



## U-TROUGH SCREW CONVEYORS

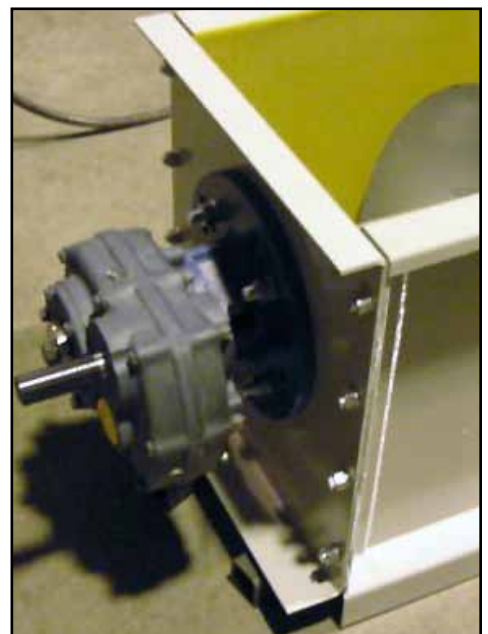


Riley Equipment's screw conveyor line offers a variety of options to satisfy your conveying needs safely and efficiently.

- U-Trough channels bi-product quickly and gently utilizing durable, true helicoidal manufactured screw conveyor.
- Standard sizes, up to 18-inches and 6600 bph, are at hand and larger sizes or customized construction are available.
- Pre-assembled and match-marked for simplified field installation.
- Easy access components result in timely service and maintenance.
- Standard models include angle

flanged U-trough, helicoid screw, style No. 226 hanger with wood bearing, (two) end plates, end ball bearing, tail shaft, coupling shafts, coupling bolts, galvanized trough covers, screw cover clamps, discharge spout and assembly bolts.

All screw conveyor drives consist of: Class II, steady load not exceeding motor HP rating for over 10 hours a day (moderate shock loads are allowable during 10 hours a day), screw conveyor reducer with adapter, CEMA drive shaft, sheaves and bushings, drive belts (2.0 Safety Factor), belt guard, and motor mount. The motor requirement is 1750 RPM.

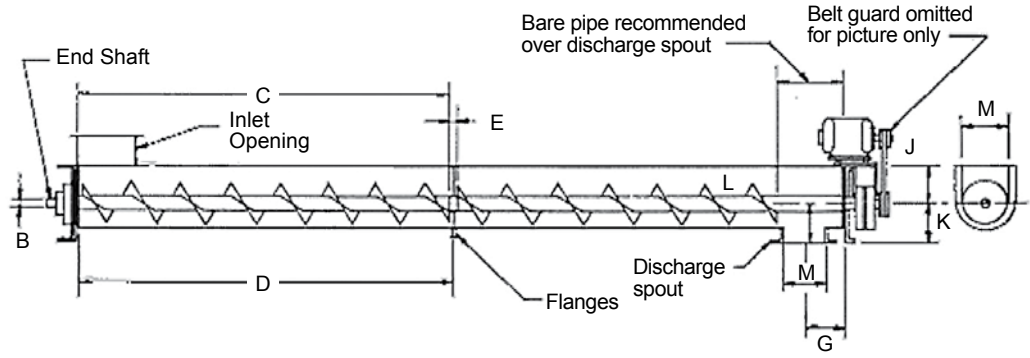


### 9" U-Trough 1000 BPH @ 162 RPM

| Unassembled |     | Std. Flighting | XX Flighting |
|-------------|-----|----------------|--------------|
| Length      | HP  | Weight         | Weight       |
| 10          | 3   | 291            | 347          |
| 20          | 3   | 546            | 655          |
| 30          | 3   | 801            | 963          |
| 40          | 5   | 1056           | 1271         |
| 50          | 5   | 1311           | 1579         |
| 60          | 5   | 1566           | 1887         |
| 70          | 5   | 1821           | 2195         |
| 80          | 5   | 2076           | 2503         |
| 90          | 5   | 2331           | 2811         |
| 100         | 5   | 2586           | 3119         |
| 110         | 5   | 2841           | 3427         |
| 120         | 7.5 | 3096           | 3735         |

Std. conveyor and material is 37 lbs/ft., XX is 43 lbs/ft.

| HP  | Class II Drive | Weight |
|-----|----------------|--------|
| 3   | TA1107H        | 195    |
| 5   | TA1107H        | 195    |
| 7.5 | TA1107H        | 195    |
| 10  | TA2115H        | 269    |



### Horizontal U-Trough Conveyor Specifications

| A  | SCR    | B      | C       | D      | E | G      | J      | K      | L      | M  | TG | CG | FB   | FT   | P     |
|----|--------|--------|---------|--------|---|--------|--------|--------|--------|----|----|----|------|------|-------|
| 9  | 9H306  | 1 1/2  | 9'-10"  | 10'-0" | 2 | 8      | 6 1/8  | 7 7/8  | 7 1/8  | 10 | 14 | 14 | 3/16 | 3/32 | 2 3/8 |
| 9  | 9H412  | 2      | 9'-10"  | 10'-0" | 2 | 8      | 6 1/8  | 7 7/8  | 7 1/8  | 10 | 14 | 14 | 3/8  | 3/16 | 2 7/8 |
| 12 | 12H408 | 2      | 11'-10" | 12'-0" | 2 | 10 1/2 | 7 3/4  | 9 5/8  | 8 7/8  | 13 | 12 | 14 | 1/4  | 1/8  | 2 7/8 |
| 12 | 12H512 | 2 7/16 | 11'-9"  | 12'-0" | 3 | 10 1/2 | 7 3/4  | 9 5/8  | 8 7/8  | 13 | 12 | 14 | 3/8  | 3/16 | 3 1/2 |
| 14 | 14H508 | 2 7/16 | 11'-9"  | 12'-0" | 3 | 11 1/2 | 9 1/4  | 10 7/8 | 10 1/8 | 15 | 12 | 14 | 1/4  | 1/8  | 3 1/2 |
| 14 | 14H614 | 3      | 11'-9"  | 12'-0" | 3 | 11 1/2 | 9 1/4  | 10 7/8 | 10 1/8 | 15 | 12 | 14 | 7/16 | 7/32 | 4     |
| 16 | 16H610 | 3      | 11'-9"  | 12'-0" | 3 | 13 1/2 | 10 5/8 | 12     | 11 1/8 | 17 | 12 | 14 | 5/16 | 5/32 | 4     |
| 16 | 16H614 | 3      | 11'-9"  | 12'-0" | 3 | 13 1/2 | 10 5/8 | 12     | 11 1/8 | 17 | 12 | 14 | 7/16 | 7/32 | 4 1/2 |
| 18 | 16H610 | 3      | 11'-9"  | 12'-0" | 3 | 14 1/2 | 12 1/8 | 13 3/8 | 12 3/8 | 19 | 12 | 14 | 5/16 | 5/32 | 4     |

A = Screw Diameter in Inches  
 SCR = Screw Designation  
 B = Coupling Diameter in Inches  
 C = Length  
 D = Length w/Flange  
 E = Dimension in Inches

G = Dimension in Inches  
 J = Dimension in Inches  
 K = Dimension in Inches  
 L = Dimension in Inches  
 M = Dimension in Inches  
 TG = Trough Gauge

CG = Cover Gauge  
 FB = Flight Base Thickness  
 FT = Flight Tip Thickness  
 P = Pipe Size

### 12" U-trough 2200 BPH @ 150 RPM

| Unassembled |     | Std. Flighting | XX Flighting |
|-------------|-----|----------------|--------------|
| Length      | HP  | Weight         | Weight       |
| 12          | 5   | 553            | 609          |
| 24          | 5   | 1042           | 1159         |
| 36          | 5   | 1531           | 1709         |
| 48          | 7.5 | 2020           | 2259         |
| 60          | 7.5 | 2509           | 2809         |
| 72          | 7.5 | 2998           | 3359         |
| 84          | 10  | 3487           | 3909         |
| 96          | 10  | 3976           | 4459         |
| 108         | 10  | 4465           | 5009         |
| 120         | 10  | 4954           | 5559         |
| 132         | 15  | 5443           | 6109         |
| 144         | 15  | 5932           | 6659         |

Std. conveyor and material is 61 lbs/ft., XX is 66 lbs/ft.

| HP  | Class II Drive | Weight |
|-----|----------------|--------|
| 5   | TA1107H        | 195    |
| 7.5 | TA1107H        | 195    |
| 10  | TA2115H        | 269    |
| 15  | TA2115H        | 269    |

### 16" U-trough 4800 BPH @ 131 RPM

| Unassembled |     | Std. Flighting | XX Flighting |
|-------------|-----|----------------|--------------|
| Length      | HP  | Weight         | Weight       |
| 12          | 5   | 780            | 882          |
| 24          | 5   | 1470           | 1674         |
| 36          | 7.5 | 2160           | 2466         |
| 48          | 10  | 2850           | 3258         |
| 60          | 15  | 3540           | 4050         |
| 72          | 15  | 4230           | 4842         |
| 84          | 15  | 4920           | 5634         |
| 96          | 20  | 5610           | 6426         |
| 108         | 20  | 6300           | 7218         |
| 120         | 25  | 6990           | 8010         |
| 132         | 25  | 7680           | 8802         |
| 144         | 25  | 8370           | 9594         |

Std. conveyor and material is 92 lbs/ft., XX is 100 lbs/ft.

| HP  | Class II Drive | Weight |
|-----|----------------|--------|
| 5   | TA1107H        | 195    |
| 7.5 | TA1107H        | 195    |
| 10  | TA2115H        | 269    |
| 15  | TA3203H        | 367    |
| 20  | TA3203H        | 367    |
| 25  | TA4207H        | 468    |

### 18" U-trough 6600 BPH @ 126 RPM

| Unassembled |     | Std. Flighting |
|-------------|-----|----------------|
| Length      | HP  | Weight         |
| 12          | 5   | 844            |
| 24          | 7.5 | 1602           |
| 36          | 10  | 2360           |
| 48          | 15  | 3118           |
| 60          | 15  | 3876           |
| 72          | 20  | 4634           |
| 84          | 20  | 5392           |
| 96          | 25  | 6150           |
| 108         | 25  | 6908           |
| 120         | 30  | 7666           |
| 132         | 30  | 8424           |
| 144         | 30  | 9182           |

Std. conveyor and material is 106 lbs/ft.

| HP  | Class II Drive | Weight |
|-----|----------------|--------|
| 5   | TA1107H        | 195    |
| 7.5 | TA1107H        | 195    |
| 10  | TA2115H        | 269    |
| 15  | TA3203H        | 367    |
| 20  | TA3203H        | 367    |
| 25  | TA4207H        | 468    |
| 30  | TA4207H        | 468    |

### 14" U-trough 3500 BPH @ 141 RPM

| Unassembled |     | Std. Flighting | XX Flighting |
|-------------|-----|----------------|--------------|
| Length      | HP  | Weight         | Weight       |
| 12          | 5   | 644            | 742          |
| 24          | 5   | 1220           | 1412         |
| 36          | 7.5 | 1796           | 2082         |
| 48          | 7.5 | 2372           | 2752         |
| 60          | 10  | 2948           | 3422         |
| 72          | 15  | 3524           | 4092         |
| 84          | 15  | 4100           | 4762         |
| 96          | 15  | 4676           | 5432         |
| 108         | 20  | 5252           | 6102         |
| 120         | 20  | 5828           | 6772         |
| 132         | 20  | 6404           | 7442         |
| 144         | 20  | 6980           | 8112         |

Std. conveyor and material is 75 lbs/ft., XX is 82 lbs/ft.

| HP  | Class II Drive | Weight |
|-----|----------------|--------|
| 5   | TA1107H        | 195    |
| 7.5 | TA1107H        | 195    |
| 10  | TA2115H        | 269    |
| 15  | TA3203H        | 367    |
| 20  | TA3203H        | 367    |

Listed specifications are based upon whole grains @ 15% moisture with a 45% trough fill. Motor requirements and capacity are based upon LEVEL conveyors. The capacity will vary on inclined conveyors and those handling all other materials. Riley Equipment is not responsible for the capacity of conveyors on an incline unless approved by our Engineering department.