

CUSTOM BUILT CONVEYORS



Your Complete Source for Dewatering Equipment



Brought to you by

**CharterMachine
Company**



SCREW CONVEYORS



BELT CONVEYORS



FEATURES

- ✓ Horizontal, inclined or vertical orientation
- ✓ Pushing or pulling drives
- ✓ Optional Slide Gate
- ✓ Enclosed trough or tube

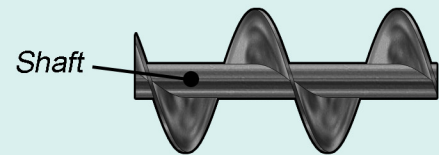
BENEFITS

- Design flexibility
- Easily control discharge flow at one or multiple points
- Reduces dust and/or spillage.

SHAFTED

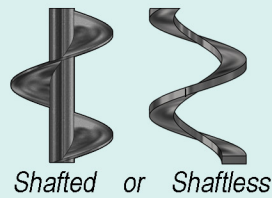
- Center pipe/shaft - faster RPM & supports screw
- Stepped diameter, stepped pitch, and opposite hand flights can be assembled to better regulate material flow.
- Suitable for longer distances
- Ideal for high-capacity applications

Dia.	30% Sludge Trough Loading					
	CFH* Full Pitch	Lbs/Hr	Dry Cake Quality (**Lbs/ds/hr)			Max RPM
			15%	20%	30%	
6	106	6360	744	1006	1552	60
9	324	19440	2276	3076	4742	55
10	446	26760	3134	4234	6526	55
12	700	42000	4918	6646	10244	50
14	1112	66720	7812	10556	16272	50
16	1492	89520	10482	14164	21834	45



VERTICAL

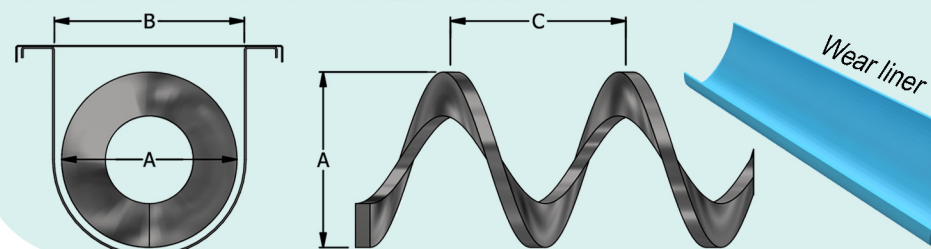
- Space efficient, Low-profile footprint
- Handling of large objects, up to trough diameter
- Fully enclosed - tight odor and mess containment
- Available in shafted or shaftless



SHAFTLESS

- No center pipe/shaft - Eliminate buildup on pipe, increases screw capacity, lower maintenance/operation costs.
- Perfect solution for moving stringy, spongy, sticky, lumpy, and wet materials. Suitable for conveying a wide range of dry and semi-solids.
- Higher trough loading (45%) and low RPM's, maximizing the amount of material it can convey.
- Continuous flight eliminates hangers - reduces maintenance cost
- Wear liners - reduces maintenance cost and easy to replace

A Dia.	B Inside	C Pitch	45% SludgeTrough Loading					
			CFH* Full Pitch	Lbs/Hr	Dry Cake Quality (**Lbs/ds/hr)			Max RPM
					15%	20%	30%	
6	7	6	65	3,975	465	629	969	25
9	10	9	224	13,418	1571	2123	3273	25
10	11	10	307	18,406	2155	2912	4489	25
12	13	12	530	31,806	3724	5032	7758	25
14	15	14	842	50,507	5914	7992	12318	25
16	17	16	1,244	75,393	8828	11929	18388	25



*CFH = Cubic feet per hour. ** ALL DIMENSIONS SHOWN IN INCHES. ***Lbs/ds/hr = Pounds of Dry Cake per hour. Data tables calculated for horizontal screw conveyor orientation.

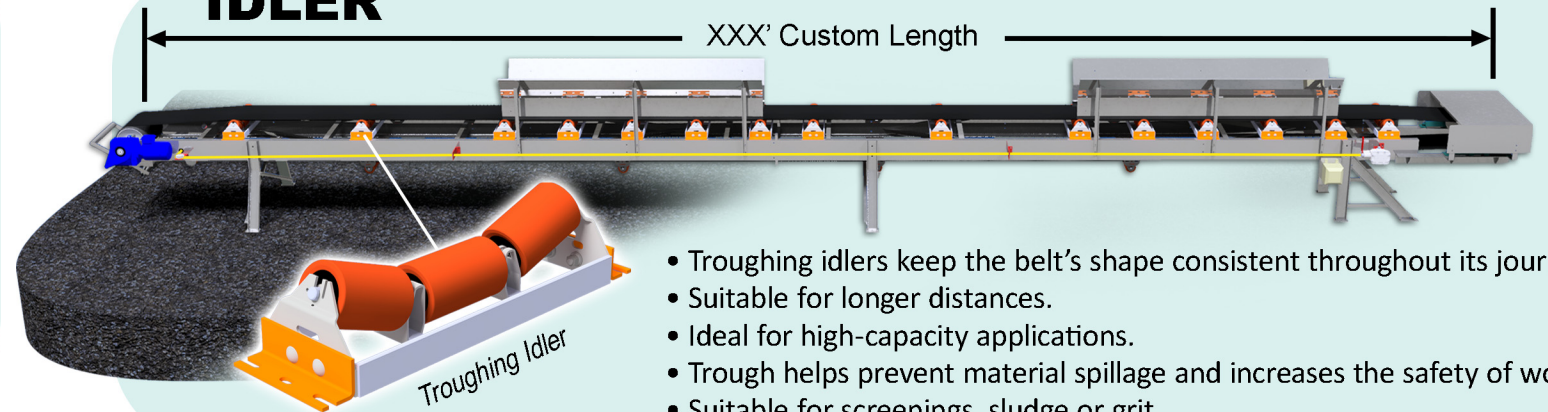
FEATURES

- ✓ Flat, troughed, cleated or sidewall belt styles
- ✓ Incline and horizontal orientations
- ✓ Heavy duty belt material with mechanical or vulcanized seams
- ✓ Drip pans and covers for moisture runoff and protection from environment

BENEFITS

- Design flexibility
- Quality materials for long life assurance
- Lower maintenance/operation costs

IDLER



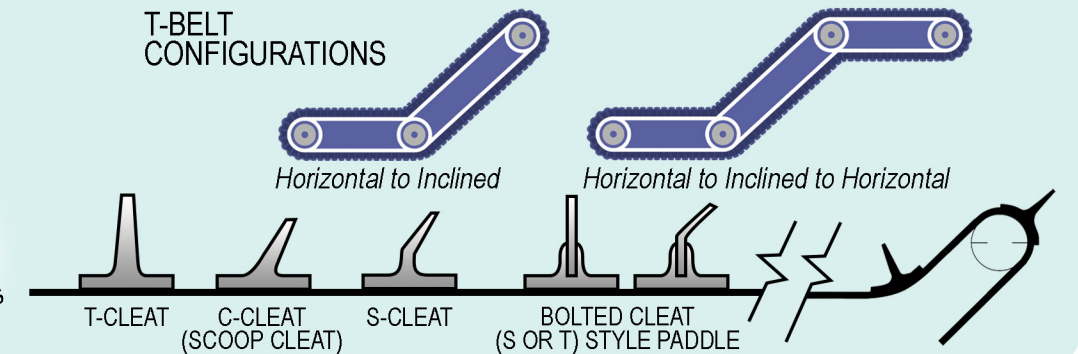
- Troughing idlers keep the belt's shape consistent throughout its journey.
- Suitable for longer distances.
- Ideal for high-capacity applications.
- Trough helps prevent material spillage and increases the safety of workers.
- Suitable for screenings, sludge or grit.

TRANSITIONAL



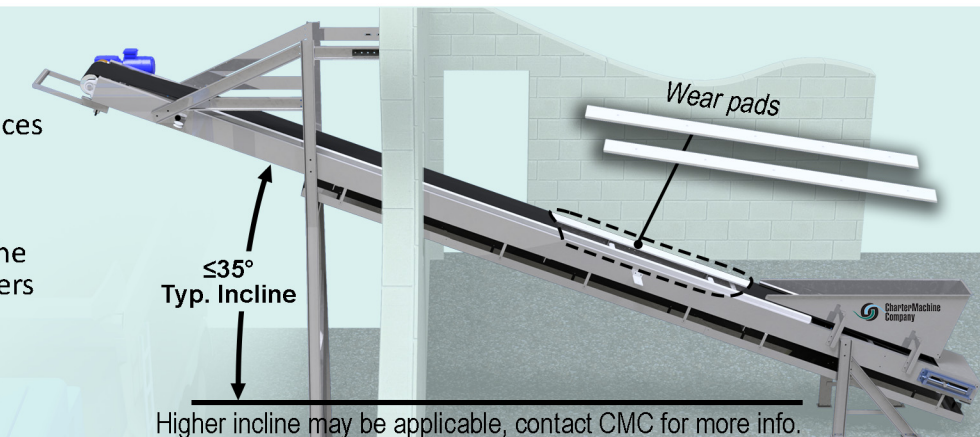
- Includes a bend or turn in the belt.
- Corrugated sidewalls have high tensile strength properties for added flexibility and toughness in order to withstand cutting, tearing, and abrasion.
- Variety of cleating styles allow for maximum operational efficiency based on the required capacity and angle of inclination.

T-BELT CONFIGURATIONS



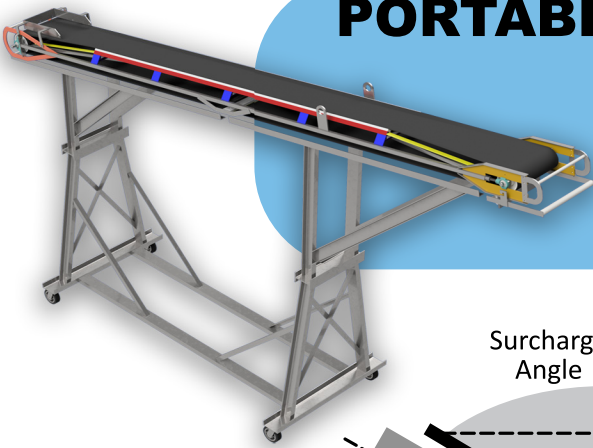
SLIDER

- Ideal for short-run distances
- Idlers are not required - economical alternative & low maintenance
- Wear pads - fraction of the cost in comparison to Idlers

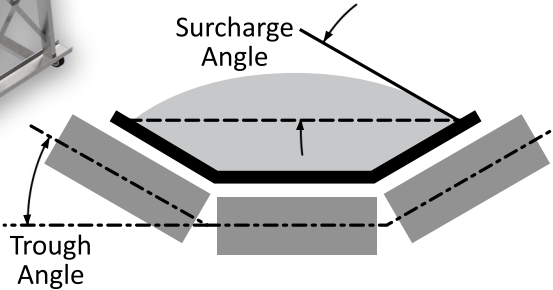


Higher incline may be applicable, contact CMC for more info.

PORTABLE



- Ultra light weight
- Simple mobility
- Wheels are optional
- Adjustable stand - capable of different discharge heights.
- Optimize work space and storage.
- Safe and Reliable. The connecting frames can be easily adjusted to suit job specific requirements in line with production and demand.

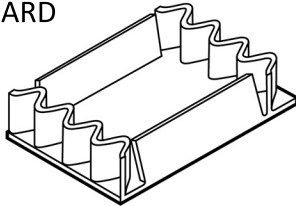


FLAT IDLER ROLLER STYLE CAPACITIES

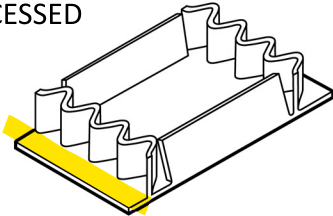
Belt Style	Belt Width	Trough Angle	CFH* @100 FPM	Lbs/Ds/Hr
Flat	16"	20	510	28,000
	18"		650	36,000
	24"		1270	70,000

*CFH = Cubic feet per hour.

STANDARD



RECESSED



CORRUGATED BELT STYLE CAPACITIES

Belt Width	ANGLE OF INCLINE														
	0°			15°			30°			45°			60°		
	SURCHARGE ANGLE			SURCHARGE ANGLE			SURCHARGE ANGLE			SURCHARGE ANGLE			SURCHARGE ANGLE		
	10°-30°	10°-30°	10°	20°	30°	10°	20°	30°	10°	20°	30°	10°	20°	30°	
18" standard	1400	1400													
18" standard w/cleats		1400	360	661	1086	207	290	475	138	179	242				
18" recessed	850	850													
18" recessed w/ cleats		850	219	401	659	125	176	288	83	108	147				
24" standard	2000	2000													
24" standard w/ cleats		2000	515	945	1550	295	414	679	197	256	346				
24" recessed	1450	1450													
24" recessed w/ cleats		1450	373	685	1125	214	300	492	143	185	250				
30" standard	2600	2600													
30" standard w/ cleats		2600	669	1228	2017	384	539	882	256	333	449				
30" recessed	2050	2050													
30" recessed w/ cleats		2050	527	968	1590	302	425	696	202	262	354				
36" standard	3200	3200													
36" standard w/ cleats		3200	824	1512	2480	472	663	1086	315	409	553				
36" recessed	2650	2650													
36" recessed w/ cleats		2650	682	1252	2054	391	549	899	261	339	458				

Chart capacities expressed in cubic feet per hour at 100 FPM belt speed.

TYPICAL APPLICATIONS

MUNICIPAL WASTEWATER / DRINKING WATER

- Municipal Sludge
- Screening / Debris
- Grit
- Inorganic solids
- Raw Sewage
- Return Sludge
- Alum
- Secondary Treatment Wastewater

INDUSTRIAL

- Coal
- Cement
- Asphalt, Crushed
- Carbon Black
- Plastics
- Glass Cullet
- Aggregate
- Catalysts
- Fiberglass
- Rock / Minerals / Sand
- Industrial Oil Sludge
- Lumber & Wood Byproducts
- Pulp / Paper

AGRICULTURE / FOOD

- Fertilizer
- Grain
- Food, fruit, Vegetable processors
- Dairy, milk processors
- Farms, manure, animal waste
- Breweries, beverage producers

OTHER

- Organic Mineral
- High Organic Dyeing
- Pharmaceutical Sludge
- Soaps / Detergent
- Cosmetics
- Ceramics



55 Wester Avenue, Metuchen, New Jersey 08840

732-494-5350 • FAX 732-494-4596 • www.chartermachine.com