

KANIAB SERKAN .CO

*Innovation in Design, Manufacturing, and
Supply of Industrial Equipment*

Brochure 01



Screw Conveyors

**RELIABLE
RESPONSIVE &
DECADES OF KNOW-HOW**



KANIAB.COM

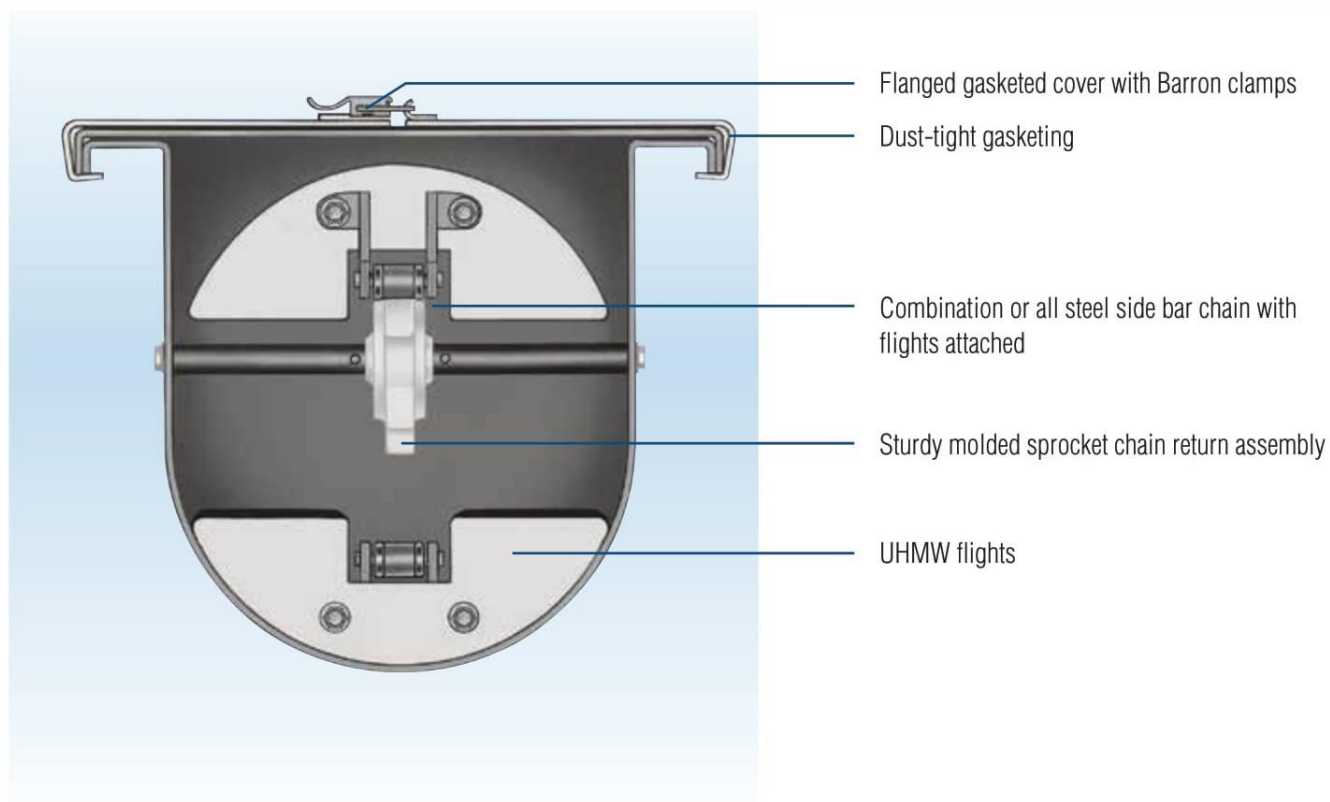
Since 2006

KANIAB SERKAN drag conveyors deliver bulk materials gently with a smooth, positive action that eliminates the tumbling and agitation which can damage the materials. Since the round-bottom design was originated and patented by Screw Conveyor Corporation over 45 years ago, this method of material transport remains a cost-effective means of handling materials whose composition, if damaged, would reduce their value.

In an era focused on the need for an A/R (abrasive-resistant) liner to ensure long life in flat-bottom designs, the KANIAB SERKAN's curved troughs and UHMW flights provide many years of durability at a lower annual cost.

Over the years, the KANIAB SERKAN conveyor has been manufactured from a variety of specialty materials engineered to meet the needs of specific applications. We have discovered unique solutions for customers—KANIAB SERKAN units are typically supplied with either a combination or an all-steel chain with attached flights.

The trough design employed for the KANIAB SERKAN distinguishes it from imitators. The double-flanged, one-piece trough is deeper than a conventional screw conveyor trough, providing greater capacity in typical units. When combined with a cover and quick-release Barron clamps, access for inspection and maintenance is both simple and efficient.



KANIAB[®] SERKAN FEATURES

Gentle Material Handling – Materials are carried as a whole without tumbling, thereby keeping agitation and friction to a minimum. Particle degradation and separation are also minimized. Sensitive materials such as pigments, edible beans, malt, seed grains, tea, and coffee are ideal for KANIAB SERKAN conveyors.

Self-Cleaning – KANIAB SERKAN conveyors are virtually self-cleaning, as the flights wipe the trough bottom after every batch.

Completely Enclosed – This design minimizes dusting. The addition of battens and bolted covers with gasketed trough flanges can provide further dust-tight construction. For outside weather-tight applications, hip roof bolted covers with gaskets throughout are available.

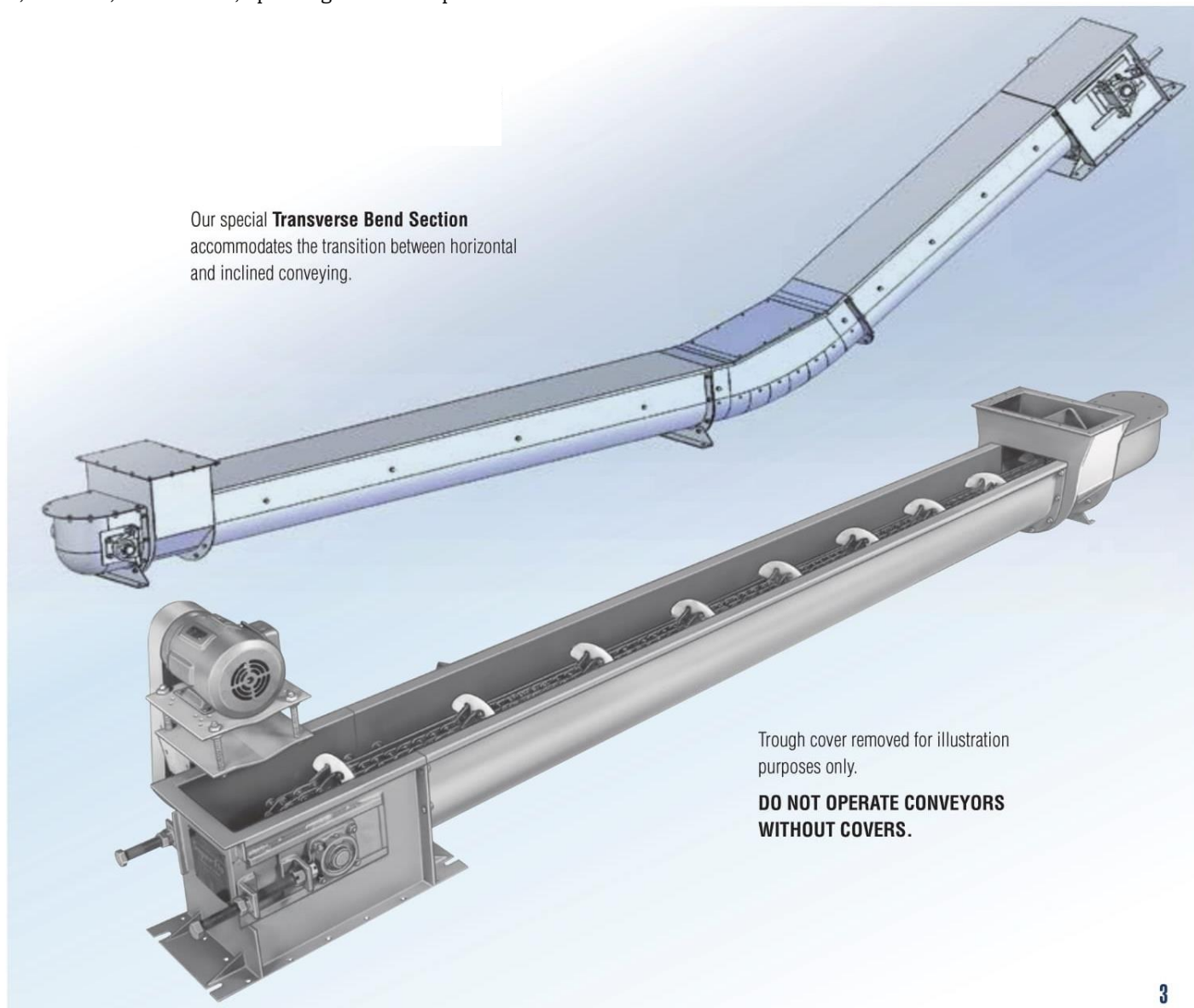
Size Range – KANIAB SERKAN conveyors come in 10 sizes, from 6" through 24", with capacities ranging from 1,890 to 25,765 cu. ft./hr, operating at a chain speed of

up to 175 ft./minute.

Special Feed Sections – By-pass or pan feeders are available for a wide variety of applications. Manual or electronic control mechanisms can be used to handle multiple products with densities ranging from 10# to 90#, for example.

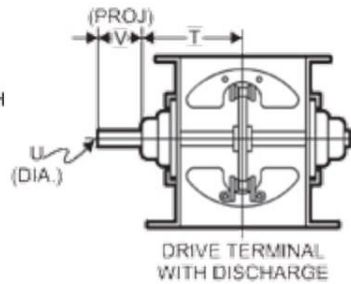
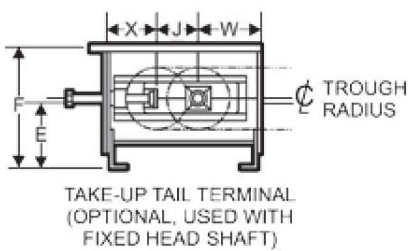
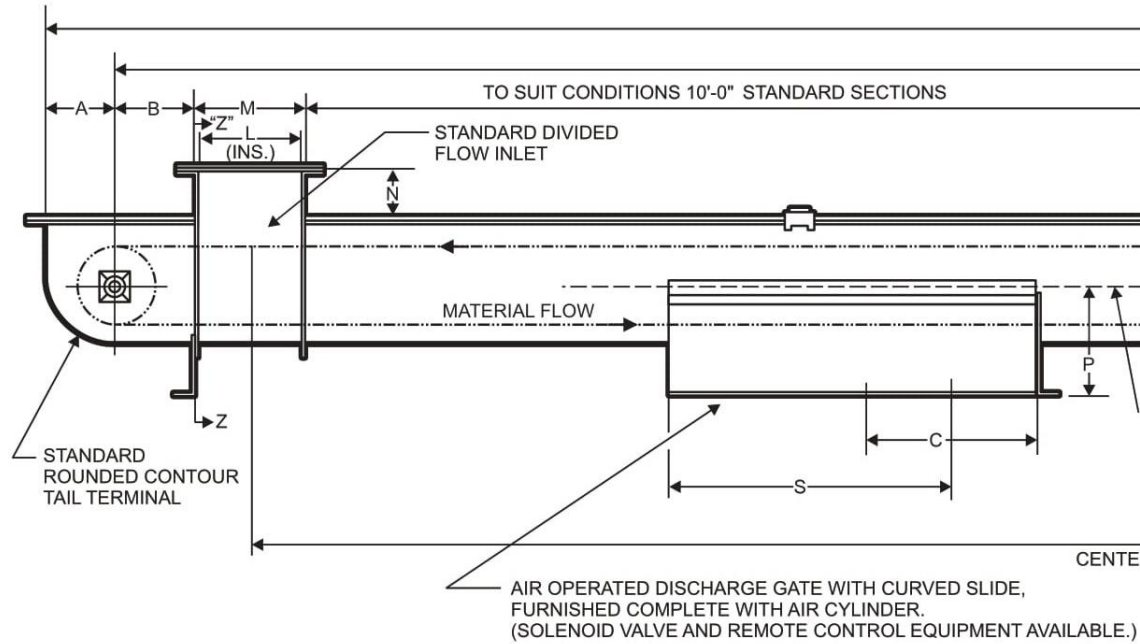
Intermediate Discharges – Intermediate discharge openings are teardrop-shaped rather than rectangular. This design allows the flights and chain to cross over without the need for crossover bars or fabricated parts, while providing maximum possible discharge. Intermediate discharge spouts are furnished with curved slide gates as standard.

Our special **Transverse Bend Section** accommodates the transition between horizontal and inclined conveying.



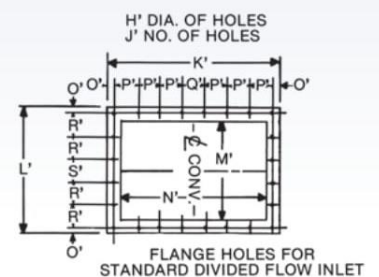
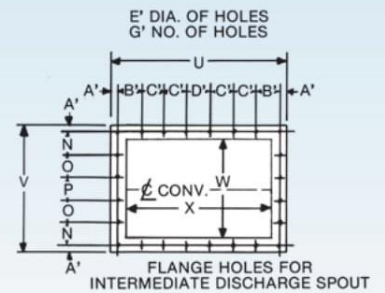
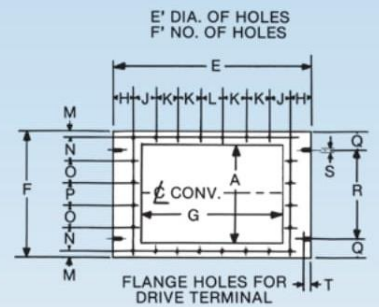
Trough cover removed for illustration purposes only.

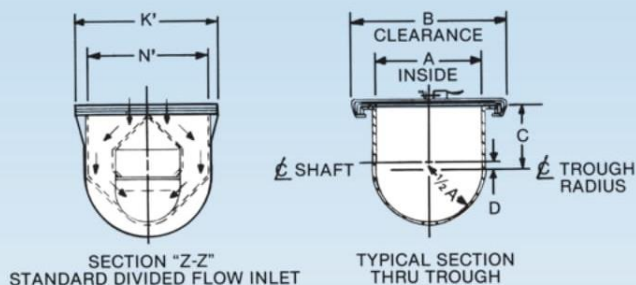
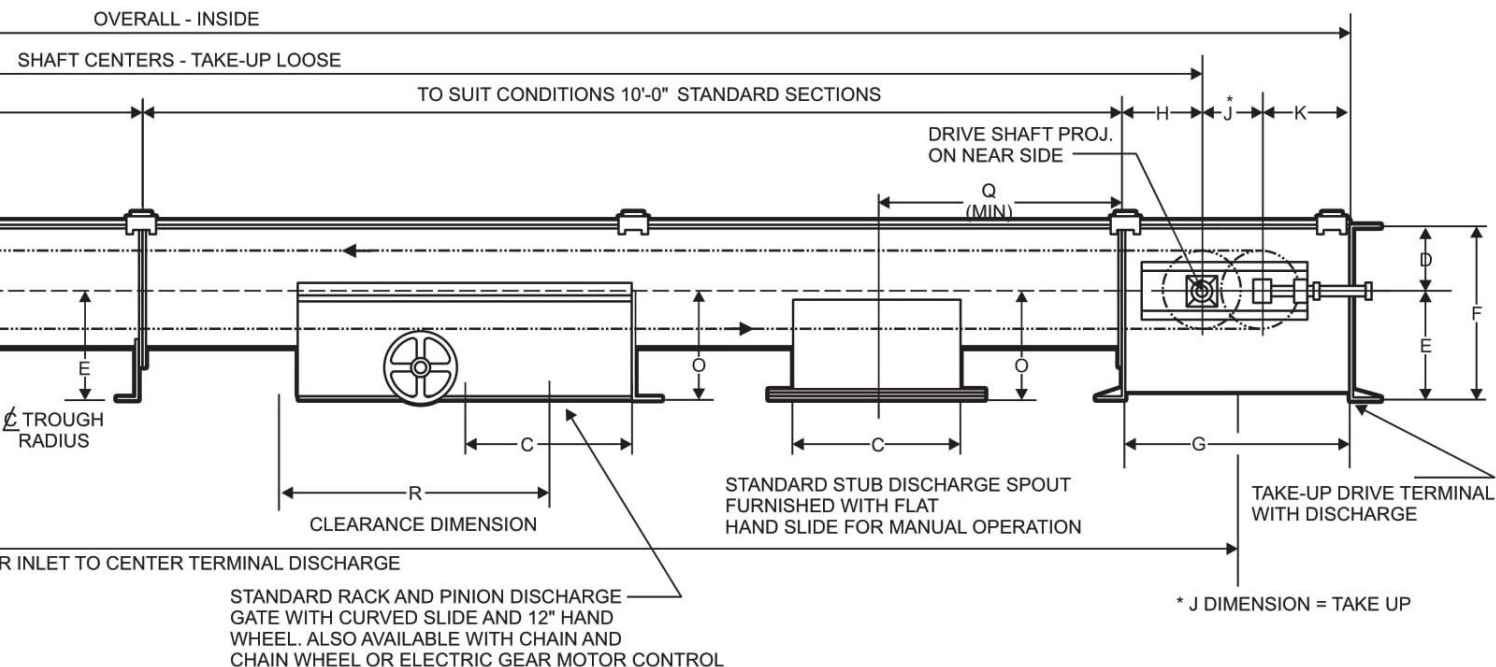
**DO NOT OPERATE CONVEYORS
WITHOUT COVERS.**



SUPER-FLO SIZES

| Dimensions in Inches | 6" | 9" | 12" | 14" | 16" | 18" | 20" | 24" |
|----------------------|---------------------------------|---------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|---------------------------------|----------------------------------|
| A | 5 | 6 | 7 ⁹ / ₁₆ | 8 ¹³ / ₁₆ | 10 | 11 ¹ / ₄ | 12 ⁷ / ₁₆ | 14 ¹⁵ / ₁₆ |
| B | 3 | 5 ¹ / ₈ | 6 ¹¹ / ₁₆ | 7 ¹⁵ / ₁₆ | 9 ¹ / ₈ | 10 ³ / ₈ | 11 ⁹ / ₁₆ | 14 ¹ / ₁₆ |
| C | 12 | 18 | 21 | 24 | 24 | 28 | 30 | 30 |
| D | 5 ³ / ₄ | 6 ⁵ / ₈ | 8 ¹ / ₄ | 9 ³ / ₄ | 11 ¹ / ₈ | 12 ⁵ / ₈ | 14 | 17 |
| E | 5 ⁵ / ₈ | 7 ⁷ / ₈ | 9 ⁵ / ₈ | 10 ⁷ / ₈ | 12 | 13 ³ / ₈ | 15 | 18 ¹ / ₈ |
| F | 11 ³ / ₈ | 14 ¹ / ₂ | 17 ⁷ / ₈ | 20 ⁵ / ₈ | 23 ¹ / ₈ | 26 | 29 | 35 ¹ / ₈ |
| G | 15 | 18 | 21 | 24 | 26 | 28 | 30 | 30 |
| H | 7 ³ / ₁₆ | 9 ³ / ₁₆ | 10 ⁷ / ₁₆ | 12 ³ / ₁₆ | 12 ¹⁵ / ₁₆ | 14 ³ / ₁₆ | 16 ³ / ₁₆ | 20 ³ / ₁₆ |
| J | 2 ¹ / ₂ | 2 ¹ / ₂ | 3 ¹ / ₂ | 3 ¹ / ₂ | 3 ¹ / ₂ | 4 | 4 | 4 |
| K | 5 ¹ / ₂ | 6 ¹ / ₂ | 7 ¹ / ₄ | 8 ¹ / ₂ | 9 ³ / ₄ | 11 | 12 ¹ / ₄ | 14 ³ / ₄ |
| L | 10 | 12 | 14 | 16 | 16 | 18 | 18 | 20 |
| M | 10 ¹ / ₄ | 12 ¹ / ₄ | 14 ¹ / ₄ | 16 ¹ / ₄ | 16 ¹ / ₄ | 18 ³ / ₈ | 18 ³ / ₈ | 20 ³ / ₈ |
| N | 4 ¹ / ₈ | 5 ⁵ / ₈ | 7 ¹ / ₈ | 8 ¹ / ₈ | 9 ¹ / ₈ | 10 | 11 ¹ / ₈ | 13 ¹ / ₈ |
| O | 8 | 9 ¹ / ₂ | 11 | 10 ¹³ / ₁₆ | 11 ¹³ / ₁₆ | 12 ¹³ / ₁₆ | 13 ⁷ / ₈ | 15 ⁷ / ₈ |
| P | 9 ¹ / ₂ | 11 | 12 ¹ / ₂ | 13 ¹ / ₂ | 14 ¹ / ₂ | 16 ¹ / ₂ | 17 ⁵ / ₈ | 19 ⁵ / ₈ |
| Q | 9 ¹ / ₄ | 14 ⁵ / ₈ | 17 ¹ / ₈ | 18 ⁵ / ₈ | 19 ¹ / ₈ | 22 ¹ / ₈ | 23 ⁵ / ₈ | 24 ¹ / ₈ |
| R | 23 | 32 | 36 ¹ / ₂ | 41 | 41 | 47 | 50 | 50 |
| S | 25 ³ / ₄ | 34 ³ / ₄ | 39 ¹ / ₄ | 43 ³ / ₄ | 44 ³ / ₄ | 51 ³ / ₈ | 54 ³ / ₈ | 54 ³ / ₈ |
| T | 5 ¹ / ₂ | 7 ¹ / ₈ | 9 ³ / ₈ | 10 ³ / ₈ | 11 ³ / ₄ | 13 ⁷ / ₁₆ | 14 ⁷ / ₁₆ | 17 ¹ / ₄ |
| U | 1 ³ / ₁₆ | 1 ⁷ / ₁₆ | 2 ³ / ₁₆ | 2 ³ / ₁₆ | 2 ⁷ / ₁₆ | 2 ¹⁵ / ₁₆ | 2 ¹⁵ / ₁₆ | 3 ⁷ / ₁₆ |
| V | 8 ¹³ / ₁₆ | 10 ³ / ₁₆ | 12 ⁵ / ₁₆ | 12 ⁵ / ₁₆ | 13 ³ / ₁₆ | 15 ¹ / ₈ | 15 ¹ / ₈ | 16 ³ / ₈ |
| W | 5 | 5 ¹ / ₄ | 6 ¹ / ₂ | 6 ¹ / ₂ | 6 ³ / ₄ | 8 | 8 | 9 ¹ / ₂ |
| X | 8 ¹ / ₄ | 8 ³ / ₄ | 10 ¹ / ₂ | 10 ¹ / ₂ | 11 | 12 | 13 | 15 ¹ / ₂ |





NOTE: Dimensions in blue section refer only to diagrams in blue section

| Dim. in inches | SUPER-FLO SIZES | | | | | | | |
|----------------------|-----------------|---------|---------|--------|--------|---------|---------|--------|
| | 6" | 9" | 12" | 14" | 16" | 18" | 20" | 24" |
| A' | 1 1/16 | 1/2 | 7/8 | 7/8 | 7/8 | 1 1/8 | 1 1/8 | 1 1/8 |
| B' | 4 3/8 | 4 | 4 3/8 | 4 3/8 | 5 1/4 | 4 3/8 | 4 3/4 | 4 3/4 |
| C' | — | 3 7/8 | 4 3/4 | 4 3/8 | 5 1/4 | 4 3/8 | 4 3/4 | 4 3/4 |
| D' | 4 5/8 | 4 | 4 1/2 | — | 5 1/4 | 4 1/2 | 4 1/4 | 4 1/4 |
| E' | 7/16 | 7/16 | 7/16 | 7/16 | 7/16 | 9/16 | 9/16 | 9/16 |
| F' | 14 | 16 | 16 | 20 | 20 | 24 | 24 | 24 |
| G' | 12 | 16 | 16 | 20 | 20 | 24 | 24 | 24 |
| H' | 7/16 | 7/16 | 7/16 | 7/16 | 7/16 | 7/16 | 7/16 | 7/16 |
| J' | 12 | 14 | 14 | 18 | 18 | 22 | 22 | 22 |
| K' | 16 | 21 | 24 | 27 | 30 | 33 | 36 | 40 |
| L' | 13 | 15 | 17 | 19 | 19 | 21 | 21 | 23 |
| M' | 10 | 12 | 14 | 16 | 16 | 18 | 18 | 20 |
| N' | 13 | 18 | 21 | 24 | 27 | 30 | 33 | 37 |
| O' | 5/8 | 5/8 | 5/8 | 5/8 | 5/8 | 5/8 | 5/8 | 5/8 |
| P' | 5 | 4 15/16 | 5 11/16 | 5 | 5 3/4 | 4 1/2 | 5 | 5 1/2 |
| Q' | 4 3/4 | — | — | 5 3/4 | — | 4 3/4 | 4 3/4 | 5 3/4 |
| R' | 4 | 4 1/2 | 5 1/4 | 4 7/16 | 4 7/16 | 4 15/16 | 4 15/16 | 5 7/16 |
| S' | 3 3/4 | 4 3/4 | — | — | — | — | — | — |

| Dimensions in inches | SUPER-FLO SIZES | | | | | | | |
|----------------------------|-----------------|--------|--------|--------|--------|--------|---------|--------|
| | 6" | 9" | 12" | 14" | 16" | 18" | 20" | 24" |
| A | 7 | 10 | 13 | 15 | 17 | 19 | 21 | 25 |
| B | 12 | 15 3/4 | 19 1/2 | 21 1/2 | 23 1/2 | 26 1/2 | 28 1/2 | 32 1/2 |
| C | 5 3/4 | 6 5/8 | 8 1/4 | 9 3/4 | 11 1/8 | 12 5/8 | 14 | 17 |
| D | 1 3/16 | 3/4 | 13/16 | 1 1/16 | 1 1/4 | 1 1/2 | 1 11/16 | 2 3/16 |
| E | 20 3/4 | 26 1/2 | 30 1/4 | 33 1/4 | 36 1/4 | 39 1/4 | 42 1/4 | 43 1/4 |
| F | 9 3/4 | 13 1/2 | 17 1/4 | 19 1/4 | 21 1/4 | 24 1/4 | 26 1/4 | 30 1/4 |
| G | 15 | 18 | 21 | 24 | 26 | 28 | 30 | 30 |
| H | 2 | 3 1/4 | 3 3/8 | 3 1/2 | 3 3/8 | 4 1/8 | 4 5/8 | 5 1/8 |
| J | 4 3/16 | 4 | 4 3/4 | 4 3/8 | 5 3/4 | 4 3/8 | 4 3/4 | 4 3/4 |
| K | 4 3/16 | 4 | 4 3/4 | 4 3/8 | 5 3/4 | 4 3/8 | 4 3/4 | 4 3/4 |
| L | — | 4 | 4 1/2 | — | 5 1/2 | 4 3/4 | 4 1/2 | 4 1/2 |
| M | 9/16 | 3/4 | 7/8 | 7/8 | 7/8 | 1 1/8 | 1 1/8 | 1 1/8 |
| N | 2 13/16 | 4 | 5 1/8 | 4 3/8 | 3 3/4 | 4 7/16 | 4 7/8 | 5 5/8 |
| O | — | — | — | 4 3/8 | 4 | 4 3/8 | 4 3/4 | 5 5/8 |
| P | 3 | 4 | 5 1/4 | — | 4 | 4 3/8 | 4 3/4 | 5 1/2 |
| Q | 13/16 | 2 1/16 | 2 1/2 | 2 7/8 | 3 3/16 | 4 1/8 | 3 1/2 | 5 1/8 |
| R | 8 1/8 | 9 3/8 | 12 1/4 | 13 1/2 | 14 7/8 | 16 | 19 1/4 | 20 |
| S | 3/8 | 1/2 | 5/8 | 5/8 | 5/8 | 5/8 | 3/4 | 3/4 |
| T | 5/8 | 1 1/16 | 1 1/8 | 1 1/8 | 1 1/4 | 1 1/4 | 1 1/2 | 1 3/4 |
| U | 14 3/4 | 20 3/4 | 25 | 28 | 28 | 33 | 35 | 35 |
| V | 10 | 13 | 17 1/4 | 19 1/4 | 21 1/4 | 24 1/4 | 26 1/4 | 30 1/4 |
| W | 7 1/4 | 10 1/4 | 13 1/4 | 15 1/4 | 17 1/4 | 19 1/4 | 21 1/4 | 25 1/4 |
| X | 12 | 18 | 21 | 24 | 24 | 28 | 30 | 30 |

CONVEYOR WEIGHTS*

| Size | Drive Terminal with Take Up | | Contour Terminal | | Divided Flow Inlet | | 10' Trough Complete | Trough Ga. | Cover Ga. |
|------|-----------------------------|------|------------------|------|--------------------|------|---------------------|------------|-----------|
| | Wt. lbs. | Ga. | Wt. lbs. | Ga. | Wt. lbs. | Ga. | lbs. | | |
| 6" | 61 | 12 | 22 | 14 | 37 | 12 | 167 | 14 | 16 |
| 9" | 86 | 12 | 46 | 12 | 60 | 12 | 258 | 12 | 14 |
| 12" | 192 | 10 | 87 | 10 | 109 | 10 | 393 | 10 | 14 |
| 14" | 212 | 10 | 99 | 10 | 128 | 10 | 438 | 10 | 14 |
| 16" | 250 | 10 | 125 | 10 | 142 | 10 | 484 | 10 | 14 |
| 18" | 394 | 3/16 | 181 | 3/16 | 215 | 3/16 | 529 | 10 | 12 |
| 20" | 460 | 3/16 | 222 | 3/16 | 280 | 3/16 | 677 | 10 | 12 |
| 24" | 574 | 3/16 | 340 | 3/16 | 360 | 3/16 | 761 | 10 | 12 |

*Weights shown are shipping weights with each part containing chain, flights and covers. Supporting structure for conveyors should be determined using these weights plus weight of material contained in conveyor. Consult our office for more data if required.

CONVEYOR CAPACITIES**

| Size | Cu. Ft. Per Hr. @100' Per Min. | Cu. Ft. Per Hr. @125' Per Min. | Cu. Ft. Per Hr. @150' Per Min. | Cu. Ft. Per Hr. @175' Per Min. | R.P.M. @100' Per Min. | R.P.M. @125' Per Min. | R.P.M. @150' Per Min. | R.P.M. @175' Per Min. |
|------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 6" | 1,080 | 1,350 | 1,620 | 1,890 | 72 | 90 | 108 | 126 |
| 9" | 2,015 | 2,520 | 3,020 | 3,525 | 61 | 76 | 92 | 106 |
| 12" | 3,250 | 4,060 | 4,875 | 5,685 | 45 | 56 | 68 | 79 |
| 14" | 4,625 | 5,780 | 6,935 | 8,095 | 38 | 47 | 57 | 66 |
| 16" | 6,165 | 7,705 | 9,250 | 10,790 | 35 | 44 | 53 | 61 |
| 18" | 8,175 | 10,220 | 12,260 | 14,305 | 30 | 38 | 46 | 53 |
| 20" | 10,225 | 12,780 | 15,335 | 17,890 | 27 | 34 | 41 | 47 |
| 24" | 14,725 | 18,405 | 22,080 | 25,765 | 23 | 29 | 35 | 41 |

**Capacities and Horsepower figures shown are maximums based on horizontal conveying of a dry, free flowing small grain weighing 48lb./cu. being conveyed horizontally under favorable conditions with a uniform and continuous in-feed. Capacity and horsepower will vary with other materials. Consult our offices for data on other materials and for inclined or reversible units. To convert to bushels, multiply cu. ft. x 0.8. Screw Conveyor Corp reserves the right to make changes in design or specifications without notice.

CONVEYOR HORSEPOWER**

| Size | Horsepower Per Ft. of Length @ | | | | Combination Chain | | Solid Steel Chain | | Flight Centers in. |
|------|--------------------------------|---------------|---------------|---------------|----------------------|-----------------------|----------------------|----------------------|--------------------|
| | 100' Per Min. | 125' Per Min. | 150' Per Min. | 175' Per Min. | Max H.P. @ 100'/Min. | Max. H.P. @ 175'/Min. | Max H.P. @ 100'/Min. | Max H.P. @ 175'/Min. | |
| 6" | .014 | .017 | .020 | .024 | 8.52 | 14.9 | — | — | 9.6 |
| 9" | .026 | .033 | .040 | .046 | 8.52 | 14.9 | — | — | 9.6 |
| 12" | .040 | .050 | .060 | .070 | 13.2 | 23.2 | 18.9 | 33.1 | 15.6 |
| 14" | .055 | .069 | .083 | .096 | 13.2 | 23.2 | 18.9 | 33.1 | 15.6 |
| 16" | .069 | .086 | .103 | .120 | 13.2 | 23.2 | 18.9 | 33.1 | 15.6 |
| 18" | .086 | .106 | .128 | .150 | 13.2 | 23.2 | 18.9 | 33.1 | 15.6 |
| 20" | .112 | .140 | .169 | .196 | 22.7 | 39.8 | 30.3 | 53 | 24.0 |
| 24" | .148 | .185 | .222 | .259 | 22.7 | 39.8 | 30.3 | 53 | 24.0 |

**Capacities and Horsepower figures shown are maximums based on horizontal conveying of a dry, free flowing small grain weighing 48lb./cu. being conveyed horizontally under favorable conditions with a uniform and continuous in-feed. Capacity and horsepower will vary with other materials. Consult our offices for data on other materials and for inclined or reversible units. To convert to bushels, multiply cu. ft. x 0.8. Screw Conveyor Corp reserves the right to make changes in design or specifications without notice.

Drag Conveyor Safety Practices



Most accidents involving property damage or personal injury are the result of someone's carelessness or negligence. In order to avoid such accidents, one of the many things that must be done is to make machinery that eliminates in so far as possible an unsafe or hazardous condition. Drag conveyors must be installed, maintained and operated with the following minimum provisions:

1. Drag conveyors shall not be operated unless the conveyor housing completely encloses the moving elements and all power transmission guards are in place. The following warning signs (see CEMA Safety Label Sheet SC-1) are attached to all conveyor housings in locations as specified. Signs should not be removed from housings or be painted over! Replacements can be ordered from the Conveyor Equipment Manufacturer's Association (CEMA).
2. Do not overload the conveyor or use it for anything but its intended use.
3. Feed openings for shovel or other manual or mechanical equipment shall be constructed in such a way that the conveyor rotating and moving parts are enclosed and restricts access to conveyor.
4. Always lock-out power before doing maintenance.

SCC does not perform electrical design services and therefore does not supply electrical devices unless specifically instructed to do so by the purchaser.

SCC will try to assist, to the best of our ability, in the selection of the devices or equipment that will aid the owner and installer in preparing a safe installation and a safe working place. Zero speed switches and other electrical devices can sense conveyor operation so that operations can be interrupted and/or alarms can be actuated.

There are many kinds of electrical interlocking devices for conveyors, elevators and conveyor systems such that if one conveyor in a system or process is stopped, other equipment feeding it or following it can also be automatically stopped and thus prevent overloading at transfer points. For the safety of those that will come into the area where this equipment will be operating we recommend that you contact an electrical designer and/or supplier. Provide them with information on your operating conditions so they can best recommend and supply the appropriate devices.



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Since 2006