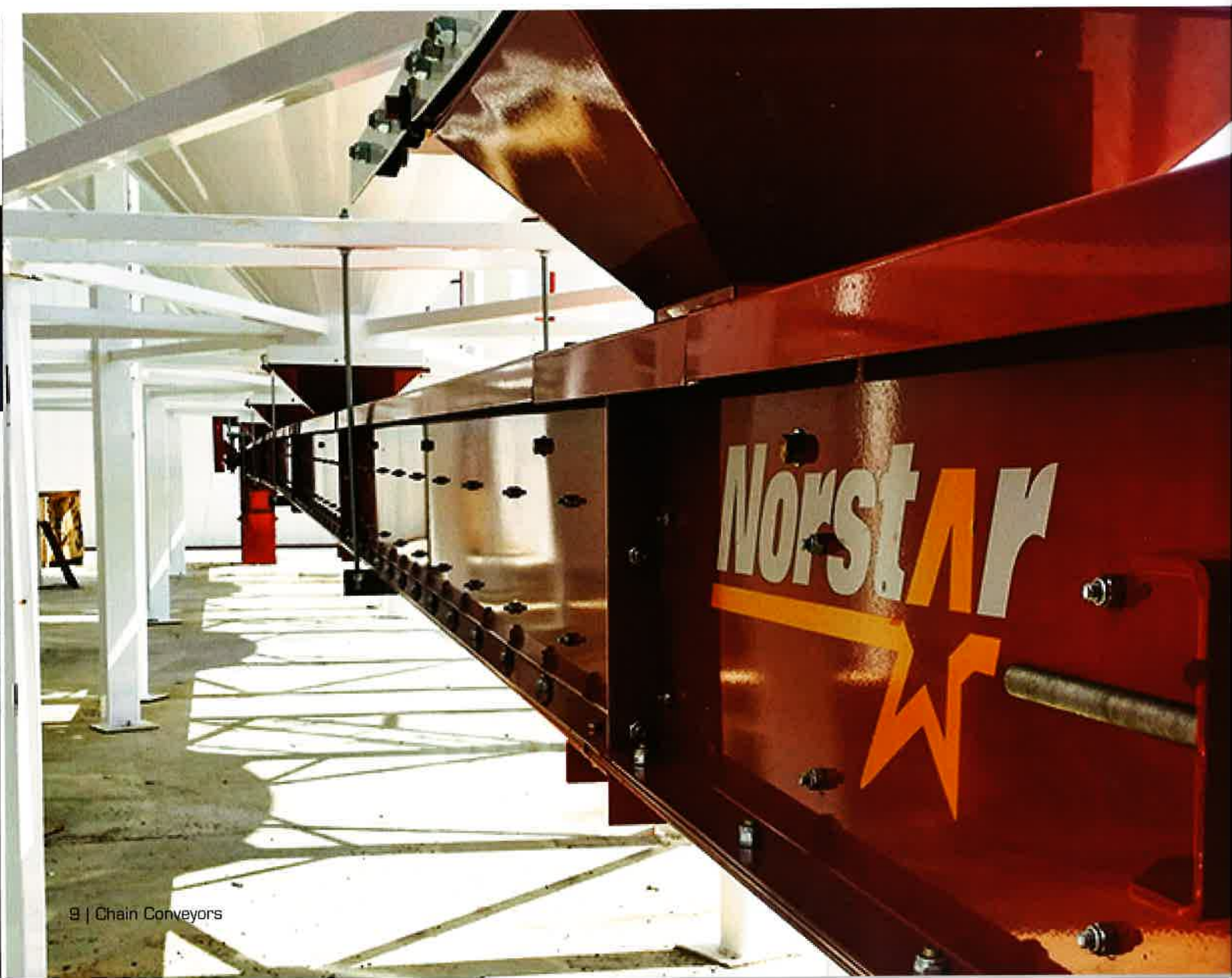


CHAIN CONVEYORS

When moving your product to and from its destination, you need equipment that gets it there both quickly and safely. Norstar Chain Conveyors provide unmatched efficiency and gentle handling for a wide range of free-flowing material. Norstar offers two models of chain conveyor: The En-Masse (Horizontal) Conveyor and the Incline Conveyor. Our Chain Conveyors can be used in a variety of applications including on-grade, overhead and underground conveyance for grain, seed and other free-flowing product. For moving highly corrosive material, Norstar offers stainless steel models for unmatched protection.

SCAN HERE TO FIND OUT MORE ABOUT OUR CHAIN CONVEYORS



EFFICIENT HANDLING

When compared to other forms of conveyance, Chain Conveyors make the most efficient use of space. Their skeletal chain and paddle assembly requires less housing space than an auger or belt system, effectively reducing the conveyor's footprint and the horse power required to run the unit. The housing of the conveyor is fully enclosed with an open interior, allowing for a higher fill-rate, especially on En-Masse models (due to smaller paddle size). This translates to a higher volume of material moved.

PROTECTING YOUR PRODUCT

With chain conveyance, the chain and paddles essentially move with the product, promoting gentle handling and minimizing product damage. Norstar Chain Conveyors prevent product contamination with a completely enclosed and weathertight UHMW sealed housing. Norstar's Self-Cleaning Tail Section and optional cleaning paddles help prevent product buildup within the conveyor with bolt-on conveyor covers offering easy-access for efficient clean-out and maintenance.

REDUCED MAINTENANCE

Chain Conveyors require minimal maintenance compared to other forms of conveyance. No time-consuming splicing of loose or damaged belts. Chains can be shortened and repaired much quicker than augers or belting. The smaller housing and enclosed UHMW sealed conveyance area reduces wear points and does not require external dust control.



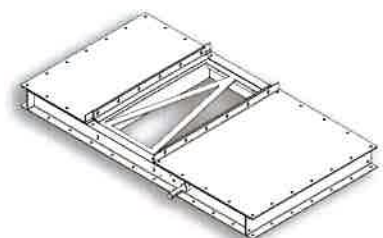
SELF-CLEANING TAIL SECTION

Norstar Drag Chain Conveyors feature a standard self-cleaning tail section. This tail section has a curved back wall that prevents material from building up in the back corner of the tail. This wall is attached to the unit's tensioning system and not to the conveyor housing itself. Whenever the conveyor's shaft is moved to tension the chain, the curved back wall moves as well to ensure appropriate proximity to the paddles.



FLUSH MOUNTED CROSS SLIDE GATE

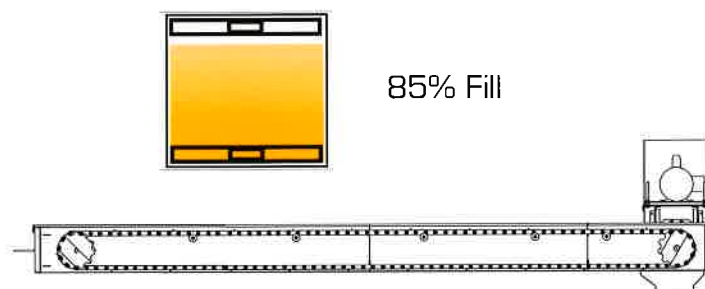
Norstar's Cross Slide Gate is designed to preserve the integrity of your product. The gate is built so that the slide plate sits flush with the conveyor floor when closed. This prevents product damage and cross-contamination as material moves over the closed gate. Norstar utilizes chain carry-over bars that span the gate void in a v-shape to ensure even distribution of paddle wear.



EN-MASSE (HORIZONTAL) CONVEYOR

FEATURES

- Can be utilized for on-grade, overhead and underground conveyance
- Sizes: 9", 12", 15" and 18" Tall
- Capacities from 0 - 14,000 BPH (350 MT)
- Single runs up to 150'
- Shallow UHMW paddles, coupled with a single chamber design, allow high volumes of product movement.
- Easily removed conveyor covers for clean-out.
- Self-Cleaning Tail Section
- 5° - 15° Elbows
- Cross Slide Gate w/ "zero lip/zero crush"
- Premium Powder Coat Finish



OPTIONS

- Stainless Steel models available
- Drive-Over Pit Hoppers (16" - 58 5/8" W)
- Liner Options (UHMW, AR 200 & 400 steel)
- Chain Options (81X, 81XH and 81XHH)
- Slide Gates and Inlet Hoppers
- Cleaning Paddles



En-Masse Conveyor Specifications

Conveyor Size	9" x 9"	9" x 12"	12" x 12"	12" x 15"	15" x 15"	15" x 18"	18" x 18"
Chain Speeds	0 - 175 FPM	0 - 175 FPM	0 - 175 FPM	0 - 175 FPM	0 - 175 FPM	0 - 175 FPM	0 - 175 FPM
Capacity (BPH)	Up to 2,500	Up to 3,900	Up to 5,200	Up to 7,375	Up to 9,225	Up to 11,700	Up to 14,000
Head Shaft RPM	27 - 97	20 - 72	20 - 72	15 - 53	15 - 53	12 - 42	12 - 42
Paddle Thickness	1/4"	1/4"	1/4"	1/4"	1/2"	1/2"	1/2"
Discharge Size	8" x 8"	8" x 8"	10" x 10"	10" x 10"	14" x 14"	14" x 14"	16" x 16"
Max. Length	150'	150'	150'	150'	150'	150'	150'

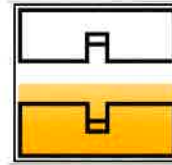
En-Masse Conveyor Capacity Chart

	175 FPM	125 FPM	110 FPM	100 FPM	75 FPM	50 FPM	RPM (50 FPM)
9" x 9"	2,500 BPH	1,800 BPH	1,575 BPH	1,425 BPH	1,075 BPH	700 BPH	27
9" x 12"	3,900 BPH	2,800 BPH	2,475 BPH	2,250 BPH	1,675 BPH	1,100 BPH	20
12" x 12"	5,200 BPH	3,750 BPH	3,275 BPH	3,000 BPH	2,250 BPH	1,450 BPH	20
12" x 15"	7,375 BPH	5,275 BPH	4,650 BPH	4,225 BPH	3,175 BPH	2,050 BPH	15
15" x 15"	9,225 BPH	6,575 BPH	5,775 BPH	5,250 BPH	3,975 BPH	2,600 BPH	15
15" x 18"	11,700 BPH	8,350 BPH	7,350 BPH	6,700 BPH	5,000 BPH	3,325 BPH	12
18" x 18"	14,000 BPH	10,000 BPH	8,800 BPH	8,000 BPH	6,000 BPH	4,000 BPH	12

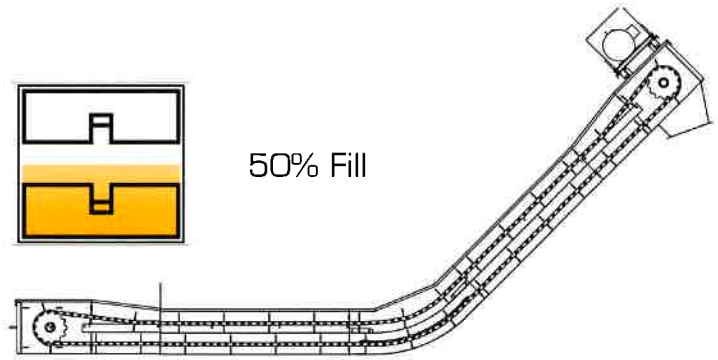
INCLINE CONVEYOR

FEATURES

- Can be utilized horizontally or with elbows with various degrees of incline for discharge (15° - 45°)
- Commonly used for reclaim or receiving.
- Sizes: 9", 12", 15", 18", 21", and 24" Tall
- Capacities from 0 - 16,750 BPH (405 MT)
- Single runs up to 150'
- Taller UHMW paddles allow product to be conveyed efficiently at an incline, preventing back flow.
- Lower chamber allows grain to slide through with no pinch points to damage material.
- Cross Slide Gate w/ "zero lip/zero crush"
- Self-Cleaning Tail Section
- Premium Powder Coat Finish



50% Fill



OPTIONS

- Stainless Steel models available
- Drive-Over Pit Hoppers (22" - 58 5/8" W)
- Liner Options (UHMW, AR 200 & 400 steel)
- Chain Options (81X, 81XH and 81XHH)
- Slide Gates and Inlet Hoppers
- Cleaning Paddles



Incline Conveyor Specifications

Conveyor Size	10" x 9"	16" x 9"	16" x 12"	18" x 15"	20" x 18"	21" x 21"	24" x 24"
Chain Speeds	0 - 175 FPM	0 - 175 FPM	0 - 175 FPM	0 - 175 FPM	0 - 175 FPM	0 - 175 FPM	0 - 175 FPM
Capacity (BPH)	Up to 2,525	Up to 4,025	Up to 5,375	Up to 7,575	Up to 10,100	Up to 12,375	Up to 16,175
Head Shaft RPM	25 - 87	25 - 87	21 - 72	17 - 61	15 - 53	13 - 47	13 - 44
Paddle Thickness	1/4"	1/4"	1/2"	1/2"	1/2"	1/2"	1/2"
Discharge Size	10" x 10"	14" x 14"	14" x 14"	16" x 16"	18" x 18"	20" x 20"	22" x 22"
Max. Length	150'	150'	150'	150'	150'	150'	150'

Incline Conveyor Capacity Chart

	175 FPM	125 FPM	110 FPM	100 FPM	75 FPM	50 FPM	RPM (50 FPM)
10" x 9"	2,525 BPH	1,810 BPH	1,590 BPH	1,585 BPH	1,080 BPH	725 BPH	25
16" x 9"	4,025 BPH	2,900 BPH	2,535 BPH	2,310 BPH	1,725 BPH	1,150 BPH	25
16" x 12"	5,375 BPH	3,870 BPH	3,400 BPH	3,100 BPH	2,300 BPH	1,550 BPH	21
18" x 15"	7,575 BPH	5,425 BPH	4,775 BPH	4,350 BPH	3,250 BPH	2,150 BPH	17
20" x 18"	10,100 BPH	7,250 BPH	6,350 BPH	5,800 BPH	4,350 BPH	2,900 BPH	15
21" x 21"	12,375 BPH	8,850 BPH	7,800 BPH	7,100 BPH	5,300 BPH	3,550 BPH	13
24" x 24"	16,175 BPH	11,600 BPH	10,200 BPH	9,250 BPH	6,900 BPH	4,650 BPH	13