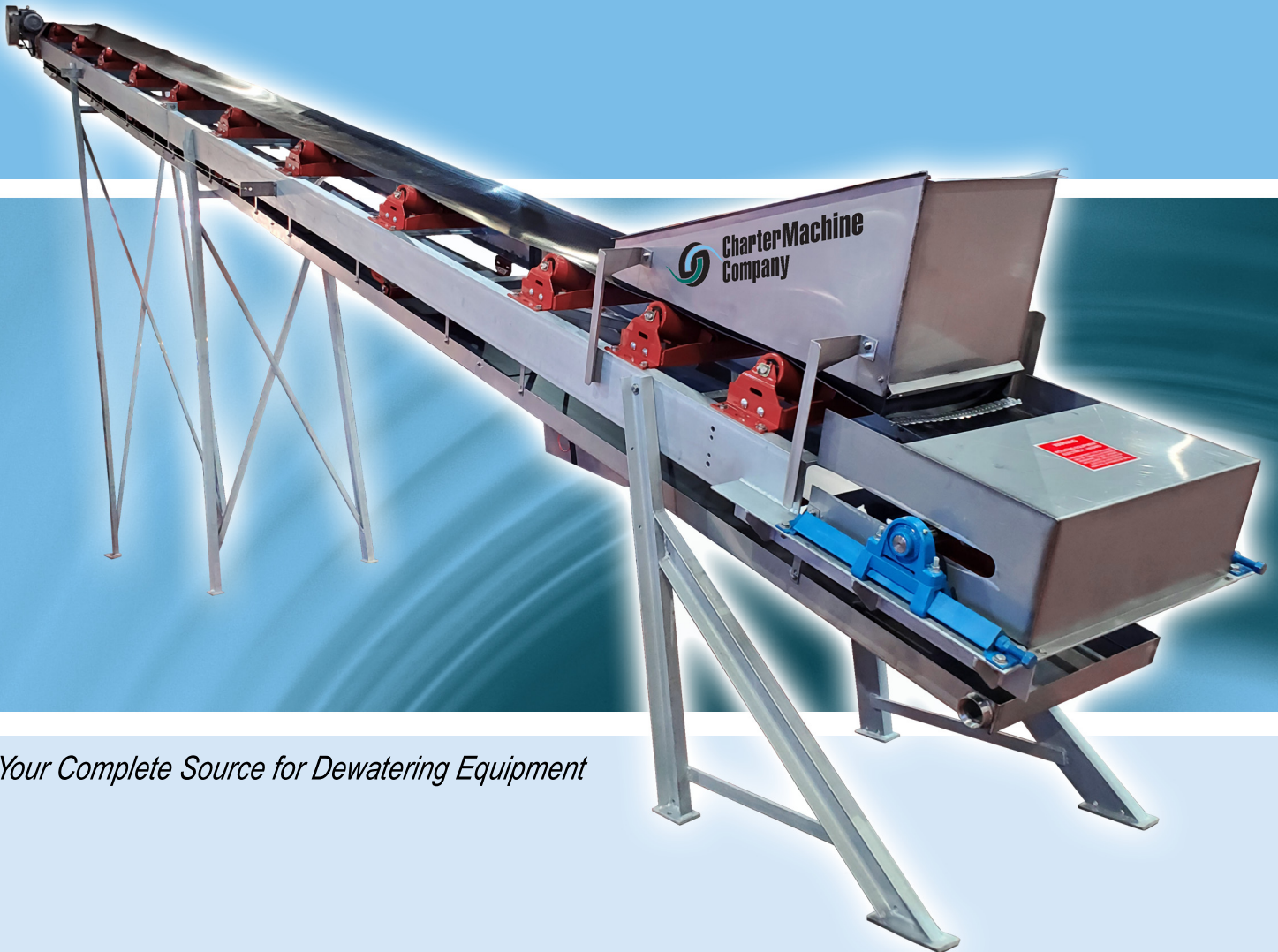


CUSTOM BUILT CONVEYORS



Your Complete Source for Dewatering Equipment



Brought to you by

**Charter Machine
Company**

SCREW CONVEYORS

BELT CONVEYORS

FEATURES

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

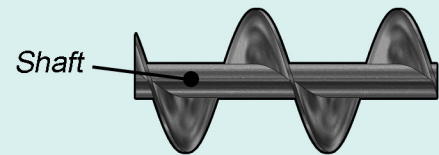
BENEFITS

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

SHAFTED

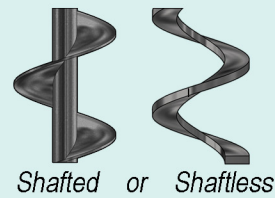
- Center pipe/shaft - faster RPM & supports screw
- Stepped diameter, stepped pitch, and opposite hand flights can be assembled to better regulate material flow.
- Suitable for longer distances
- Ideal for high-capacity applications

| 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

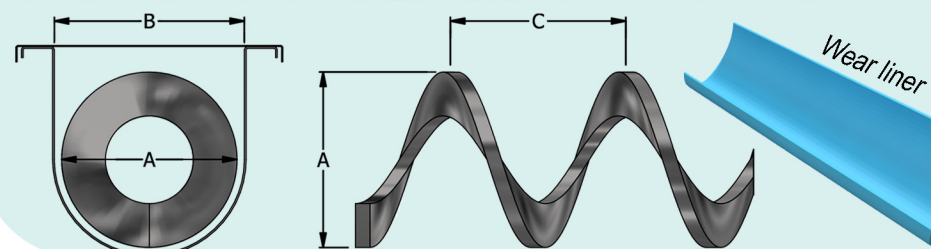
- Space efficient, Low-profile footprint
- Handling of large objects, up to trough diameter
- Fully enclosed - tight odor and mess containment
- Available in shafted or shaftless



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.

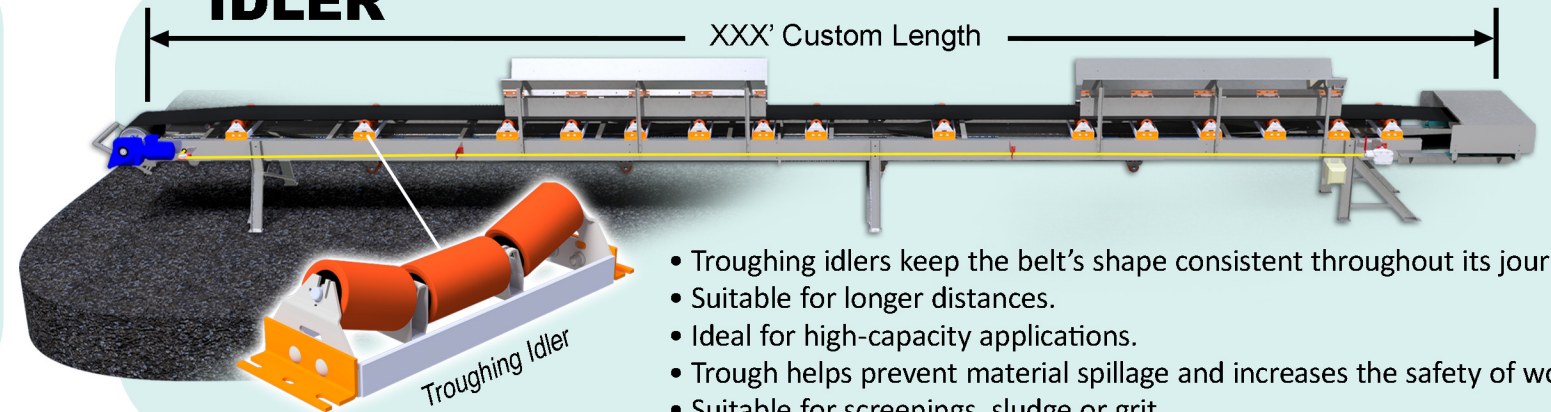
FEATURES

- ✓ 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



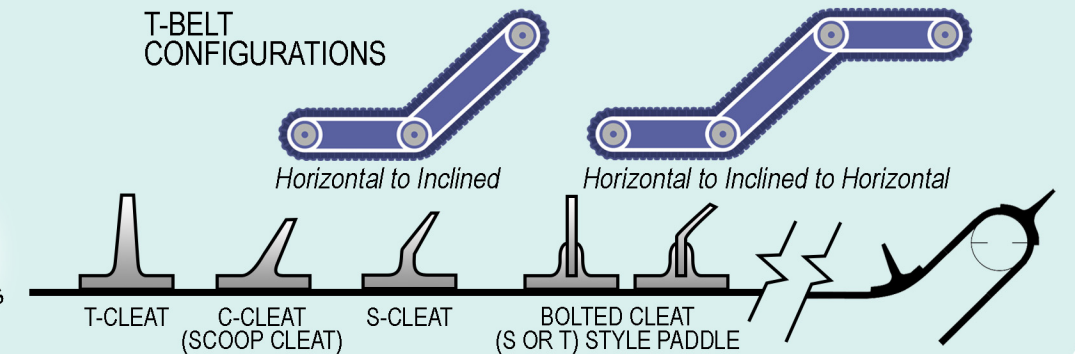
- Troughing idlers keep the belt's shape consistent throughout its journey.
- Suitable for longer distances.
- Ideal for high-capacity applications.
- Trough helps prevent material spillage and increases the safety of workers.
- Suitable for screenings, sludge or grit.

TRANSITIONAL



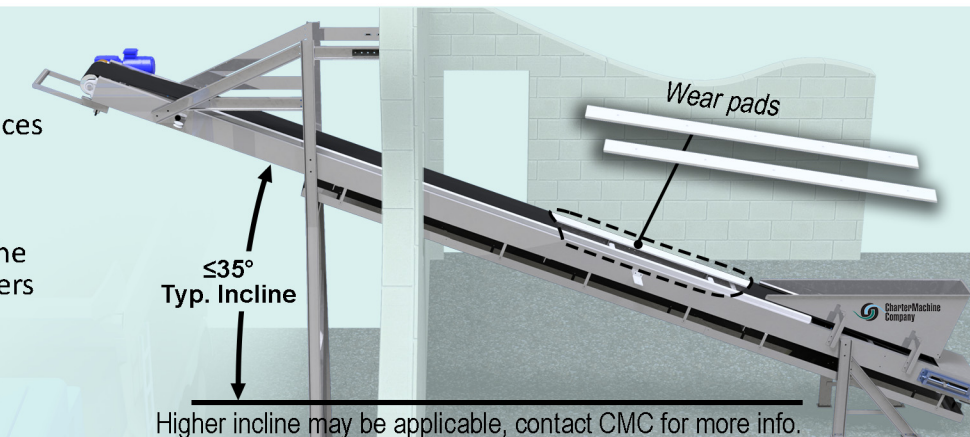
- Includes a bend or turn in the belt.
- Corrugated sidewalls have high tensile strength properties for added flexibility and toughness in order to withstand cutting, tearing, and abrasion.
- Variety of cleating styles allow for maximum operational efficiency based on the required capacity and angle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

T-BELT CONFIGURATIONS



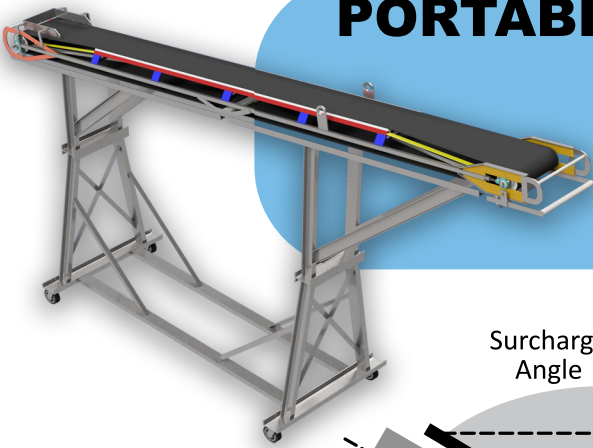
SLIDER

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

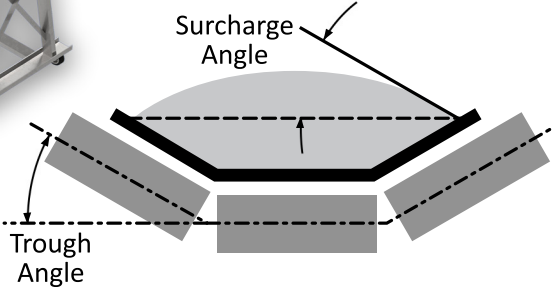


Higher incline may be applicable, contact CMC for more info.

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 |

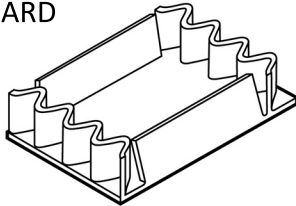
*CFH = Cubic feet per hour.

CORRUGATED BELT STYLE CAPACITIES

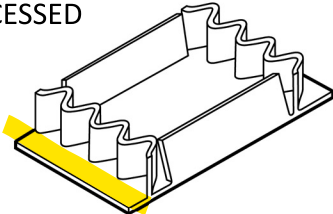
| Belt Width | ANGLE OF INCLINE | | | | | | | | | | | | | | |
|------------------------|------------------|---------|-----|-----------------|------|-----|-----------------|------|-----|-----------------|-----|-----|-----------------|-----|--|
| | 0° | | | 15° | | | 30° | | | 45° | | | 60° | | |
| | SURCHARGE 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.

STANDARD



RECESSED



TYPICAL APPLICATIONS

MUNICIPAL WASTEWATER / DRINKING WATER

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

INDUSTRIAL

- Cosmetics
- Ceramics
- Chemicals
- Carbon Black
- Plastics
- Glass Cullet
- Aggregate
- Catalysts
- Fiberglass
- Rock / Minerals / Sand
- Industrial Oil Sludge
- Lumber & Wood Byproducts
- Pulp / Paper
- Soaps / Detergent

AGRICULTURE

- Fertilizer
- Grain
- Carbon Black
- Plastics
- Aggregate
- Catalysts
- Rock / Minerals / Sand
- Industrial Oil Sludge
- Pulp / Paper
- Cosmetics

OTHER

- Organic Mineral
- High Organic Dyeing
- Pharmaceutical Sludge
- Asphalt, Crushed
- Coal
- Cement



55 Wester Avenue, Metuchen, New Jersey 08840
732-494-5350 • FAX 732-494-4596 • www.chartermachine.com