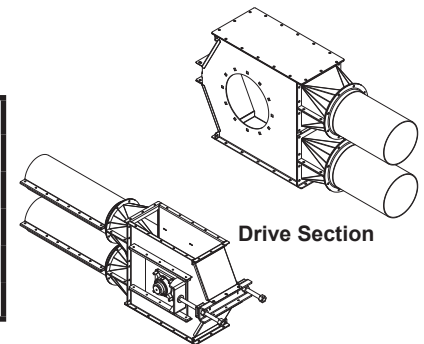
Direct Drive Section

Part #	Description	Weight (lbs)	List Price
73084	TL Drive 10" 81X M2H36T18C 2.4375" 3/5HP	n/a	\$ 8,839.00
73085	TL Drive 10" 81X M2H36T21C 2.4375" 7.5/10HP	n/a	\$ 8,839.00
70405	TL Drive 10" 81X M2H36T25C 2.4375" 15HP	n/a	\$ 8,839.00
70406	TL Drive 10" 81X M3H35T25C 2.4375" 15/20HP	n/a	\$ 9,617.00
70407	TL Drive 10" 81X M4H18T25C 2.4375" 20HP	n/a	\$ 11,954.00
70408	TL Drive 10" 81X M4H18T28C 3" 25/30HP	n/a	\$ 12,031.00
70409	TL Drive 10" 81X M5H18T28C 3" 30HP	n/a	\$ 15,531.00



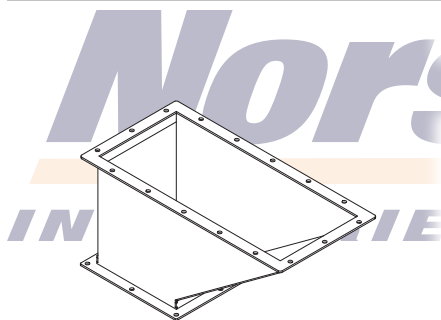
End Section

Part #	Description	Weight (lbs)	List Price
63851	Tinline 10in 10ga Drive End Section	n/a	\$ 2,121.00
63852	Tinline 10in 3/16 Drive End Section	n/a	\$ 2,339.00
63858	Tinline 10in 10ga Take-up End Section	n/a	\$ 5,654.00
63859	Tinline 10in 3/16 Take-up End Section	n/a	\$ 7,164.00
63865	Tinline 10in 10ga Self-Cleaning Take-up End Section	n/a	\$ 5,654.00
63866	Tinline 10in 3/16 Self-Cleaning Take-up End Section	n/a	\$ 7,164.00

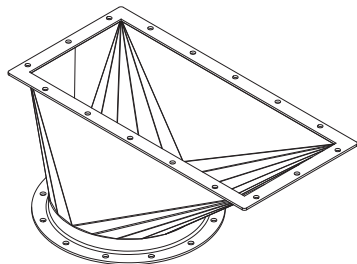


Drive Section

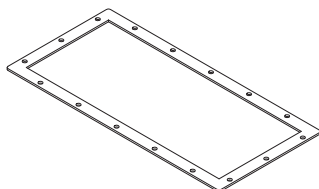
Takeup Section

Discharge to Square Transitions

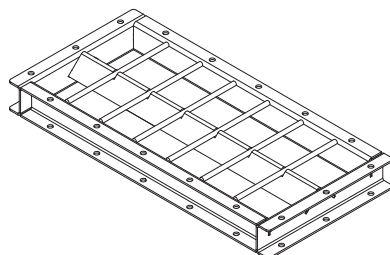
Part #	Description	Weight (lbs)	List Price
64021	10" Twinline Discharge Transition to 10" Square 0 deg	n/a	\$ 535.00
64022	10" Twinline Discharge Transition to 10" Square 15 deg	n/a	\$ 521.00
64023	10" Twinline Discharge Transition to 10" Square 30 deg	n/a	\$ 520.00
64024	10" Twinline Discharge Transition to 10" Square 45 deg	n/a	\$ 523.00
64025	10" Twinline Discharge Transition to 10" Square 60 deg	n/a	\$ 544.00

Discharge to Round Transitions

Part #	Description	Weight (lbs)	List Price
64119	10" Twinline Discharge Transition to 12" Round 0 deg	n/a	\$ 555.00
64120	10" Twinline Discharge Transition to 12" Round 15 deg	n/a	\$ 540.00
64121	10" Twinline Discharge Transition to 12" Round 30 deg	n/a	\$ 546.00
64122	10" Twinline Discharge Transition to 12" Round 45 deg	n/a	\$ 569.00
64123	10" Twinline Discharge Transition to 12" Round 60 deg	n/a	\$ 635.00

Discharge Flange

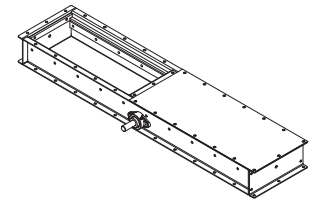
Part #	Description	Weight (lbs)	List Price
64103	10" Discharge Flange	n/a	\$ 117.00

Inlet Grating

Part #	Description	Weight (lbs)	List Price
64173	Twinline 10in Grating	n/a	\$ 171.00

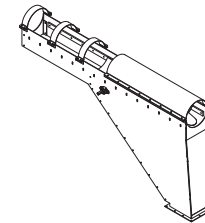
End Section Slide Gate

Part #	Description	Weight (lbs)	List Price
79928	10" Standard End Plastic Slider Slide Gate	n/a	\$ 2,255.00
79932	10" Self-Cleaning Take-up End Plastic Slider Slide Gate	n/a	\$ 2,706.00

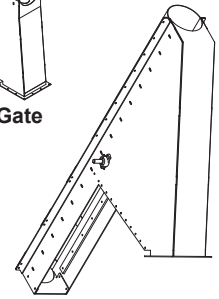


Discharge Gate

Part #	Description	Weight (lbs)	List Price
58141	10" 0 Deg Discharge Gate	n/a	\$ 3,565.00
81848	10" 15 Deg Discharge Gate	n/a	\$ 3,411.00
81849	10" 30 Deg Discharge Gate	n/a	\$ 3,369.00
81850	10" 45 Deg Discharge Gate	n/a	\$ 3,369.00
58145	10" 0 Deg Discharge Gate, Liner Ready	n/a	\$ 3,601.00
81860	10" 15 Deg Discharge Gate, Liner Ready	n/a	\$ 3,446.00
81861	10" 30 Deg Discharge Gate, Liner Ready	n/a	\$ 3,403.00
81862	10" 45 Deg Discharge Gate, Liner Ready	n/a	\$ 3,403.00
60371	Discharge Gate Chain Guide Assembly	n/a	\$ 941.00
21983	Chain Wheel Chain*	n/a	\$ 4.00/ft



0° Discharge Gate



45° Discharge Gate

*Discounts DO NOT apply to these items

0 Deg Discharge Gate Liners

10ga				3/16"				1/4"			
	Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price
AR200	59451	n/a	\$ 352.00		59452	n/a	\$ 610.00		-	-	-
AR400	59453	n/a	\$ 668.00		59454	n/a	\$ 730.00		-	-	-
UHMW	-	-	-		-	-	-		59450	n/a	\$ 589.00

15 Deg Discharge Gate Liners

10ga				3/16"				1/4"			
	Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price
AR200	82978	n/a	\$ 317.00		82979	n/a	\$ 549.00		-	-	-
AR400	83007	n/a	\$ 601.00		83008	n/a	\$ 657.00		-	-	-
UHMW	-	-	-		-	-	-		82977	n/a	\$ 531.00

30 Deg Discharge Gate Liners

10ga				3/16"				1/4"			
	Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price
AR200	82981	n/a	\$ 320.00		82982	n/a	\$ 555.00		-	-	-
AR400	83009	n/a	\$ 607.00		83010	n/a	\$ 663.00		-	-	-
UHMW	-	-	-		-	-	-		82980	n/a	\$ 536.00

45 Deg Discharge Gate Liners

10ga				3/16"				1/4"			
	Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price
AR200	82984	n/a	\$ 326.00		82985	n/a	\$ 566.00		-	-	-
AR400	83011	n/a	\$ 619.00		83012	n/a	\$ 676.00		-	-	-
UHMW	-	-	-		-	-	-		82983	n/a	\$ 547.00

Norstar

Tube Section

Packages include:
*Tube Length *Pipe Splice



Part #	Description	Weight (lbs)	List Price
64816	Tinline Section Assembly 10in 10ga 5ft	n/a	\$ 1,096.00
64817	Tinline Section Assembly 10in 10ga 10ft	n/a	\$ 1,584.00
64818	Tinline Section Assembly 10in 10ga 20ft	n/a	\$ 2,725.00
64819	Tinline Section Assembly 10in 10ga 30ft	n/a	\$ 3,866.00
64820	Tinline Section Assembly 10in 10ga 40ft	n/a	\$ 5,007.00

Tube Kit (Tube Not Included)

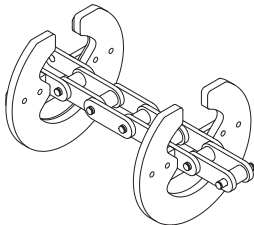
Package includes:
Tube Splices and Spacer Brackets

Part #	Description	Weight (lbs)	List Price
64848	10" Tinline Pipe Splice	n/a	\$ 153.00
67739	10" Tinline Tube Spacer Bracket	n/a	\$ 249.00
10TL10	10" Tinline tube kit less tube 5'-10"	n/a	\$ 804.00
10TL20	10" Tinline tube kit less tube 15'-20"	n/a	\$ 1,053.00
10TL30	10" Tinline tube kit less tube 30'	n/a	\$ 1,302.00
10TL40	10" Tinline tube kit less tube 40'	n/a	\$ 1,551.00

Chain and Paddles

Complete Chain includes:

*Chain Weldment *UHMW Paddles *Steel Backing Plates *Paddle Hardware



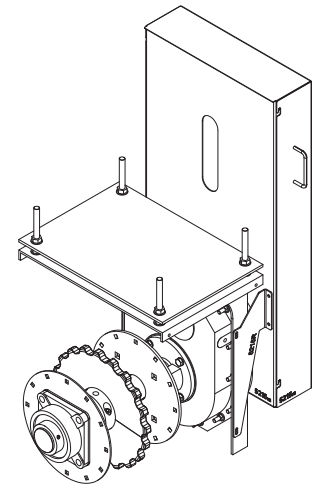
Part #	Description	Weight (lbs)	List Price
58329-10	10" 81XHH Complete Chain Assembly 10' section	n/a	\$ 1,142.00
58335-10	10" 81XHH Chain Weldment 10' section	n/a	\$ 324.00
58347	10" 81XHH UHMW Paddle	n/a	\$ 45.00
58353	10" 81XHH Paddle Backing Plate	n/a	\$ 3.00

Chain is sold in 10' rolls complete.

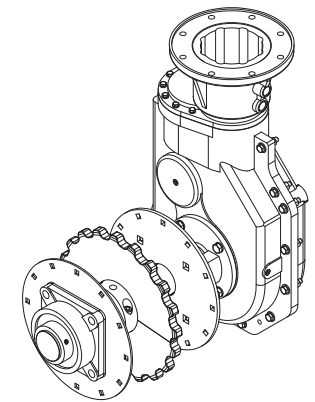
To arrive at the amount of chain needed, take the tube length plus 10' and round up to the next multiple of 10 to determine rolls of chain.

Belt Drive Section

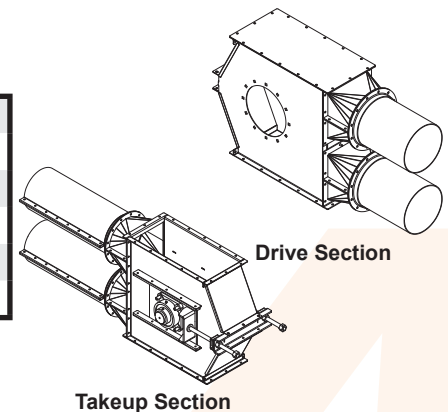
Part #	Description	Weight (lbs)	List Price
73086	TL Drive 12" 81X TA0107L15 3.4375" 5HP	n/a	\$ 7,899.00
73087	TL Drive 12" 81X TA1107H15 3.4375" 5HP	n/a	\$ 8,343.00
73088	TL Drive 12" 81X TA1107H15 3.4375" 7.5HP	n/a	\$ 8,343.00
73089	TL Drive 12" 81X TA2115H15 3.4375" 7.5/10HP	n/a	\$ 8,818.00
70410	TL Drive 12" 81X TA3203H15 3.4375" 15/20HP	n/a	\$ 9,246.00
70411	TL Drive 12" 81X TA4207H15 3.4375" 20HP	n/a	\$ 11,042.00
70412	TL Drive 12" 81X TA4207H15 3.4375" 25/30HP	n/a	\$ 12,416.00
70413	TL Drive 12" 81X TA5215H15 3.4375" 30HP	n/a	\$ 14,682.00
70414	TL Drive 12" 81X TA5215H15 3.4375" 40/50HP	n/a	\$ 14,806.00
70415	TL Drive 12" 81X TA6307H15 3.4375" 50HP	n/a	\$ 16,622.00
70416	TL Drive 12" 81X TA5215H15 3.4375" 60HP	n/a	\$ 14,806.00
70827	TL Drive 12" 81X TA6307H15 3.4375" 60HP	n/a	\$ 16,952.00

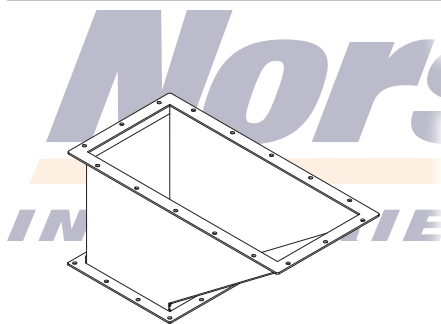
**Direct Drive Section**

Part #	Description	Weight (lbs)	List Price
73090	TL Drive 12" 81X M2H36T18C 3.4375" 3/5HP	n/a	\$ 10,543.00
73091	TL Drive 12" 81X M2H36T21C 3.4375" 7.5/10HP	n/a	\$ 10,543.00
73092	TL Drive 12" 81X M2H36T25C 3.4375" 15HP	n/a	\$ 10,543.00
70828	TL Drive 12" 81X M3H35T25C 3.4375" 15/20HP	n/a	\$ 11,471.00
70829	TL Drive 12" 81X M4H18T25C 3.4375" 20HP	n/a	\$ 13,847.00
70830	TL Drive 12" 81X M4H18T28TSC 3.4375" 25/30HP	n/a	\$ 13,925.00
70831	TL Drive 12" 81X M4H18T28C 3.4375" 25HP	n/a	\$ 13,925.00
70832	TL Drive 12" 81X M5H40T28TSC 3.4375" 30HP	n/a	\$ 16,814.00
70833	TL Drive 12" 81X M5H40T32TSC 3.4375" 40/50HP	n/a	\$ 16,892.00
70834	TL Drive 12" 81X M6H19T32C 3.4375" 50HP	n/a	\$ 21,786.00
70835	TL Drive 12" 81X M6H19T36C 3.4375" 60HP	n/a	\$ 21,864.00

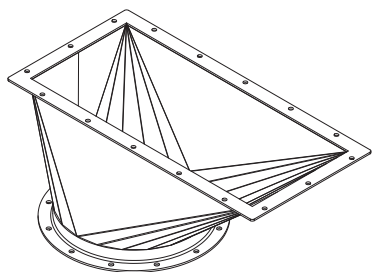
**End Section**

Part #	Description	Weight (lbs)	List Price
63853	Tinline 12in 10ga Drive End Section	n/a	\$ 2,794.00
63854	Tinline 12in 3/16 Drive End Section	n/a	\$ 3,083.00
63860	Tinline 12in 10ga Take-up End Section	n/a	\$ 8,868.00
63861	Tinline 12in 3/16 Take-up End Section	n/a	\$ 11,391.00
63867	Tinline 12in 10ga Self-Cleaning Take-up End Section	n/a	\$ 8,868.00
63868	Tinline 12in 3/16 Self-Cleaning Take-up End Section	n/a	\$ 11,391.00

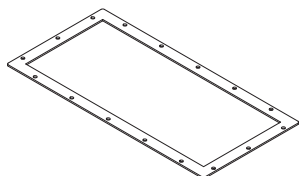


Discharge to Square Transitions

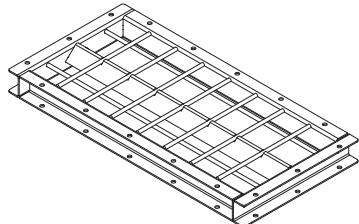
Part #	Description	Weight (lbs)	List Price
64026	12" Tinline Discharge Transition to 12" Square 0 deg	n/a	\$ 826.00
64027	12" Tinline Discharge Transition to 12" Square 15 deg	n/a	\$ 807.00
64028	12" Tinline Discharge Transition to 12" Square 30 deg	n/a	\$ 804.00
64029	12" Tinline Discharge Transition to 12" Square 45 deg	n/a	\$ 811.00
64030	12" Tinline Discharge Transition to 12" Square 60 deg	n/a	\$ 847.00

Discharge to Round Transitions

Part #	Description	Weight (lbs)	List Price
64124	12" Tinline Discharge Transition to 14" Round 0 deg	n/a	\$ 841.00
64125	12" Tinline Discharge Transition to 14" Round 15 deg	n/a	\$ 808.00
64126	12" Tinline Discharge Transition to 14" Round 30 deg	n/a	\$ 830.00
64127	12" Tinline Discharge Transition to 14" Round 45 deg	n/a	\$ 831.00
64128	12" Tinline Discharge Transition to 14" Round 60 deg	n/a	\$ 930.00

Discharge Flange

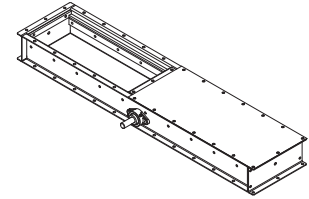
Part #	Description	Weight (lbs)	List Price
64108	12" Discharge Flange	n/a	\$ 182.00

Inlet Grating

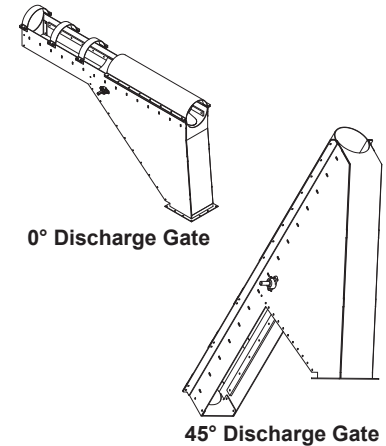
Part #	Description	Weight (lbs)	List Price
64175	Tinline 12in Grating	n/a	\$ 238.00

End Section Slide Gate

Part #	Description	Weight (lbs)	List Price
79929	12" Standard End Plastic Slider Slide Gate	n/a	\$ 2,537.00
79933	12" Self-Cleaning Take-up End Plastic Slider Slide Gate	n/a	\$ 3,045.00

**Discharge Gate**

Part #	Description	Weight (lbs)	List Price
58142	12" 0 Deg Discharge Gate	n/a	\$ 6,391.00
81851	12" 15 Deg Discharge Gate	n/a	\$ 6,097.00
81852	12" 30 Deg Discharge Gate	n/a	\$ 6,014.00
81853	12" 45 Deg Discharge Gate	n/a	\$ 6,014.00
58146	12" 0 Deg Discharge Gate, Liner Ready	n/a	\$ 6,454.00
81863	12" 15 Deg Discharge Gate, Liner Ready	n/a	\$ 6,157.00
81864	12" 30 Deg Discharge Gate, Liner Ready	n/a	\$ 6,073.00
81865	12" 45 Deg Discharge Gate, Liner Ready	n/a	\$ 6,073.00
60371	Discharge Gate Chain Guide Assembly	n/a	\$ 941.00
21983	Chain Wheel Chain*	n/a	\$4.00 /ft



*Discounts DO NOT apply to these items

0 Deg Discharge Gate Liners

10ga				3/16"				1/4"			
	Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price
AR200	59456	n/a	\$ 425.00		59457	n/a	\$ 739.00		-	-	-
AR400	59458	n/a	\$ 808.00		59459	n/a	\$ 883.00		-	-	-
UHMW	-	-	-		-	-	-		59455	n/a	\$ 710.00

15 Deg Discharge Gate Liners

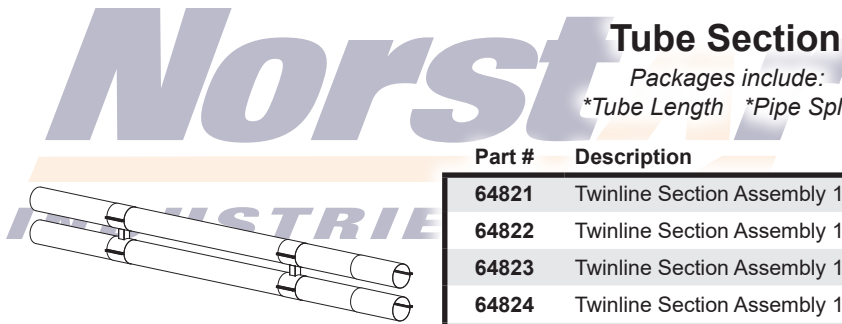
10ga				3/16"				1/4"			
	Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price
AR200	82987	n/a	\$ 383.00		82988	n/a	\$ 665.00		-	-	-
AR400	83013	n/a	\$ 727.00		83014	n/a	\$ 795.00		-	-	-
UHMW	-	-	-		-	-	-		82986	n/a	\$ 639.00

30 Deg Discharge Gate Liners

10ga				3/16"				1/4"			
	Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price
AR200	82990	n/a	\$ 387.00		82991	n/a	\$ 671.00		-	-	-
AR400	83015	n/a	\$ 735.00		83016	n/a	\$ 803.00		-	-	-
UHMW	-	-	-		-	-	-		82989	n/a	\$ 645.00

45 Deg Discharge Gate Liners

10ga				3/16"				1/4"			
	Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price		Part #	Weight (lbs)	List Price
AR200	82993	n/a	\$ 394.00		82994	n/a	\$ 685.00		-	-	-
AR400	83017	n/a	\$ 749.00		83018	n/a	\$ 819.00		-	-	-
UHMW	-	-	-		-	-	-		82992	n/a	\$ 658.00



Part #	Description	Weight (lbs)	List Price
64821	Tinline Section Assembly 12in 10ga 5ft	n/a	\$ 1,350.00
64822	Tinline Section Assembly 12in 10ga 10ft	n/a	\$1,935.00
64823	Tinline Section Assembly 12in 10ga 20ft	n/a	\$ 3,300.00
64824	Tinline Section Assembly 12in 10ga 30ft	n/a	\$ 4,666.00
64825	Tinline Section Assembly 12in 10ga 40ft	n/a	\$ 6,031.00

Tube Kit (Tube Not Included)

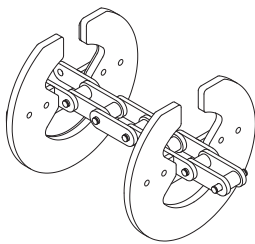
Package includes:
Tube splices and spacer brackets

Part #	Description	Weight (lbs)	List Price
67740	12" Tinline Pipe Splice	n/a	\$ 320.00
64849	12" Tinline Tube Spacer Bracket	n/a	\$ 166.00
12TL10	12" Tinline tube kit less tube 5'-10"	n/a	\$ 972.00
12TL20	12" Tinline tube kit less tube 15'-20"	n/a	\$ 1,138.00
12TL30	12" Tinline tube kit less tube 30'	n/a	\$ 1,305.00
12TL40	12" Tinline tube kit less tube 40'	n/a	\$1,470.00

Chain and Paddles

Complete Chain includes:

*Chain Weldment *UHMW Paddles *Steel Backing Plates *Paddle Hardware



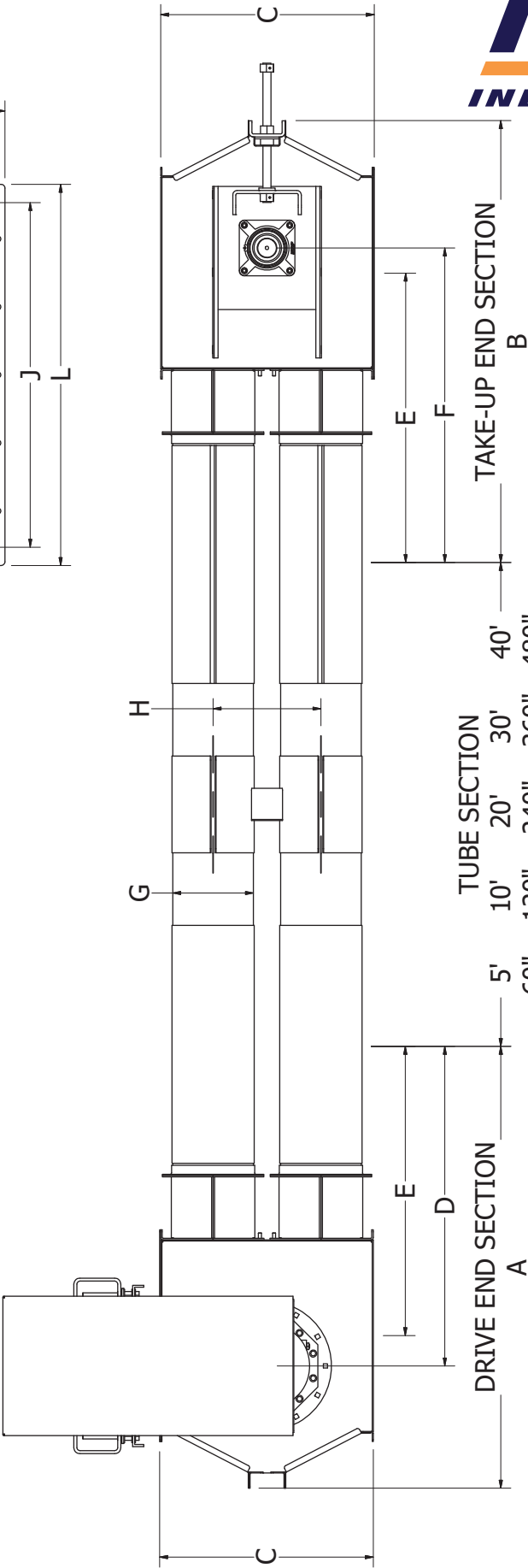
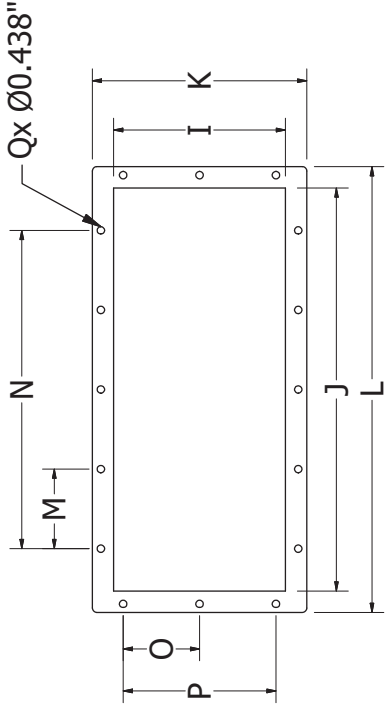
Part #	Description	Weight (lbs)	List Price
58331-10	12" 81XHH Complete Chain Assembly 10' section	n/a	\$ 1,362.00
58337-10	12" 81XHH Chain Weldment 10' section	n/a	\$ 336.00
58349	12" 81XHH UHMW Paddle	n/a	\$ 64.00
58355	12" 81XHH Paddle Backing Plate	n/a	\$ 4.00

Chain is sold in 10' rolls complete.

To arrive at the amount of chain needed, take the tube length plus 10' and round up to the next multiple of 10 to determine rolls of chain.



INLET / DISCHARGE FLANGE



MODEL	A	STD TAKE-UP	SC TAKE-UP	C	D	E	MIN	MAX	G	H
6"	47"	47"	55.5"	18.5"	34.125"	32"	30.5"	35"	6"	10"
8"	52.75"	52.75"	64.75"	22.75"	39.5"	34.875"	33"	39"	8"	11.75"
10"	54.875"	54.875"	67.375"	26.375"	39.625"	35.875"	33"	39"	10"	13.375"
12"	60.188"	60.188"	73.688"	31.688"	43.25"	38"	35"	41"	12"	16.688"

MODEL	I	J	K	L	M	N	O	P	Q
6"	6.125"	16"	8.625"	18.5"	5.5"	11"	3"	6"	12
8"	8.125"	21.75"	10.625"	24.25"	5.583"	16.75"	3.5"	7"	14
10"	10.125"	23.75"	12.625"	26.25"	4.688"	18.75"	4.5"	9"	16
12"	12.125"	28"	15.125"	31"	5.75"	23"	5.5"	11"	16