

**Link-Belt®
Screw Conveyors**

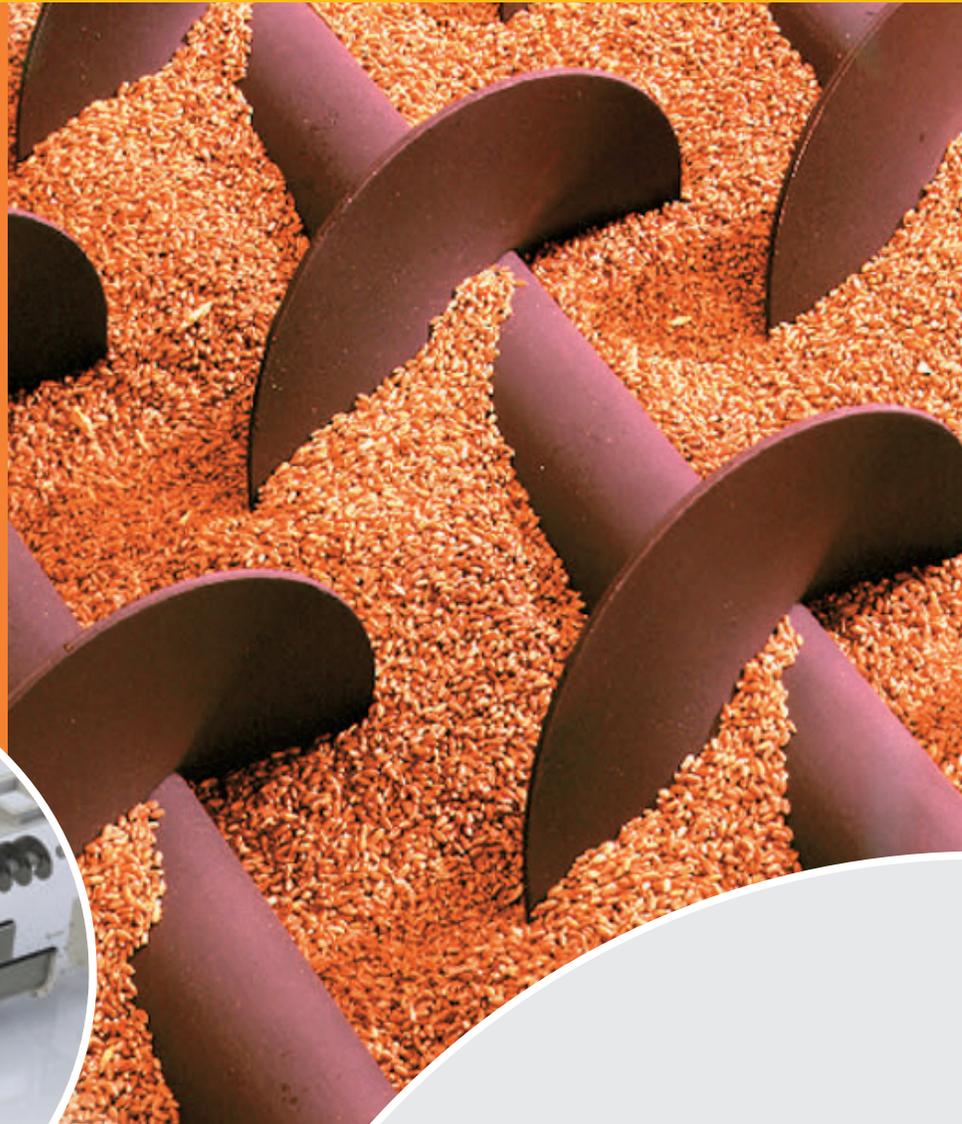


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Syntron Material Handling

Proven Engineered Products – Complete Material Handling Solutions

Let Syntron Material Handling's knowledgeable team help your business with conveying, feeding, screening, elevating, vibratory flow aids, and mining controls of bulk product. Whether optimizing existing systems or starting from the ground-up on new and customized plants or mines, our dedicated staff will provide you with the most efficient and cost-effective solutions.

An international leader for innovative solutions, Syntron Material Handling can improve the technology customers are already using. The Link-Belt® expertise and equipment have been instrumental in developing some of the world's largest belt conveyors. The Syntron® feeders are instrumental to supplying energy sources and material handling efforts across the globe.

While management leads the way, the real heartbeat of Syntron Material Handling is a team of employees that have taken idlers, feeders and material handling equipment to new levels of excellence. Many have fine-tuned their skills for more than 20, 30, 40 or even 50 years. Centering our entire operation in Slatton, MS allows us to maintain the highest Quality Control Standards and on-time deliveries. Our Quality Management System is certified to the ISO 9001:2015 standard. We are a charter member of CEMA, and active members of NSSGA, NMA, SME, FEMA, and PMMI. For all your Aggregate needs contact the leader... Syntron Material Handling. Moving the World with Link-Belt® and Syntron® Brands.



Quality Bulk Handling Equipment that Pays Its Way

Link-Belt® Screw Conveyors and Screw Feeders

Greek mathematician and physicist Archimedes is acknowledged as the inventor of the screw conveyor in 235-240 B.C., and essentially his design has not changed since then.

Syntron Material Handling and Link-Belt® added the new and innovative applications which make the Archimedian screw the indispensable tool it is. Plus, Syntron Material Handling's conveyor equipment specialists improved materials and fabrication techniques and added electricity as a power source in the 125 years we have specialized in manufacturing screw and conveyor components.

To the basic Archimedian screw Link-Belt® and Syntron Material Handling added conveyor systems and screw feeders, designed them for every conceivable application and manufactured them so well we have become the standard for the industry.

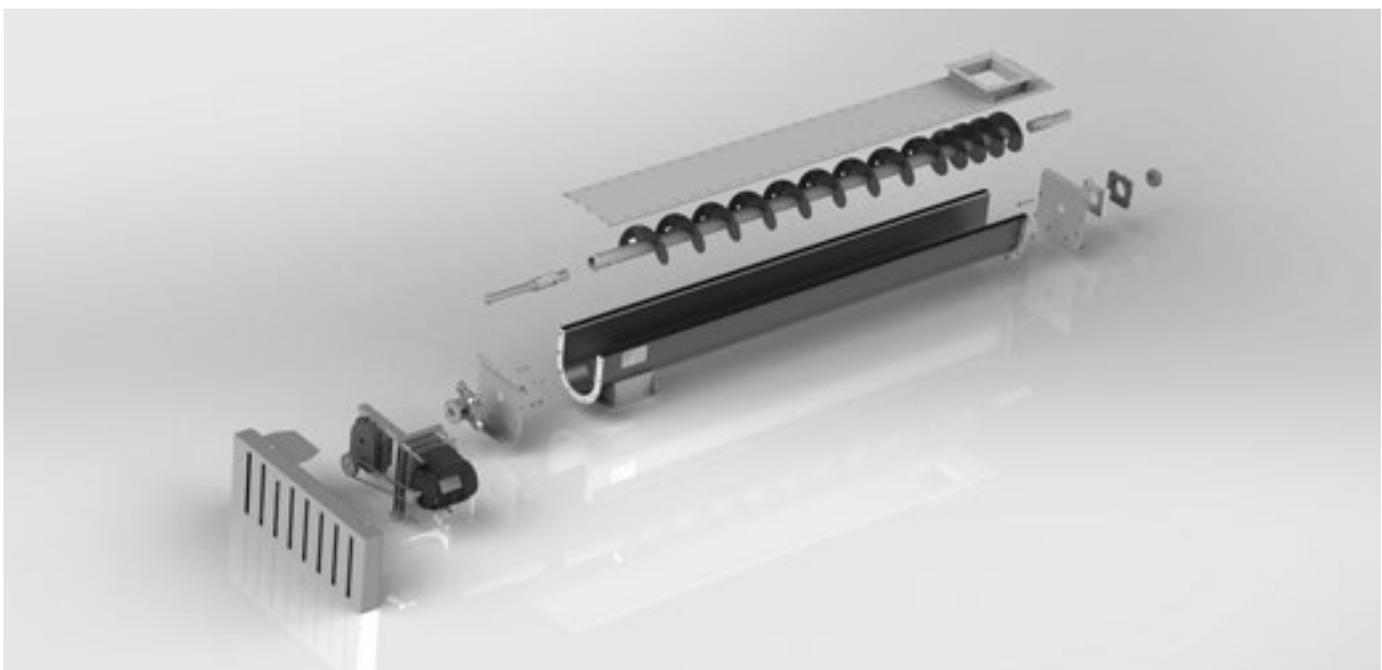
Application engineering is a major reason for the industry's wide acceptance of the Link-Belt® screw conveyor. Studied attention to detail during this phase eliminates costly installation and operation errors.

Close tolerance machining and fabrication in our state-of-the-art manufacturing facility assure equipment quality and performance.

Our ability to meet your needs with a broad selection of screw conveyors and components is important to you, plus your confidence that the equipment you purchase from Syntron Material Handling will earn its stripes and pay its own way, giving you a good return on your investment.

Link-Belt® Screw Conveyors serve modern industry in a wide variety of ways:

- Conveying • Distributing
- Collecting • Mixing • Heating
- Cooling • Elevating • Batching
- Blending • Aerating • Providing crystallization or coagulant action and more.



Unmatched versatility.



Syntron Material Handling is industry's largest supplier of screw conveyors, feeders and components. You'll find hard-working Link-Belt® Screw Conveyors in a broad range of applications, handling everything from alfalfa meal to zinc oxide-over 250 types of materials. And it doesn't matter whether the material is light or heavy, fine or coarse, granular or flaky, hot or cold, wet or dry, sluggish or free-flowing. Syntron Material Handling's Link-Belt® Screw Conveyors can handle it effectively and economically.

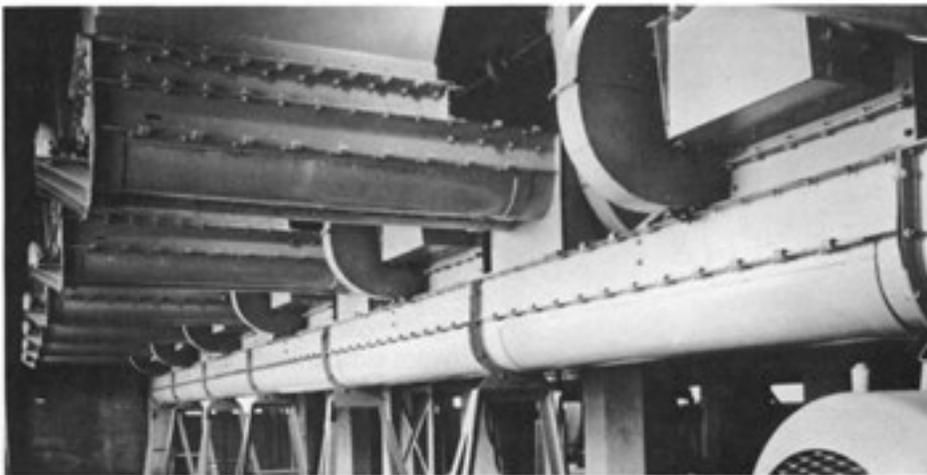


There is a wide selection of Link-Belt® Screw Conveyor types to choose from. We make a complete line of screw feeders, conveyor screws, troughs, trough ends, hangers, bearings, shafts, seals and drives.

Top Left: Granular feed supplement being conveyed into storage at a poultry processing facility.

Center Left: Helicoid flight conveyor screws perform efficiently on many snow thrower models.

Center Right: Twin 12-inch diameter screw conveyors with fully enclosed dust-tight troughs handling pulverized boiler fuel in power generating plant.



Bottom: Helicoid screw conveyors are essential components in this flour collecting system located in a large bakery.

Engineered for every type of service.



No one can match our ability to give you the right equipment for your application. Syntron Material Handling engineers pioneered the development of screw conveyors and components for the widest range of materials, purposes and applications. Whether the job involves light-duty service-conveying egg powder, for example-or severe operating conditions-like round-the-clock coal delivery to a power plant-we have the in-depth knowledge and experience to provide just what you need.

Link-Belt® Screw Conveyors are ruggedly built, accurately manufactured and performance proven. And our unequalled field experience is your assurance of the best in service and recommendations.

Clean, compact design saves space, simplifies installation.

Link-Belt® Screw Conveyors adapt readily to tight quarters and congested locations. No matter how many twists and turns your operation takes, there is a Link-Belt® space saving Screw Conveyor to fit. Our conveyors operate effectively in horizontal, vertical or inclined positions. Their compact design permits easy installation. And they're simple to support.

If you should need replacement parts, you can count on controlled-tolerance standardized parts that meet CEMA specifications. They're interchangeable for fast, easy assembly, and they don't require special tools.

So if space is at a premium, or if you want simple installation and maintenance for better on-line performance, dependable Link-Belt® Screw Conveyors are your best choice.



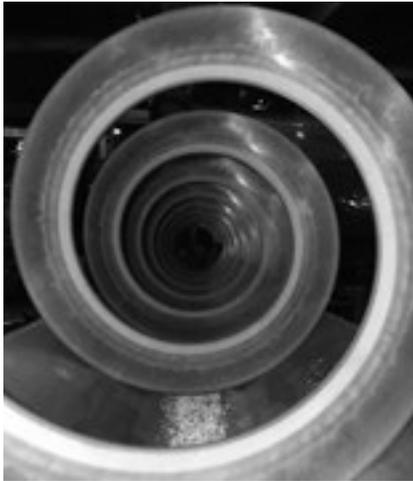
Top: Sugar is handled by twin screw feeders and helicoid conveyors in this large bakery. Drop-bottom troughs permit easy access and quick cleaning of all parts.

Center: Screw conveyor augers are used throughout this combine for gathering, conveying, elevating and distributing the harvest.

Bottom Left: Heavy-duty sectional flight conveyor augers installed on boring machine.

Bottom Right: Totally enclosed screw conveyors can assure a clean, safe operation.

Nearby service when you need it.



When you buy from Syntron Material Handling, you can rely on our factory-stocked equipment and parts. You keep downtime to a minimum because you get fast turnaround—from order entry to parts delivery at your plant or jobsite.

When it comes to bulk material handling, think Syntron Material Handling.

Syntron Material Handling has the uncommon ability to solve any screw conveying problem you might face. We've got the equipment selection experience and the customer service you expect to maintain and operate your facility.



Top Right - Over 40 feet of screw conveyors carry malt and rice from storage to mills in this factory.



Center Left - Typical installation provides close fitting gates and connections,



Center Right - Helicoid screw conveyor delivers 50 tons of coal per hour to boiler room bunkers.

Bottom - Granular shell lime distribution system at a large chemical facility.



Component Description

Screw conveyors are one of the oldest and simplest methods for moving bulk materials and consist primarily of a conveyor screw rotating in a stationary trough. Material placed in the trough is moved along its length by rotation of the screw which is supported by hanger bearings. Inlets, outlets, gates and other accessories control the material and its disposition.

Screw conveyors are compact, easily adapted to congested locations and can be mounted horizontal, vertical, and in inclined configurations. Their supports are simple and easily installed.

These versatile conveyors can be used to control the flow of material in pro-

cessing operations which depend upon accurate batching . . . or as a mixer, agitator or stirrer to mix and blend dry or fluid ingredients, provide crystallization or coagulant action, or maintain solutions in suspension.

Screw conveyors can be effectively sealed to prevent dust or fumes from escaping or dirt or moisture from entering. They can be jacketed to serve as a dryer or cooler, or furnished in a wide variety of materials to resist corrosion, abrasion or heat.

Screw conveyors are used as earth augers to dig post holes or to bore under highways for installation of culverts. They are also used extensively on combines,

threshing machines, hay bailers, fodder blowers and many other farm machines.

Screw feeders are modified screw conveyors used to control the flow of material at a constant or variable rate from track hoppers, storage hoppers, bins or tanks. They are suitable for handling a wide variety of materials ranging from fines to a combination of fines and lumps. Under many conditions, feeders are also used as a valve.

Screw feeders are totally enclosed, compact, simple in design and dust-tight. They are economical to install, operate and maintain.

Conveyor Screw

The conveyor screw is the rotating portion of a screw conveyor which imparts smooth and positive motion to the bulk material being conveyed. It consists of spiral

flighting mounted on a pipe and is made either right or left hand to suit the screw rotation and the desired direction of material travel.



Conveyor Screw with Drive Shaft

The conveyor drive shaft connects the conveyor screw to the driving unit and transmits rotary motion to the screw. Coupling bolts secure the drive shaft in the conveyor screw.



Conveyor Screw with Drive Shaft, End Shaft and Coupling

The conveyor drive shaft, end shaft and coupling support the conveyor screw sections and keep them in alignment. The end shaft is located at the end opposite the drive shaft. Couplings are used to connect successive conveyor screw

sections when more than one section is necessary to make up the total length of conveyor. The shafts and coupling are secured in the conveyor screws by coupling bolts.



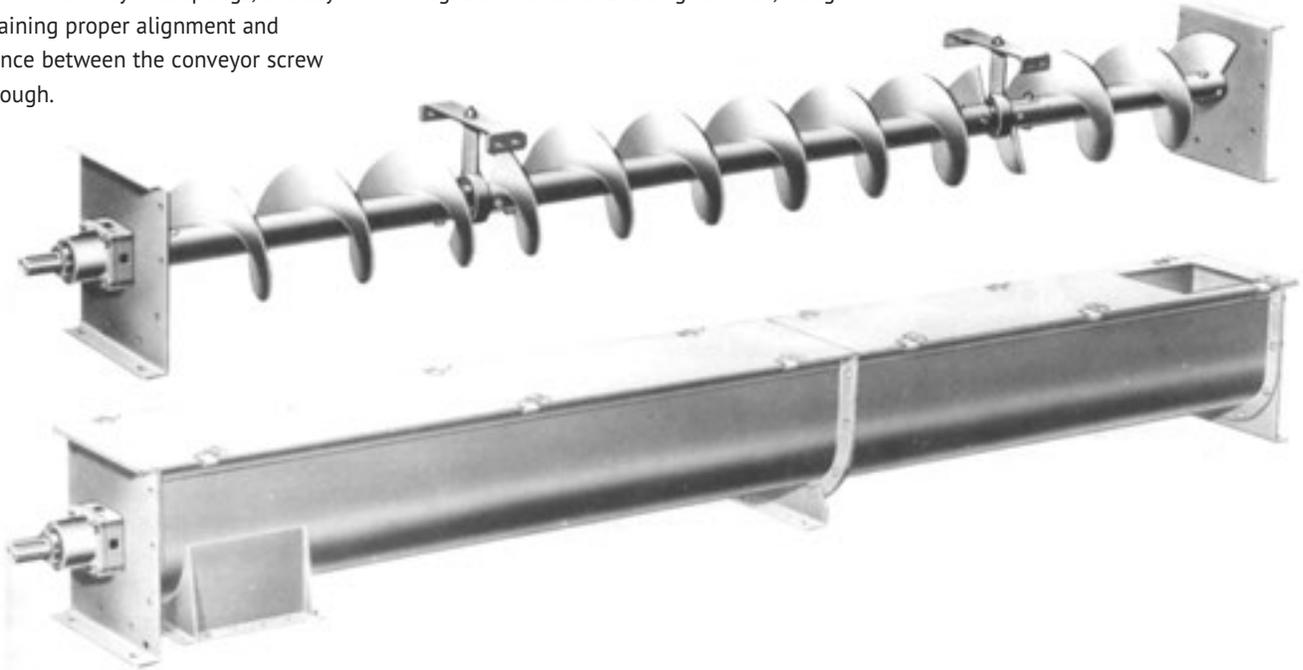
component description

Trough Ends and Hangers

The **trough ends** support the conveyor drive and end shafts while the hangers support the conveyor couplings, thereby maintaining proper alignment and clearance between the conveyor screw and trough.

To provide additional protection for the drive shaft and end shaft bearings, for or against the material being handled, trough

end seals are assembled between the flanged blocks and the trough end plates.



Conveyor Trough with Inlet Opening and Discharge Spout

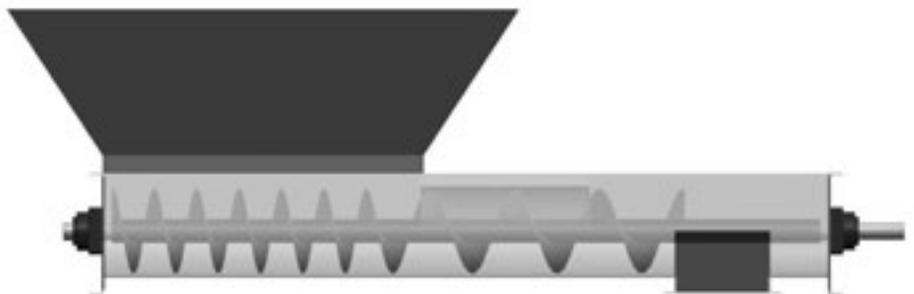
The **trough** is the enclosure in which the material is confined and guided in its movement. Trough end flanges preserve the contour of the trough, facilitate assembly of adjoining sections, and insure accurate alignment. Supporting feet at the trough joints or saddles located between the joints, support the intermediate trough sections.

Discharge spouts provide outlets for the material and direct its flow to bins or succeeding equipment- With more than one discharge point in a conveyor, selective control may be exercised by means of slide gates, made integral with the discharge spouts.

Trough covers with fasteners complete the conveyor enclosure. Material is fed into the conveyor through inlet openings in the cover.

Typical Screw Conveyor Complete With Drive

A **shaft mounted speed reducer** makes a simple and compact drive combination. The drive consists of a standard shaft-mounted speed reducer with adapter having a built-in seal and mounted on a steel plate trough end. A welded steel adjustable motor support bracket is rigidly mounted on the adapter and provides ample clearance over the trough end for easy trough cover removal.



component description

Conveyor Screws

Helicoid Flight Conveyor Screws

The helicoid flight conveyor screw is made of a helix, formed from a flat steel bar or coil strip and mounted on a pipe or shaft. The helix, formed by special rolling equipment to the required diameter, pitch and thickness, is a smooth, continuous one-piece flight.

By virtue of its one-piece construction, it possesses superior strength. The absence of laps, rivets or welds on the carrying face of the Flight promotes and maintains cleanliness and reduces wear. The rolling process effects a hardening and smoothing of the flight surface which increases resistance to wear and reduces friction and power consumption.

The flight is fastened to the pipe, or shaft, by intermittent or continuous welds and with or without formed steel end lugs. The pipe, of a size carefully selected for adequate torsional strength and resistance to excessive deflection, has internal collars at each end. These collars are permanently inserted and have appropriate inside diameters to accept coupling or end shafts.

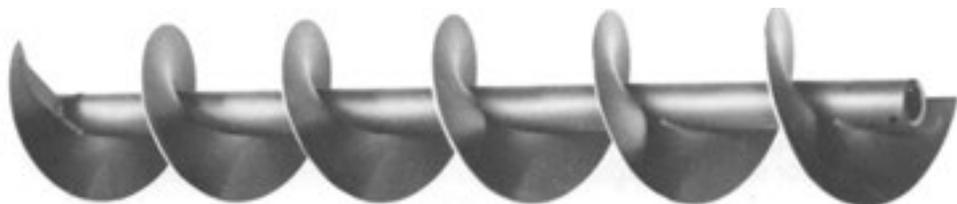
The assembled helicoid flight conveyor screw is solidly constructed and exceptionally sturdy, and its inherent balance permits operation at high speeds. Its distinctive characteristics contribute to maximum efficiency, durability and economy.

Helicoid flight conveyor screws are interchangeable with sectional flight conveyor screws of the same diameter and shaft size.

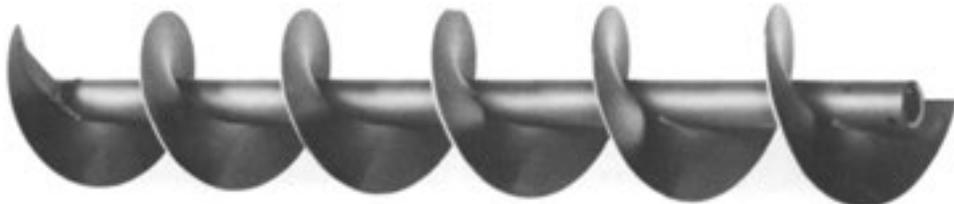
Helicoid flighting is made with regular pitch approximately equal to the diameter. It can also be furnished with other than regular pitch and in a wide range of diameters, thicknesses and lengths to meet the most exacting requirements.

For extremely heavy duty the flighting may be continuously welded to the pipe or shaft on one or both sides.

Consult Syntron Material Handling for information on special requirements.



Helicoid flight conveyor screw



Sectional flight conveyor screw

Sectional Flight Conveyor Screws

Sectional flight conveyor screws are made of individual flights, each blanked from a flat steel plate and formed into a helix. The flights are butt welded together and fastened to the pipe or shaft by intermittent or continuous welds and with or without formed steel end lugs. Sectional flights are formed with regular pitch approximately equal to the diameter.

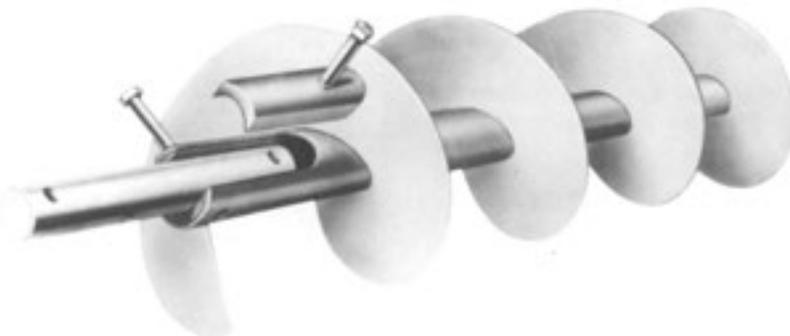
Sectional flight conveyor screws are interchangeable with helicoid flight conveyor screws of the same diameter and shaft size.

Sectional flights afford flexibility in choice of diameters, pitches and thicknesses. The

sectional flight conveyor screw is a sturdily constructed assembly, carefully designed to render efficient, economical and lasting service.

When desired, sectional flights may be lap welded together, or flights may be continuously welded to the pipe on one or both sides, thus providing exceptionally rugged construction for the most severe conveying applications.

Many variations of sectional flight conveyor screws can be furnished to meet specific needs. Some of these are listed on the following pages.



Quik-Link Conveyor Screws

The Quik-Link conveyor screw is designed for easy removal from the conveyor trough. Each section of screw is provided with a Quik-Link key located at one end of the pipe. By removing this key, a conveyor

screw section and coupling with hanger can be quickly and conveniently disassembled without disturbing other components.

Quik-Link conveyor screws are available in both the helicoid flight and sectional flight construction.

component description

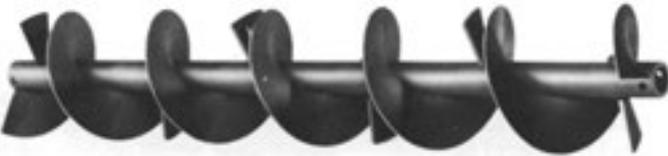
Conveyor Screws



Cut flight conveyor screws have notches cut in the periphery of either helicoid or sectional flights. These notches supplement the conveying action with a moderate mixing action. They are used for light, fine, granular or flaky materials.



Ribbon flight conveyor screws consist of continuous helical flighting formed from steel bar and secured to the pipe by supporting lugs. They are used for conveying sticky, gummy or viscous substances, or where the material tends to stick to flighting at the pipe.



Conveyor screws with paddles have paddles spaced at intervals and set to partially oppose the forward flow, to provide a moderate mixing or stirring of materials being conveyed. Paddles are adjustable and may be set at any angle to produce the desired degree of agitation. They are used for light or medium weight, fine, granular or flaky materials.



Cut and folded flight conveyor screws provide folded segments which act as lifting vanes to produce a cascading effect. This promotes agitation and aeration, resulting in better mixing. They are used for light or medium weight, fine, granular or flaky materials.



Short pitch conveyor screws are of regular construction except that the pitch of the flights is reduced. They are recommended for use in inclined conveyors of 20 degrees slope and over, including vertical conveyors and are extensively use as feeder screws. They retard flushing of materials of a fluid nature.



Cut flight conveyor screws with paddles have paddles mounted at intervals and set to counteract the flow of materials, considerably increases the agitation and mixing action produced by the cut flights.



Paddle conveyor screws have formed steel blades mounted on rod shanks inserted through the pipe. Conveying action can be controlled by adjusting the angle of the paddles. They are used for mixing, blending or stirring dry or fluid materials.

component description

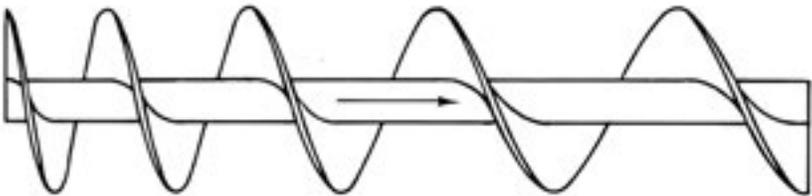
Conveyor Screws



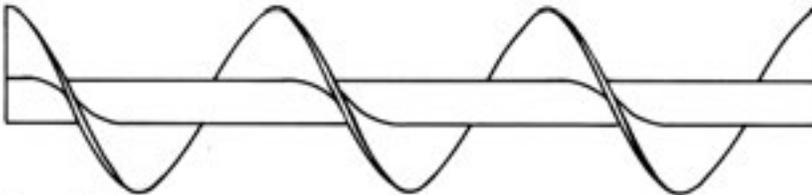
Tapering flight conveyor screw



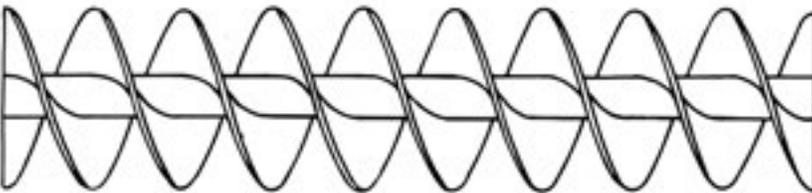
Stepped diameter conveyor screw



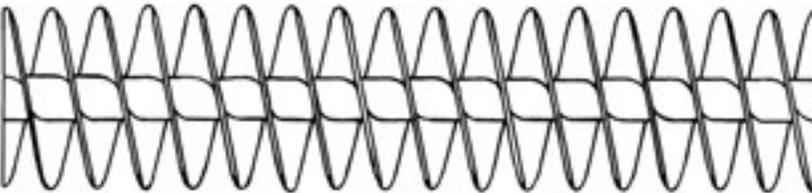
Stepped pitch conveyor screw



Long pitch conveyor screw



Double flight conveyor screw



Double flight short pitch conveyor screw

Tapering flight conveyor screws

are frequently used as feeder screws for handling friable lumpy material from bins or hoppers and also to draw the material uniformly from the entire length of the feed opening.

Stepped diameter conveyor screws

consist of flights of different diameters, each with its regular pitch, mounted in tandem on one pipe or shaft. They are frequently used as feeder screws, with the smaller diameter located under bins or hoppers to regulate the flow of material.

Stepped pitch conveyor screws

are screws with succeeding single or groups of sectional flights increasing in pitch and are used as feeder screws to draw fine free-flowing materials uniformly from the entire length of the feed opening.

Long pitch conveyor screws

are occasionally used as agitators for liquids or rapid conveying of very free-flowing materials.

Double flight conveyor screws

of regular pitch promote a smooth gentle flow and discharge of certain materials.

Double flight short pitch conveyor screws assure more accurate regulation of feed and flow in screw feeders and effectively deter flushing action of fluid materials.

component description

Conveyor Screws

Ribbon Flight Conveyor Screws

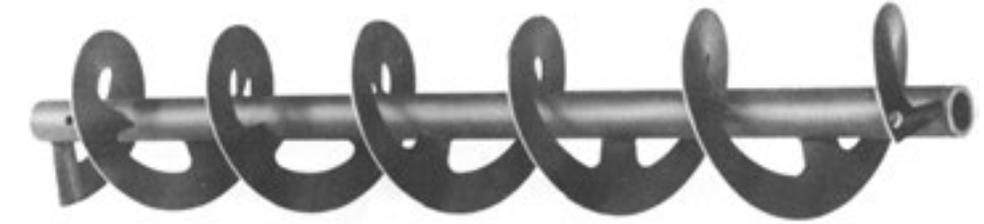
consist of sectional flights, butt welded together to form a continuous helix. Flights are secured to the pipe by supporting lugs.

Variations of diameter, pitch, flight width or thickness can be furnished. Also, these screws can be furnished with either continuous or sectional flights, lap or butt welded together.

Ribbon flight conveyor screws are the solution to most conveying problems encountered in the handling of sticky, gummy or viscous materials. The tendency of materials of this nature to adhere and build up at the juncture of solid flight with the pipe is overcome by the open construction of the ribbon flight. Raw sugar, molasses, asphalt, hot tar, sticky feed mixes, and similar products are typical of the many materials successfully handled by ribbon flight conveyor screws.

Providing the periphery of ribbon flights with a beveled edge improves operation and reduces power consumption when handling materials which tend to pack or trowel between flights and trough. Consequently, beveled edge ribbon flight conveyor screws are usually subjected to extremely heavy loads, and construction is accordingly heavy and rugged. The ribbon flights are supported on the pipe or shaft by steel lugs, generously proportioned to resist bending.

Where the material handled moves virtually en masse, there is but very slight difference in capacity between ribbon and solid flight conveyor screws of the same size. Mixing action without supplementary means of agitation is negligible.



Ribbon flight conveyor screw



Ribbon flight conveyor screw with paddles

Ribbon Flight Conveyor Screw with Paddles

To provide moderate mixing or stirring of materials being conveyed, paddles can be furnished, spaced at intervals and set to partially oppose the forward flow. Paddles are adjustable and may be set at any angle to produce the desired degree of agitation. They are used for light or medium weight, fine, granular or flaky materials.

Multiple Ribbon Flight Conveyor Screws

This type of screw consists of two or more ribbon flights of different diameters and opposite hand, mounted one with in the other on the same pipe or shaft by rigid supporting lugs. Material is moved forward by one flight and backward by the other, thereby including positive and thorough mixing.

Abrasion-Resistant Conveyor Screws

The particularly severe service encountered when conveying abrasive materials has prompted many attempts to overcome excessive wear on flights. Several successful methods have been developed.

Each of these methods offers specific advantages depending on the nature of the material handled and the application. For a careful analysis and recommendation, consult Syntron Material Handling.

Hard surfacing by application of a special compound, by arc or torch, to the flight periphery or face, or both, provides an exceptionally hard surface at the points of greatest wear.

For severe applications, conveyors with high alumina ceramic tile bonded to the flight periphery or face are also available.

Corrosion-Resistant Conveyor Screws

Corrosion is manifested in so many different ways that no one choice of material will suit all requirements. To withstand the effects of corrosion encountered in many fields of industry, conveyor screws are fabricated of stainless steel, Monel metal, aluminum, and other materials.

Galvanizing and other coating methods have proved effective under mildly corrosive conditions. Vulcanized or bonded rubber covering of the entire conveyor is frequently satisfactory for resistance to extremely corrosive action.

Heat-Resistant Conveyor Screws

Conveyor screws for high temperature applications are made of many of the available heat-resistant alloys. Several of the stainless steels and other high-chrome alloys are particularly suitable for this service.

component description

Drive Shafts, End Shafts and Couplings

The **conveyor drive shaft** delivers the driving power, and is therefore carefully designed of quality steel of the proper characteristics to provide adequate torque, bending and shear strength, and with closely controlled tolerances for correct bearing clearances.

For conveyors of unusual length or for severely heavy loads, alloy steels, heat-treated high carbon steels or 3-bolt connections, are used.

Jig-drilled coupling bolt holes and accurately cut keyways contribute to ease of assembly.

The **conveyor end shaft** supports the last section of conveyor screw and is furnished with close tolerances for proper operation in end bearing. Coupling bolt holes are jig drilled for interchangeability and ease of assembly.

Conveyor couplings connect and space adjoining sections of conveyor screw and transmit rotation.

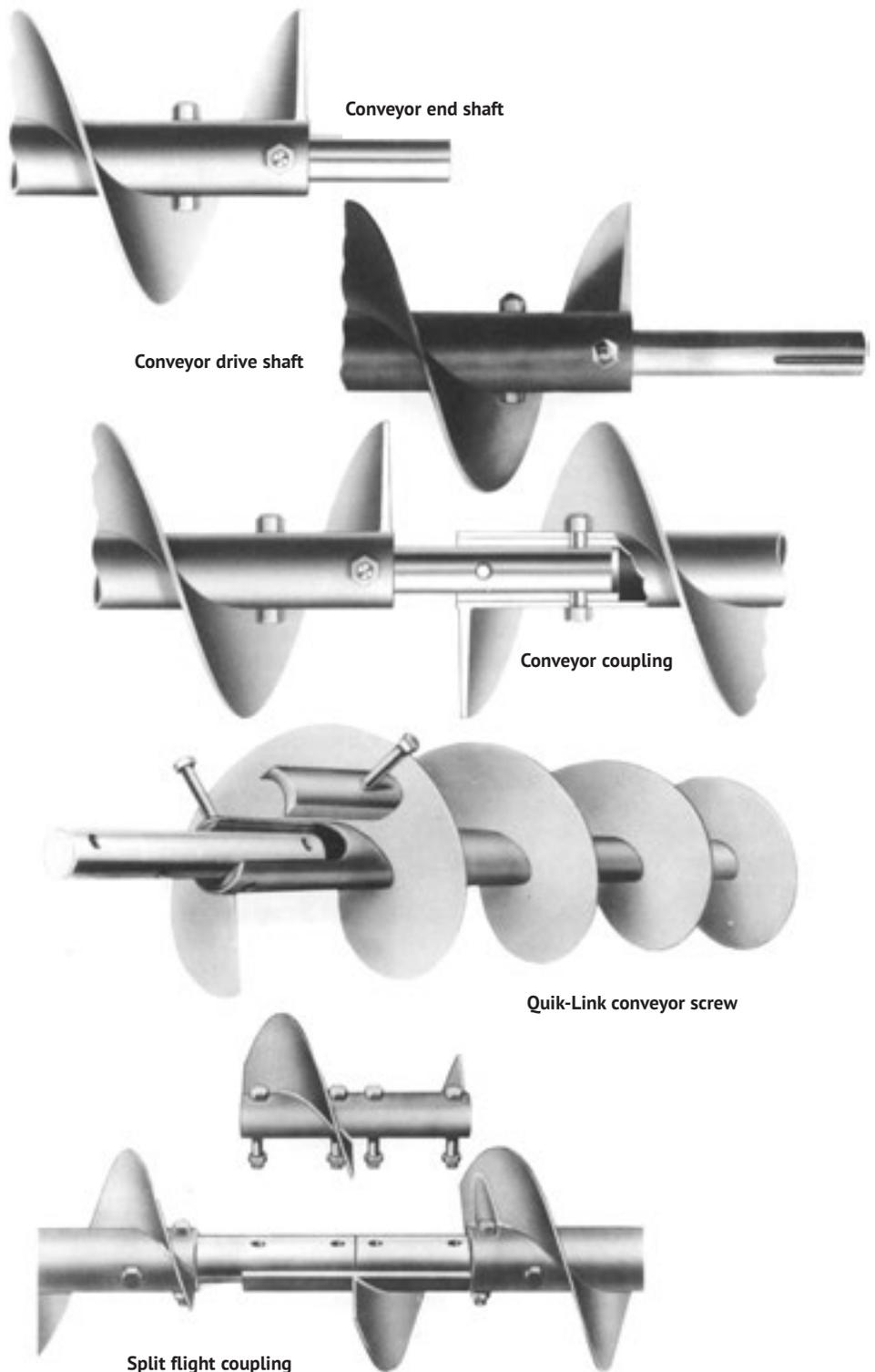
Carefully selected steels, with accurate heat-treating or hard surfacing when required, insure ample strength and resistance to wear for the kind of service specified.

For conveyors of unusual length or for severely heavy loads, alloy steels, heat-treated high carbon steels or 3-bolt connections are used.

Close tolerances on diameters and jig-drilled coupling bolt holes assure interchangeability and ease of assembly.

Quik-Link conveyor screws provide an easy means for the quick removal of a conveyor screw section and coupling with hanger without disturbing other components. Regular couplings are used with these screws.

Split flight couplings permit installing or removing individual conveyor screws without disturbing adjoining sections. With split flight couplings installed on both sides of each hanger, conveyor screws can be removed without disturbing the hangers. The Link-Belt® split flight coupling is sturdily constructed and jig-drilled for coupling bolts.



component description

Hangers

No. 216 hangers



No. 216 hangers have formed steel box frames of superior strength and rigidity and are excellent for heavy service. They are mounted within the conveyor trough. Mounting holes are slotted parallel with the conveyor to permit adjustment and alignment. These hangers are normally furnished with hard iron, babbitted, bronze, oil impregnated wood or molded fabric bearings, but can also be furnished with special bearings.

No. 216F hangers



No. 216F hangers are similar in construction to No. 216 hangers except they are designed to mount in, flared trough.

No. 220 hangers



No. 220 hangers are similar in construction to No. 226 hangers, except they are mounted on top of the trough flanges. Mounting holes are slotted parallel with the conveyor to provide adjustment and alignment. These hangers are normally furnished with hard iron, babbitted, bronze, oil impregnated wood or molded fabric bearings, but can also be furnished with special bearings.

No. 226 hangers



No. 226 hangers have a rigid, formed-steel box frame with clearance for passage of material in large volume. They are mounted within the conveyor trough. Mounting holes are slotted parallel with the conveyor to permit adjustment and alignment. These hangers are normally furnished with hard iron, babbitted, bronze, oil impregnated wood or molded fabric bearings, but can also be furnished with special bearings.

No. 270 ball bearing hangers



No. 270 ball bearing hangers have self-aligning ball bearings. The frame is a box-member top-bar with a pipe stem support for the bearing. The bearing is factory adjusted for the proper length from the top-bar and locked with a sealant and a lock nut. The frame is designed for mounting inside the trough and slotted mounting holes parallel to the conveyor permit adjustment and alignment.

No. 316 hangers



No. 316 hangers have formed steel frames of superior strength and rigidity and are excellent for heavy service. They are mounted within the conveyor trough, are self-adjusting and will accommodate operating variations which may exist between the conveyor screw and trough. Mounting holes are slotted parallel with the conveyor to permit adjustment and alignment. These hangers are normally furnished with hard iron, babbitted, bronze, oil impregnated wood or molded fabric bearings, but can also be furnished with special bearings.

No. 326 hangers



No. 326 hangers have a rigid, formed steel frame with clearance for passage of material in large volume. They are mounted within the conveyor trough, are self-adjusting and will accommodate operating variations which may exist between the conveyor screw and the trough. Mounting holes are slotted parallel with the conveyor to permit adjustment and alignment. These hangers are normally furnished with hard iron, babbitted, bronze, oil impregnated wood or molded fabric bearings, but can also be furnished with special bearings.

component description

Trough End Plates

Trough end plates for either U-trough or flared trough are made of heavy gauge steel plate with the top flanged to support the trough cover. They are furnished with or without supporting feet.

Trough end plates can be made of stainless steel or nonferrous metals for corrosive or high temperature applications. They can also be furnished with protective coatings, such as galvanizing.

They may be equipped with either sleeve, bolt, or roller bearing flange blocks, or with the addition of a mounting shelf, pillow block bearings.

Drive Shaft Trough Ends are of the double ball bearing and double roller bearing types. Each consists of a rigid shaft, operating in double bearings and designed to accommodate both radial and thrust loads. The radial or overhung load is usually a chain drive connected to a power source. Since the bearings will also accept thrust loads in either direction, the need for auxiliary thrusts is eliminated.

Drive shaft trough ends with double ball bearings consist of double ball bearing flanged blocks rigidly attached to heavy steel plate trough ends for either U-troughs or flared troughs. The gray iron housings are of one-piece construction and are precision machined for accurate alignment. Effective seals are provided in the flanged blocks to exclude dirt and moisture and retain lubricant.

Drive shaft trough ends with double roller bearings consist of heavy duty double roller bearing flanged blocks mounted by means of machined surfaces into extra heavy steel plate trough ends for either U-troughs or flared troughs. The gray iron housings are accurately machined and fitted with roller bearings of high radial and thrust capacity. The blocks have effective seals and are arranged for easy lubrication.

Countershaft trough ends are used on screw conveyors where application of right angle drives is necessary due to space limitations, interference of adjoining equipment or for better service and maintenance accessibility.

Application of countershaft trough ends permits drive installations alongside, above or below the conveyor and permits using horizontal drives for inclined conveyors. A common drive for two conveyors intersecting at right angles, or a battery of parallel conveyors driven from a common source, can be readily arranged.



Trough end with feet



Trough end without feet



Tubular trough end



Flared trough end



Trough end with double roller bearing

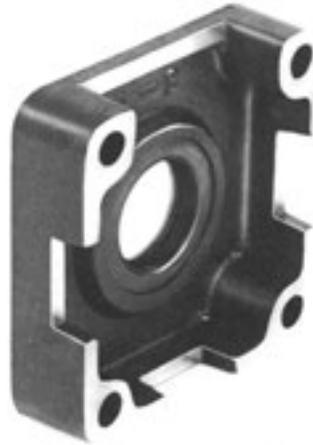
component description

Seal Glands, Trough End Seals and Trough End Bearings

Seal glands and trough end seals are used to provide additional bearing protection against dust or fumes from within the trough and prevent entrance, along the shaft, of dirt, moisture or lubricant.

The trough end seal housings are made of gray iron and are designed for assembly between babbitted, bronze or ball bearing flanged blocks and the trough end plates. They can be provided with lip-type seals for effective protection for or against the materials being handled, with felt seals when handling dusty materials, or with waste packing when handling abrasive materials.

Seal glands consist of gray iron, split flanges into which packing materials are compressed against machined steel collars. They are used internally on all trough ends except the outboard bearing type on which they are externally mounted. These seals provide maximum protection for or against the materials being handled.



Trough end seal



**Internal mounting
seal gland**

Trough end bearings

Babbitted and bronze bearing flanged blocks are made with one-piece gray iron housings. Babbitted bearing blocks are for general use where loads and speeds are moderate. Bronze bearing blocks are used where heavy bearing pressures, impact loads or temperature conditions are involved.

Ball bearing flanged blocks consist of single row, deep groove, self-aligning ball bearings, which are effectively sealed, mounted in one-piece gray iron housings. Spring locking collars with two set screws hold the bearings firmly on the shafts.



**Ball bearing
Flanged block**

component description

Troughs

The trough not only confines and guides the flow of material, but also serves as the housing in which all operating components are supported and held together in their proper functional relationship. Accuracy in manufacturing and inherent strength to maintain this accuracy are therefore, essential.

Link-Belt® designs, and manufacturing methods, are constantly being improved to provide these qualities to the fullest extent while at the same time affecting economies in weight and space requirements.

Flanged trough - By forming the top flanges integrally with the trough sides from a single steel sheet, adequate strength and rigidity is obtained without superfluous bulk or weight. Steel connecting flanges, securely welded at each end in special welding fixtures to assure square, true ends, facilitate assembly, insure proper alignment and preserve the contour of the trough.

Angle Flanged trough - This trough is identical in construction to the flanged trough, except that top flanges are obtained by securely welding structural steel angles to the trough.

Flared trough - This trough is of conventional construction except that trough sides are flared outward to afford a wider top opening. This results in improved feed and conveying action with sticky materials or materials which are not entirely free flowing. It is customarily used with ribbon flight conveyor screws.

Corrosive or high temperature applications may require the specific qualities that make stainless steel and non-ferrous metals well adapted to these services. In general, any type of trough that can be fabricated of mild steel can also be made of stainless steel or aluminum, brass, bronze, copper, Monel metal, nickel, etc. For resistance to corrosion there are numerous protective coatings that are applied to steel troughs and covers. Galvanizing, tinning, chrome plating, etc., are all effective for certain applications. Vulcanized or bonded rubber coatings resist abrasion and corrosion.



Flanged trough



Angle flanged trough



Flared trough

component description

Troughs

Drop bottom troughs are equipped with a drop bottom usually hinged, held in place by spring clamps of various types for ready access to trough interior, conveyor screws and hangers.

This design facilitates quick, thorough, and frequent cleaning of the trough, screw and other parts and is particularly useful to combat infestation and promote sanitation.

Channel side troughs are made with separate detachable trough bottoms, bolted or clamped to formed or rolled steel channels. The channels may be of any reasonable length to span widely spaced supports. Trough bottoms are made in lengths up to 12 feet.

This trough is occasionally selected for ease of replacement of trough bottoms subject to unusually severe abrasive or corrosive wear.



Drop bottom trough



Channel side trough

Trough Support

Supporting feet are of formed steel for use with end flanges and provide a convenient means of aligning and supporting conveyors from floors, and supporting structures.

Supporting saddles are used when location of support points does not coincide with the spacing of joint flanges or when troughs with butt strapped connections are used.



Support feet



Support saddle

component description

Trough Covers

Covers are used for protection of operating personnel, dust control or protection for or against the material being handled. When required, protective seals can be furnished between the covers and troughs. Covers are made in three general types: plain, semi-flanged and flanged.

Plain covers consist of flat steel sheets and can be furnished with spring clamps, screw clamps or bolts.

Semiflanged covers are flanged 30 degrees along the sides and provided with spring clamps attached to the top side of the cover. These covers can also be furnished with screw clamps or bolts.

Flanged covers have right angle flanges along the sides to provide a stiffer cover for more convenient handling. They are normally attached to the trough with screw clamps or bolts.

Hip Roof covers are peaked to form a longitudinal ridge. They are normally furnished for use in outdoor applications because of their ability to shed water.

Shrouds are used in U-trough sections of screw feeders to decrease the clearance between the cover and feeder screw to obtain proper feed regulation.



Plain Cover



Semiflanged Cover



Flanged Cover



Shroud

component description

Trough Discharge Spouts and Gates

Discharge spouts and gates afford the means for discharging material from the trough and for connection to succeeding equipment to which material is delivered. Gates provide for selective control of multiple spouts.

All spouts and gates are of welded steel construction with connecting flanges punched with accurately spaced holes for interchangeability and ease of assembly.

Spouts and gates can be fabricated of stainless steel and nonferrous metals. Spouts of special design can be furnished to accommodate unusual conditions.

Plain discharge openings are cut in the bottom of the trough at the desired location to provide free discharge of material. They are used for delivering to open or closed storage or similar applications.

Discharge Spouts are welded in place when furnished with a complete conveyor. They are furnished in thicknesses proportioned for the size and thickness of trough.

Flush end discharge spouts are furnished welded in place on flanged or angle flanged trough. They are furnished in thicknesses proportioned for the size and thickness of the trough.

Hand Slide Gates are made to attach to discharge spouts and can be operated from any one of the four sides, provided there is sufficient clearance for the gate in its open position.

Rack and Pinion slide gates have cut tooth racks welded to the side-plates and actuated by cut tooth pinions mounted on pinion shafts operated by hand wheels or chain wheels. These are available with either flat slide plates or curved slide plates.

Air Operated gates are high quality units designed for low-friction performance in applications requiring frequent gate operation. These gates are built to accept a flange-faced air cylinder and have a roller mounted slide plate operating in a formed steel housing. The cylinder can be furnished with the gate or supplied by the user for field installation. No air piping or controls are provided with these gates.

Slide gates, either hand or rack and pinion operated, may be installed in practically all applications for operation either parallel or at right angles to take conveyor axis. Rack and pinion operated gates may be furnished with chain wheels and chains for remote control. Pinion shafts may be extended to accommodate various operating arrangements.

Plain discharge opening



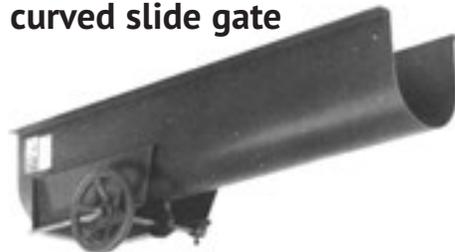
Discharge Spout



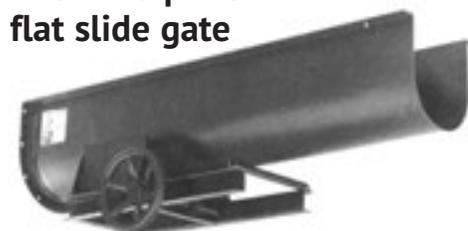
Flush end discharge spout



Rack and pinion curved slide gate



Rack and pinion flat slide gate



Technical Data

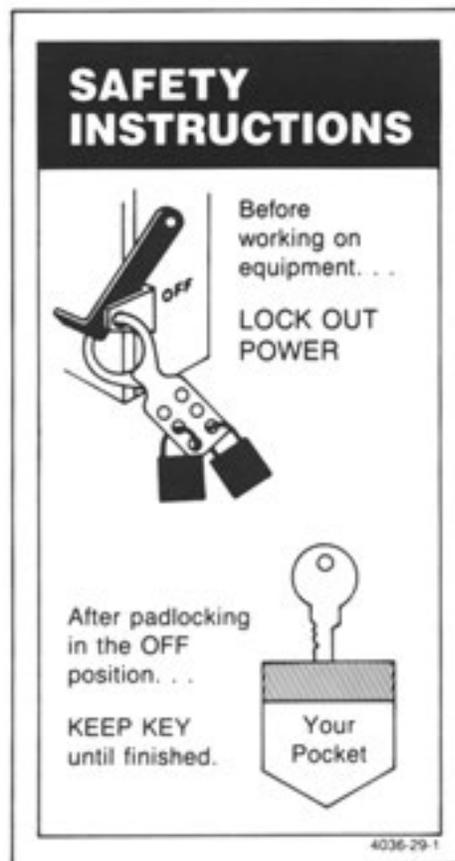
The Link-Belt® screw conveyor layout, engineering and component selection information in this section is provided to assist you in the selection of the proper conveyor components for your particular material handling requirement. It has been compiled during the many years of experience designing numerous and varied screw conveyor installations, and includes detailed information on all Link-Belt® standard screw conveyor components and accessories.

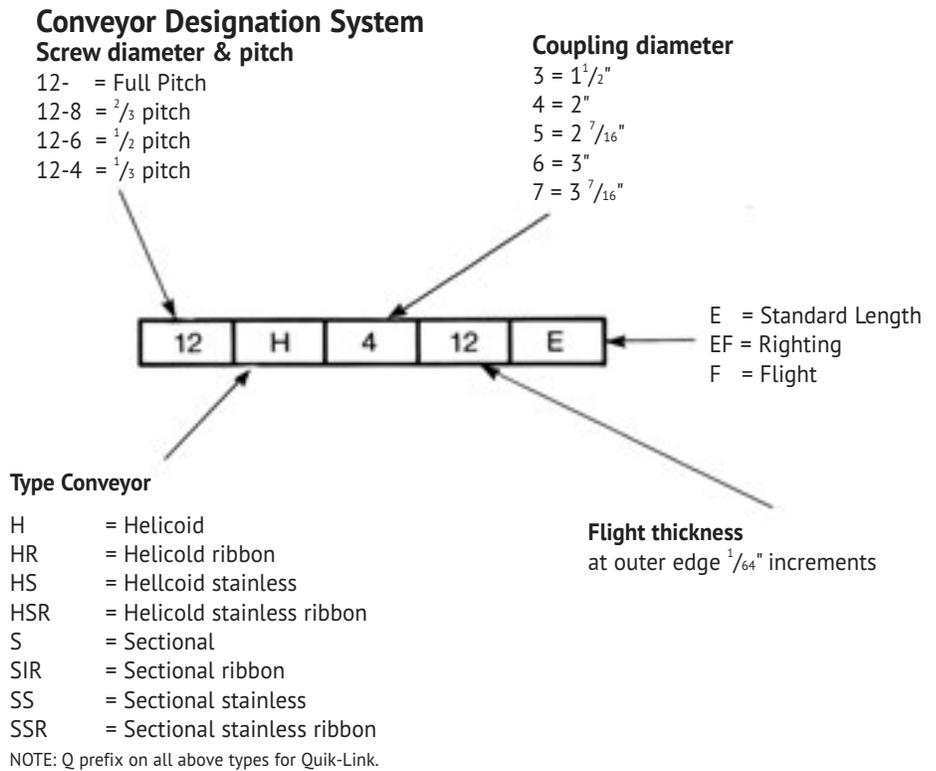
The data and formulas presented permit easy selection of the necessary components for handling materials under normal operating conditions by horizontal screw conveyors and screw feeders.

Where unusual applications or severe operating conditions are a factor or where there is doubt concerning the correct selection, contact Syntron Material Handling, Tupelo, MS to assist you with additional information.

CAUTION: Link-Belt® Screw Conveyors and components must be installed, operated and maintained in accordance with Syntron Material Handling Service Instructions. Failure to follow these instructions can result in serious personal injury, property damage or both.

Service Instructions are available online at www.syntronmh.com



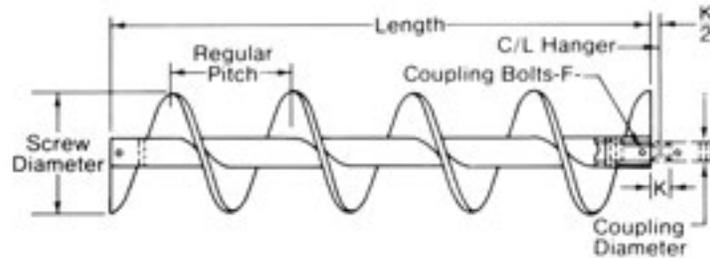


Helicoid Flight and Sectional Flight Screws – Comparison Table .

Screw Diameter, Inches	Coupling Diameter, Inches	Nominal Pipe Size Inches (¹)	Helicoid Flight			Sectional Flight	
			Conveyor Screw Size Designation	Thickness of Flight, Inches		Conveyor Screw Size Designation	Thickness of Flight, Inches
				Inner Edge	Outer Edge		
6	1½	2	6H304	¼	⅜	6S307	12 ga.
	1½	2	6H308	¼	⅜	6S309	10 ga.
	1½	2	6H312	¾	⅜	6S312	⅜
9	1½	2	9H306	⅜	⅜	9S307	12 ga.
	2	2½	9H406	⅜	⅜	9S407	12 ga.
	1½	2	9H312	¾	⅜	9S312	⅜
	2	2½	9H412	¾	⅜	9S412	⅜
	2	2½	9H414	⅜	⅜	9S416	¼
10	1½	2	10H306	⅜	⅜	10S309	10 ga.
	2	2½	10H412	¾	⅜	10S412	⅜
12	2	2½	12H408	¼	¼	12S409	10 ga.
	2⅜	3	12H508	¼	¼	12S509	10 ga.
	2	2½	12H412	¾	⅜	12S412	⅜
	2⅜	3	12H512	¾	⅜	12S512	⅜
	3	3½	12H614	⅜	⅜	12S616	¼
14	2⅜	3	14H508	¼	¼	14S509	10 ga.
	3	3½	14H614	⅜	⅜	14S616	¼
16	3	3½	16H610	⅜	⅜	16S609	10 ga.
	3	4(²)	16H614	⅜	⅜	16S616	¼
18	3	3½	18H610	⅜	⅜	18S609	10 ga.

(¹) Schedule 40
 (²) 3½" for 16S616

component selection

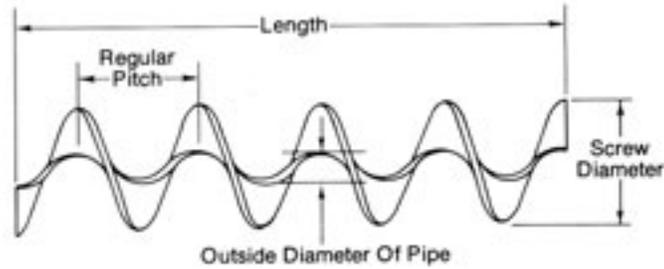


Helicoid Flight Conveyor Screw

Helicoid Flight Conveyor Screws are made of a continuous one-piece helix fastened to a pipe with spaced intermittent welds. Steel lugs are welded to pipe and flight at both ends, except on 4-inch size.

Helicoid Flight Conveyor Screws															
Screw Diameter, Inches	Coupling Diameter, Inches	Conveyor Screw Number	Part Numbers		Length, Feet and Inches	Average Weight, Pounds		Maximum Horsepower at 100 rpm	Nominal Pipe Diameter, Inches		Thickness of Flight, Inches		Pitch Inches	F Inches	K Inches
			Left Hand	Right Hand		Per Section	Per Foot		Inside	Outside	Inner Edge	Outer Edge			
4	1	4H204-E	171-85-A	171-85-B	9-10½	32	3.2	1.5	1¼	1¼	12 ga.	⅜	4	¾	1½
	1	4H206-E	171-85-C	171-85-D	9-10½	38	3.9	1.5	1¼	1¼	⅜	⅜	4	¾	1½
6	1½	6H304-E	171-85-E	171-85-F	9-10	51	5.2	5	2	2¼	⅜	⅜	6	½	2
	1½	6H308-E	171-85-G	171-85-H	9-10	66	6.7	5	2	2¼	¼	⅜	6	½	2
	1½	6H312-E	171-85-J	171-85-K	9-10	85	8.6	5	2	2¼	⅜	⅜	6	½	2
9	1½	9H306-E	171-85-L	171-85-M	9-10	67	6.8	5	2	2¼	⅜	⅜	9	½	2
	1½	9H312-E	171-85-N	171-85-P	9-10	103	10	5	2	2¼	⅜	⅜	9	½	2
	2	9H406-E	171-85-R	171-85-S	9-10	89	9.1	10	2½	2¼	⅜	⅜	9	¾	2
	2	9H412-E	171-85-T	171-85-U	9-10	123	13	10	2½	2¼	⅜	⅜	9	¾	2
10	2	9H414-E	171-85-V	171-85-W	9-10	135	14	10	2½	2¼	⅜	⅜	9	¾	2
	1½	10H306-E	171-85-X	171-85-Y	9-10	70	7.1	5	2	2¼	⅜	⅜	10	½	2
	2	10H412-E	171-85-Z	171-85-AA	9-10	133	14	10	2½	2¼	⅜	⅜	10	¾	2
12	2	12H408-E	171-85-AB	171-85-AC	11-10	144	12	10	2½	2¼	¼	⅜	12	¾	2
	2	12H412-E	171-85-AD	171-85-AE	11-10	176	15	10	2½	2¼	⅜	⅜	12	¾	2
	2⅞	12H508-E	171-85-AF	171-85-AG	11-9	167	14	15	3	3½	¼	⅜	12	¾	3
	2⅞	12H512-E	171-85-AH	171-85-AJ	11-9	201	17	15	3	3½	⅜	⅜	12	¾	3
	3	12H614-E	171-85-AK	171-85-AL	11-9	240	20	25	3½	4	⅜	⅜	12	¾	3
14	2⅞	14H508-E	171-85-AM	171-85-AN	11-9	176	15	15	3	3½	¼	⅜	14	¾	3
	3	14H614-E	171-85-AP	171-85-AR	11-9	245	21	25	3½	4	⅜	⅜	14	¾	3
16	3	16H610-E	171-85-AS	171-85-AT	11-9	218	19	25	3½	4	⅜	⅜	16	¾	3
	3	16H614-E	171-85-AU	171-85-AV	11-9	300	26	25	4	4½	⅜	⅜	16	¾	3

component selection

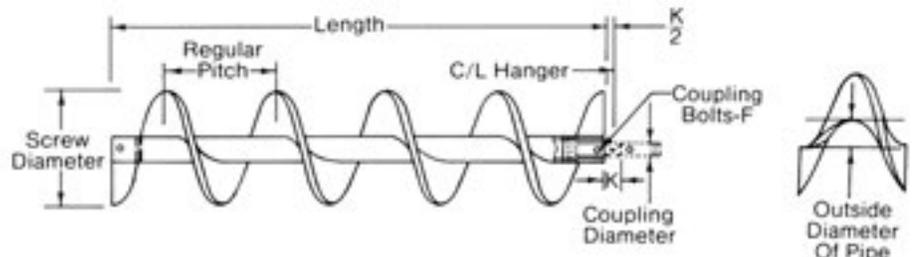


Helicoid Flight

Helicoid Flighting is manufactured in a continuous one-piece helix of the desired diameter, pitch and thickness. The helicoid flight is tapered in cross section, with the thickness at the inner edge about twice the thickness at the outer edge,

Helicoid Flighting										
Fighting Diameter, Inches	Inside Diameter, Inches	Conveyor Number	Part Numbers		Length Feet and Inches	Average Weight Pounds		Thickness of Flight, Inches		Pitch Inches
			Left Hand	Right Hand		Per Section	Per Foot	Inner Edge	Outer Edge	
4	1 $\frac{1}{2}$	4H204-EF	168-36-3	168-36-4	9-10 $\frac{1}{2}$	8.4	.85	12 ga.	$\frac{1}{16}$	4
	1 $\frac{1}{2}$	4H206-EF	168-36-7	168-36-8	9-10 $\frac{1}{2}$	14	1.4	$\frac{3}{16}$	$\frac{3}{32}$	4
6	2 $\frac{1}{2}$	6H304-EF	168-36-11	168-36-12	9-10	15	1.5	$\frac{1}{8}$	$\frac{1}{16}$	6
	2 $\frac{1}{2}$	6H308-EF	168-36-15	168-36-16	9-10	29	3.0	$\frac{1}{8}$	$\frac{1}{8}$	6
	2 $\frac{1}{2}$	6H312-EF	168-36-19	168-36-20	9-10	49	5.0	$\frac{1}{8}$	$\frac{3}{16}$	6
9	2 $\frac{1}{2}$	9H306-EF	168-36-27	168-36-28	9-10	31	3.2	$\frac{3}{16}$	$\frac{3}{32}$	9
	2 $\frac{1}{2}$	9H312-EF	168-36-31	168-36-32	9-10	67	6.8	$\frac{1}{8}$	$\frac{3}{16}$	9
	2 $\frac{1}{2}$	9H406-EF	168-36-35	168-36-36	9-10	31	3.2	$\frac{3}{16}$	$\frac{3}{32}$	9
	2 $\frac{1}{2}$	9H412-EF	168-36-39	168-36-40	9-10	66	6.7	$\frac{1}{8}$	$\frac{3}{16}$	9
10	2 $\frac{1}{2}$	9H414-EF	168-36-43	168-36-44	9-10	78	7.9	$\frac{1}{8}$	$\frac{3}{32}$	9
	2 $\frac{1}{2}$	10H306-EF	168-36-47	168-36-48	9-10	33	3.4	$\frac{3}{16}$	$\frac{3}{32}$	10
12	2 $\frac{1}{2}$	10H412-EF	168-36-51	168-36-52	9-10	75	7.6	$\frac{1}{8}$	$\frac{3}{16}$	10
	2 $\frac{1}{2}$	12H408-EF	168-36-59	168-36-60	11-10	70	5.9	$\frac{1}{8}$	$\frac{1}{8}$	12
	2 $\frac{1}{2}$	12H412-EF	168-36-63	168-36-64	11-10	102	8.6	$\frac{1}{8}$	$\frac{3}{16}$	12
	3 $\frac{1}{2}$	12H508-EF	168-36-67	168-36-68	11-9	68	5.8	$\frac{1}{8}$	$\frac{1}{8}$	12
	3 $\frac{1}{2}$	12H512-EF	168-36-71	168-36-72	11-9	102	8.7	$\frac{1}{8}$	$\frac{3}{16}$	12
14	4	12H614-EF	168-36-75	168-36-76	11-9	123	10	$\frac{3}{16}$	$\frac{3}{32}$	12
	3 $\frac{1}{2}$	14H508-EF	168-36-79	168-36-80	11-9	78	6.6	$\frac{1}{8}$	$\frac{1}{8}$	14
16	4	14H614-EF	168-36-83	168-36-84	11-9	128	11	$\frac{3}{16}$	$\frac{3}{32}$	14
	4	16H610-EF	168-36-87	168-36-88	11-9	101	8.6	$\frac{3}{16}$	$\frac{3}{32}$	16
	4 $\frac{1}{2}$	16H614-EF	168-36-91	168-36-92	11-9	153	13	$\frac{3}{16}$	$\frac{3}{32}$	16

component selection



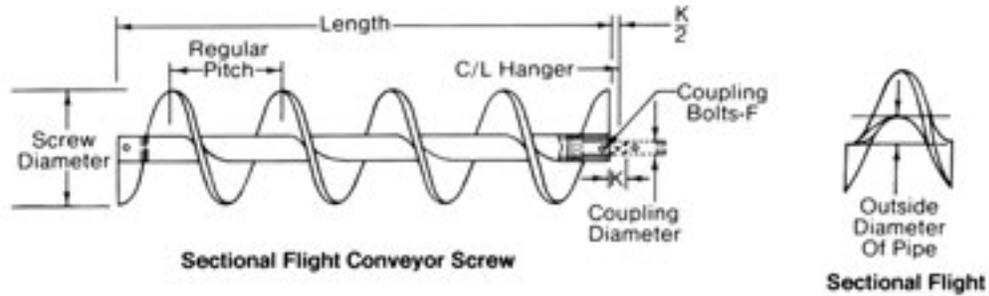
Sectional Flight Conveyor Screw

Sectional Flight

Sectional Flight Conveyor Screws consist of individual flights formed into a helix, then butt welded together and fastened to a pipe or shaft with spaced intermittent welds, Steel lugs are welded to pipe and flight at both ends, except on regular sectional flight screw sizes larger than 16-inch diameter. Both ends of the pipe have permanent internal collars with inside diameters to accept couplings, drive shafts or end shafts.

Sectional Flight Conveyor Screws														
Screw Diameter, Inches	Coupling Diameter, Inches	Conveyor Screw Number	Part Numbers		Length, Feet and Inches	Average Weight, Pounds		Maximum Horsepower at 100 rpm	Nominal Pipe Diameter, Inches		Thickness of Flight Inches	Pitch Inches	F	K
			Left Hand	Right Hand		Per Section	Per Foot		Inside	Outside			Inches	
6	1½	6S307-E	172-135-C	172-135-D	9-10	54	5.5	5	2	2½	12 ga.	6	½	2
	1½	6S309-E	172-135-E	172-135-F	9-10	57	5.8	5	2	2½	10 ga.	6	½	2
	1½	6S312-E	172-135-G	172-135-H	9-10	64	6.5	5	2	2½	⅞	6	½	2
	1½	6S316-E	172-135-J	172-135-K	9-10	73	7.4	5	2	2½	¼	6	½	2
9	1½	9S307-E	172-135-N	172-135-P	9-10	66	6.7	5	2	2½	12 ga.	9	½	2
	1½	9S309-E	172-135-R	172-135-S	9-10	73	7.4	5	2	2½	10 ga.	9	½	2
	1½	9S312-E	172-135-T	172-135-U	9-10	84	8.5	5	2	2½	⅞	9	½	2
	1½	9S316-E	172-139-A	172-139-B	9-10	100	10	5	2	2½	¼	9	½	2
	2	9S407-E	172-135-Y	172-135-Z	9-10	86	8.8	10	2½	2½	12 ga.	9	¾	2
	2	9S409-E	172-135-AA	172-135-AB	9-10	93	9.5	10	2½	2½	10 ga.	9	¾	2
	2	9S412-E	172-135-AC	172-135-AD	9-10	99	10	10	2½	2½	⅞	9	¾	2
10	1½	10S309-E	172-135-AL	172-135-AM	9-10	80	8.1	5	2	2½	10 ga.	10	½	2
	1½	10S312-E	172-139-C	172-139-D	9-10	93	9.5	5	2	2½	⅞	10	½	2
	1½	10S316-E	172-139-E	172-139-F	9-10	112	11	5	2	2½	¼	10	½	2
	2	10S412-E	172-135-AR	172-135-AS	9-10	112	11	10	2½	2½	⅞	10	¾	2
	2	10S416-E	172-135-AT	172-135-AU	9-10	130	13	10	2½	2½	¼	10	¾	2
12	2	12S409-E	172-135-AX	172-135-AY	11-10	130	11	10	2½	2½	10 ga.	12	¾	2
	2	12S412-E	172-135-AZ	172-135-BA	11-10	150	13	10	2½	2½	⅞	12	¾	2
	2	12S416-E	172-135-BB	172-135-BC	11-10	177	15	10	2½	2½	¼	12	¾	2
	2	12S424-E	172-139-G	172-139-H	11-10	229	19	10	2½	2½	¾	12	¾	2
	2⅞	12S509-E	172-135-BF	172-135-BG	11-9	151	13	15	3	3½	10 ga.	12	¾	3
	2⅞	12S512-E	172-135-BH	172-135-BJ	11-9	167	14	15	3	3½	⅞	12	¾	3
	2⅞	12S516-E	172-135-BK	172-135-BL	11-9	192	16	15	3	3½	¼	12	¾	3
	2⅞	12S524-E	172-139-J	172-139-K	11-9	240	20	15	3	3½	¾	12	¾	3
	3	12S612-E	172-135-BM	172-135-BN	11-9	180	15	25	3½	4	⅞	12	¾	3
	3	12S616-E	172-136-A	172-136-B	11-9	203	17	25	3½	4	¼	12	¾	3
3	12S624-E	172-136-C	172-136-D	11-9	248	21	25	3½	4	¾	12	¾	3	

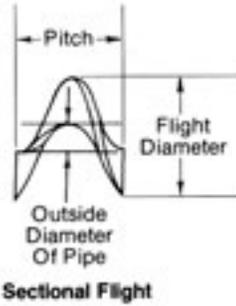
component selection



Sectional Flight Conveyor Screws (Continued)

Screw Diameter, Inches	Coupling Diameter, Inches	Conveyor Screw Number	Part Numbers		Length, Feet and Inches	Average Weight, Pounds		Maximum Horsepower at 100 rpm	Nominal Pipe Diameter, Inches		Thickness of Flight, Inches	Pitch, Inches	F, K	
			Left Hand	Right Hand		Per Section	Per Foot		Inside	Outside			Inches	Inches
14	2 ⁷ / ₁₆	14S509-E	172-136-G	172-136-H	11-9	157	13	15	3	3 ¹ / ₂	10 ga.	14	¹ / ₈	3
	2 ⁷ / ₁₆	14S512-E	172-136-J	172-136-K	11-9	177	15	15	3	3 ¹ / ₂	³ / ₁₆	14	¹ / ₈	3
	2 ⁷ / ₁₆	14S516-E	172-139-N	172-139-P	11-9	206	18	15	3	3 ¹ / ₂	¹ / ₄	14	¹ / ₈	3
	3	14S612-E	172-136-L	172-136-M	11-9	192	16	25	3 ¹ / ₂	4	³ / ₁₆	14	¹ / ₈	3
	3	14S616-E	172-136-N	172-136-P	11-9	221	19	25	3 ¹ / ₂	4	¹ / ₄	14	¹ / ₈	3
16	3	14S624-E	172-136-R	172-136-S	11-9	273	23	25	3 ¹ / ₂	4	³ / ₁₆	14	¹ / ₈	3
	3	16S609-E	172-136-T	172-136-U	11-9	184	16	25	3 ¹ / ₂	4	10 ga.	16	¹ / ₈	3
	3	16S612-E	172-136-V	172-136-W	11-9	207	18	25	3 ¹ / ₂	4	³ / ₁₆	16	¹ / ₈	3
	3	16S616-E	172-136-X	172-136-Y	11-9	240	20	25	3 ¹ / ₂	4	¹ / ₄	16	¹ / ₈	3
	3	16S624-E	172-136-Z	172-136-AA	11-9	303	26	25	3 ¹ / ₂	4	³ / ₁₆	16	¹ / ₈	3
18	3	16S632-E	172-136-AB	172-136-AC	11-9	365	31	25	3 ¹ / ₂	4	¹ / ₂	16	¹ / ₈	3
	3	18S612-E	172-136-AF	172-136-AG	11-9	228	19	25	3 ¹ / ₂	4	³ / ₁₆	18	¹ / ₈	3
	3	18S616-E	172-136-AH	172-136-AJ	11-9	269	23	25	3 ¹ / ₂	4	¹ / ₄	18	¹ / ₈	3
	3	18S624-E	172-136-AK	172-136-AL	11-9	346	29	25	3 ¹ / ₂	4	³ / ₁₆	18	¹ / ₈	3
	3	18S632-E	172-136-AM	172-136-AN	11-9	423	36	25	3 ¹ / ₂	4	¹ / ₂	18	¹ / ₈	3
	3 ⁷ / ₁₆	18S712-E	172-139-R	172-139-S	11-8	247	21	41	4	4 ¹ / ₂	³ / ₁₆	18	⁷ / ₁₆	4
	3 ⁷ / ₁₆	18S716-E	172-136-AP	172-136-AR	11-8	286	25	41	4	4 ¹ / ₂	¹ / ₄	18	⁷ / ₁₆	4
20	3 ⁷ / ₁₆	18S724-E	172-136-AS	172-136-AT	11-8	359	31	41	4	4 ¹ / ₂	³ / ₁₆	18	⁷ / ₁₆	4
	3 ⁷ / ₁₆	18S732-E	172-139-T	172-139-U	11-8	432	37	41	4	4 ¹ / ₂	¹ / ₂	18	⁷ / ₁₆	4
	3	20S612-E	172-136-AU	172-136-AV	11-9	234	20	25	3 ¹ / ₂	4	³ / ₁₆	20	¹ / ₈	3
	3	20S616-E	172-136-AW	172-136-AX	11-9	277	24	25	3 ¹ / ₂	4	¹ / ₄	20	¹ / ₈	3
	3	20S624-E	172-136-AY	172-136-AZ	11-9	357	30	25	3 ¹ / ₂	4	³ / ₁₆	20	¹ / ₈	3
	3	20S632-E	172-139-V	172-139-W	11-9	438	37	25	3 ¹ / ₂	4	¹ / ₂	20	¹ / ₈	3
	3 ⁷ / ₁₆	20S712-E	172-139-X	172-139-Y	11-8	259	22	41	4	4 ¹ / ₂	³ / ₁₆	20	⁷ / ₁₆	4
24	3 ⁷ / ₁₆	20S716-E	172-139-Z	172-139-AA	11-8	301	26	41	4	4 ¹ / ₂	¹ / ₄	20	⁷ / ₁₆	4
	3 ⁷ / ₁₆	20S724-E	172-136-BA	172-136-BB	11-8	382	33	41	4	4 ¹ / ₂	³ / ₁₆	20	⁷ / ₁₆	4
	3 ⁷ / ₁₆	20S732-E	172-139-AB	172-139-AC	11-8	463	40	41	4	4 ¹ / ₂	¹ / ₂	20	⁷ / ₁₆	4
	3 ⁷ / ₁₆	24S712-E	172-136-BC	172-136-BD	11-8	294	25	41	4	4 ¹ / ₂	³ / ₁₆	24	⁷ / ₁₆	4
	3 ⁷ / ₁₆	24S716-E	172-136-BE	172-136-BF	11-8	349	30	41	4	4 ¹ / ₂	¹ / ₄	24	⁷ / ₁₆	4
	3 ⁷ / ₁₆	24S724-E	172-136-BG	172-136-BH	11-8	453	39	41	4	4 ¹ / ₂	³ / ₁₆	24	⁷ / ₁₆	4
	3 ⁷ / ₁₆	24S732-E	172-136-BJ	172-136-BK	11-8	558	48	41	4	4 ¹ / ₂	¹ / ₂	24	⁷ / ₁₆	4

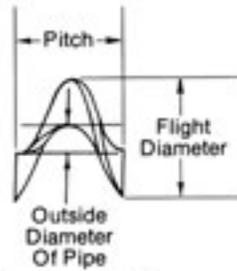
component selection



Sectional Flights are individual flights formed into a spiral or helix of the desired diameter and pitch, butt welded together to form a continuous conveyor screw.

Sectional Flighting								
Flight Diameter, Inches	Inside Diameter, Inches	Flight Number	Part Numbers		Length Inches	Average Weight, Pounds	Thickness Inches	Pitch Inches
			Left Hand	Right Hand				
6	2 $\frac{3}{8}$	6S307-F	169-9-101	169-9-102	7 $\frac{3}{4}$.90	12 ga.	6
	2 $\frac{3}{8}$	6S309-F	169-9-9	169-9-10	7 $\frac{3}{4}$	1.2	10 ga.	6
	2 $\frac{3}{8}$	6S312-F	169-9-11	169-9-12	7 $\frac{1}{2}$	1.5	$\frac{3}{16}$	6
	2 $\frac{3}{8}$	6S316-F	169-9-13	169-9-14	7 $\frac{1}{2}$	2.1	$\frac{1}{4}$	6
9	2 $\frac{3}{8}$	9S307-F	169-9-103	169-9-104	10 $\frac{1}{2}$	2.3	12 ga.	9
	2 $\frac{3}{8}$	9S309-F	169-9-17	169-9-18	10 $\frac{1}{2}$	2.9	10 ga.	9
	2 $\frac{3}{8}$	9S312-F	169-9-19	169-9-20	10 $\frac{1}{2}$	3.9	$\frac{3}{16}$	9
	2 $\frac{3}{8}$	9S316-F	169-9-123	169-9-124	10 $\frac{1}{2}$	5.3	$\frac{1}{4}$	9
	2 $\frac{3}{8}$	9S407-F	169-9-105	169-9-106	10 $\frac{1}{2}$	2.2	12 ga.	9
	2 $\frac{3}{8}$	9S409-F	169-9-23	169-9-24	10 $\frac{1}{2}$	2.8	10 ga.	9
	2 $\frac{3}{8}$	9S412-F	169-9-25	169-9-26	10 $\frac{1}{2}$	3.8	$\frac{3}{16}$	9
10	2 $\frac{3}{8}$	9S416-F	169-9-27	169-9-28	10 $\frac{1}{2}$	5.1	$\frac{1}{4}$	9
	2 $\frac{3}{8}$	10S309-F	169-9-33	169-9-34	11	3.7	10 ga.	10
	2 $\frac{3}{8}$	10S312-F	169-9-137	169-9-138	11	4.9	$\frac{3}{16}$	10
	2 $\frac{3}{8}$	10S316-F	169-9-127	169-9-128	11	6.7	$\frac{1}{4}$	10
	2 $\frac{3}{8}$	10S412-F	169-9-39	169-9-40	11 $\frac{1}{2}$	4.8	$\frac{3}{16}$	10
12	2 $\frac{3}{8}$	10S416-F	169-9-41	169-9-42	11 $\frac{1}{2}$	6.5	$\frac{1}{4}$	10
	2 $\frac{3}{8}$	12S409-F	169-9-107	169-9-108	13 $\frac{1}{2}$	5.4	10 ga.	12
	2 $\frac{3}{8}$	12S412-F	169-9-45	169-9-46	13 $\frac{1}{2}$	7.1	$\frac{3}{16}$	12
	2 $\frac{3}{8}$	12S416-F	169-9-47	169-9-48	13 $\frac{1}{2}$	9.7	$\frac{1}{4}$	12
	2 $\frac{3}{8}$	12S424-F	169-9-139	169-9-140	13 $\frac{1}{2}$	15	$\frac{3}{8}$	12
	3 $\frac{1}{2}$	12S509-F	169-9-109	169-9-110	13 $\frac{1}{2}$	5.1	10 ga.	12
	3 $\frac{1}{2}$	12S512-F	169-9-51	169-9-52	13 $\frac{1}{2}$	6.8	$\frac{3}{16}$	12
	3 $\frac{1}{2}$	12S516-F	169-9-121	169-9-122	13 $\frac{1}{2}$	9.2	$\frac{1}{4}$	12
	3 $\frac{1}{2}$	12S524-F	169-9-129	169-9-130	13 $\frac{1}{2}$	14	$\frac{3}{8}$	12
	4	12S612-F	169-9-53	169-9-54	14 $\frac{1}{2}$	6.6	$\frac{3}{16}$	12
14	4	12S616-F	169-9-55	169-9-56	14 $\frac{1}{2}$	8.9	$\frac{1}{4}$	12
	4	12S624-F	169-9-57	169-9-58	14 $\frac{1}{2}$	13	$\frac{3}{8}$	12
	3 $\frac{1}{2}$	14S509-F	169-9-111	169-9-112	17	7.3	10 ga.	14
	3 $\frac{1}{2}$	14S512-F	169-9-61	169-9-62	17	9.7	$\frac{3}{16}$	14
	3 $\frac{1}{2}$	14S516-F	169-9-143	169-9-144	17	13	$\frac{1}{4}$	14
	4	14S612-F	169-9-63	169-9-64	17	9.3	$\frac{3}{16}$	14
	4	14S616-F	169-9-65	169-9-66	17	13	$\frac{1}{4}$	14
	4	14S624-F	169-9-67	169-9-68	17	19	$\frac{3}{8}$	14

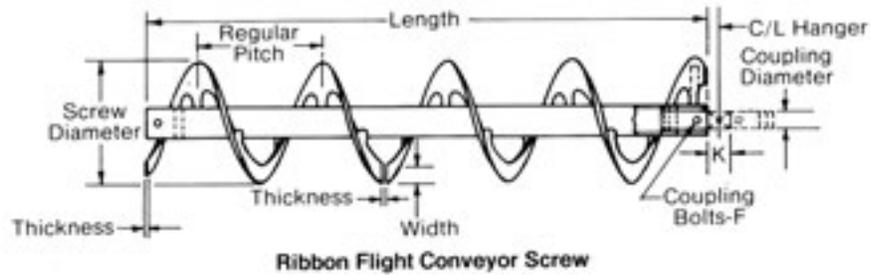
component selection



Sectional Flight

Sectional Flighting (Continued)								
Flight Diameter, inches	Inside Diameter, inches	Flight Number	Part Numbers		Length inches	Average Weight, Pounds	Thickness inches	Pitch inches
			Left Hand	Right Hand				
16	4	16S609-F	169-9-69	169-9-70	19 1/4	9.4	10 ga.	16
	4	16S612-F	169-9-71	169-9-72	19 1/4	13	3/16	16
	4	16S616-F	169-9-73	169-9-74	19 1/4	17	1/4	16
	4	16S624-F	169-9-75	169-9-76	19 1/4	26	3/8	16
	4	16S632-F	169-9-113	169-9-114	19 1/4	34	1/2	16
18	4	18S612-F	169-9-79	169-9-80	20 1/2	16	3/16	18
	4	18S616-F	169-9-81	169-9-82	20 1/2	22	1/4	18
	4	18S624-F	169-9-83	169-9-84	20 1/2	33	3/8	18
	4	18S632-F	169-9-115	169-9-116	20 1/2	45	1/2	18
	4 1/2	18S712-F	169-9-145	169-9-146	21	16	3/16	18
	4 1/2	18S716-F	169-9-97	169-9-98	21	22	1/4	18
	4 1/2	18S724-F	169-9-99	169-9-100	21	33	3/8	18
20	4 1/2	18S732-F	169-9-147	169-9-148	21	44	1/2	18
	4	20S612-F	169-9-85	169-9-86	24 1/4	20	3/16	20
	4	20S616-F	169-9-87	169-9-88	24 1/4	28	1/4	20
	4	20S624-F	169-9-117	169-9-118	24 1/4	42	3/8	20
	4	20S632-F	169-9-149	169-9-150	24 1/4	56	1/2	20
	4 1/2	20S712-F	169-9-151	169-9-152	24	20	3/16	20
	4 1/2	20S716-F	169-9-153	169-9-154	24	28	1/4	20
	4 1/2	20S724-F	169-9-89	169-9-90	24	41	3/8	20
24	4 1/2	20S732-F	169-9-155	169-9-156	24	55	1/2	20
	4 1/2	24S712-F	169-9-91	169-9-92	27	30	3/16	24
	4 1/2	24S716-F	169-9-93	169-9-94	27	41	1/4	24
	4 1/2	24S724-F	169-9-95	169-9-96	27	61	3/8	24
	4 1/2	24S732-F	169-9-119	169-9-120	27	82	1/2	24

component selection



Ribbon flight conveyor screws consist of sectional flights, butt welded together to form a continuous helix. Flights are secured to the pipe by supporting lugs. Both ends of the pipe have permanent internal collars with inside diameters to accept couplings, drive shafts and end shafts. They are used for conveying sticky, gummy or viscous substances, or where the material tends to adhere to flighting at the pipe. Stainless steel ribbon flight conveyor screws can be furnished.

Sectional Ribbon Flight Conveyor Screws*

Screw Diameter, Inches	Coupling Diameter, Inches	Conveyor Screw Number	Part Numbers		Length Feet and Inches	Average Weight, Pounds		Maximum Horsepower at 100 rpm	Nominal Pipe Diameter, Inches		Flight Size, Thickness and Width Inches	Pitch Inches	F	K
			Left Hand	Right Hand		Per Section	Per Foot		Inside	Outside				
6	1 1/2	6SR312-E	172-143-A	172-143-B	9-10	57	5.8	5	2	2 3/4	3/4 x 1	6	1/2	2
9	1 1/2	9SR316-E	172-143-G	172-143-H	9-10	79	8.0	5	2	2 3/4	1/4 x 1 1/2	9	1/2	2
10	1 1/2	10SR316-E	172-143-N	172-143-P	9-10	79	8.0	5	2	2 3/4	1/4 x 1 1/2	10	1/2	2
12	2	12SR416-E	172-143-V	172-143-W	11-10	143	12	10	2 1/2	2 3/4	1/4 x 2	12	3/4	2
	2	12SR424-E	172-143-AB	172-143-AC	11-10	186	16	10	2 1/2	2 3/4	3/8 x 2 1/2	12	3/4	2
	2 7/16	12SR524-E	172-143-AH	172-143-AJ	11-9	209	18	15	3	3 1/2	3/8 x 2 1/2	12	3/4	3
14	2 7/16	14SR516-E	172-143-AP	172-143-AR	11-9	166	14	15	3	3 1/2	1/4 x 2	14	3/4	3
	2 7/16	14SR524-E	172-143-AW	172-143-AK	11-9	214	18	15	3	3 1/2	3/8 x 2 1/2	14	3/4	3
	3	14SR624-E	172-143-BC	172-143-BD	11-9	232	20	25	3 1/2	4	3/8 x 2 1/2	14	3/4	3
16	3	16SR616-E	172-143-BJ	172-143-BK	11-9	197	17	25	3 1/2	4	1/4 x 2 1/2	16	3/4	3
	3	16SR624-E	172-143-BR	172-143-BS	11-9	232	20	25	3 1/2	4	3/8 x 2 1/2	16	3/4	3
18	3	18SR624-E	172-143-BX	172-143-BY	11-9	267	23	25	3 1/2	4	3/8 x 3	18	3/4	3
20	3 7/16	20SR724-E	172-143-CD	172-143-CE	11-8	278	24	41	4	4 1/2	3/8 x 3	20	7/8	4
24	3 7/16	24SR724-E	172-143-CK	172-143-CL	11-8	279	24	41	4	4 1/2	3/8 x 3	24	7/8	4

Sectional Ribbon Flighting*

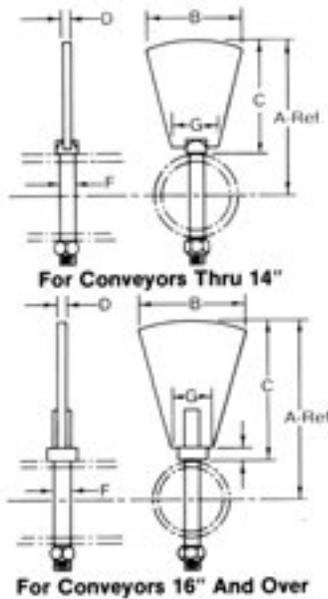
Flight Diameter, Inches	Inside Diameter, Inches	Flight Number	Part Numbers		Length Inches	Average Weight Pounds	Thickness Inches	Pitch Inches
			Left Hand	Right Hand				
6	4	6SR312-F	169-20-1	169-20-2	6 1/4	.95	3/16	6
9	6	9SR316-F	169-20-3	169-20-4	9 3/4	2.9	1/4	9
10	7	10SR316-F	169-20-5	169-20-6	10 1/2	3.2	1/4	10
12	8	12SR416-F	169-20-7	169-20-8	12 1/4	5.1	1/4	12
	7	12SR424-F	169-20-9	169-20-10	12 3/4	9.2	3/8	12
	7	12SR524-F	169-20-11	169-20-12	12 3/4	9.2	3/8	12
14	10	14SR516-F	169-20-13	169-20-14	14 3/4	6.1	1/4	14
	9	14SR524-F	169-20-15	169-20-16	14 3/4	11	3/8	14
	9	14SR624-F	169-20-17	169-20-18	14 3/4	11	3/8	14
16	11	16SR616-F	169-20-19	169-20-20	17 1/4	8.6	1/4	16
	11	16SR624-F	169-20-21	169-20-22	17 1/4	13	3/8	16
18	12	18SR624-F	169-20-23	169-20-24	18	17	3/8	18
20	14	20SR724-F	169-20-25	169-20-26	20 1/2	20	3/8	20
24	18	24SR724-F	169-20-27	169-20-28	25 1/4	24	3/8	24

*Ribbon Fltng. is non-stock

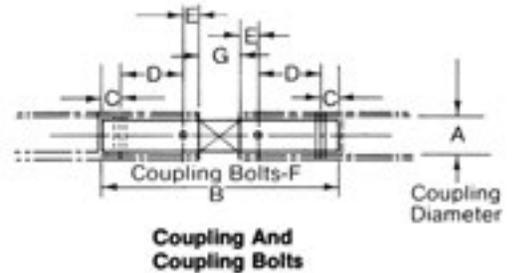
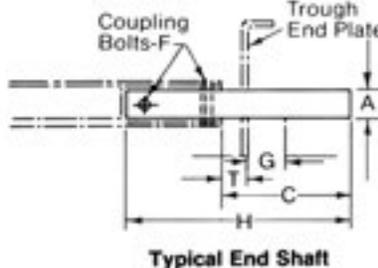
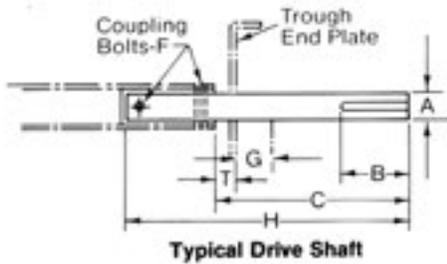
component selection

Type 1 Paddles consist of formed steel blades mounted on bolt or rod shanks which are inserted through regular conveyor screw pipe. They are normally mounted at 120 degree intervals spacing, three paddles per pitch. Paddle at each end of conveyor may be inserted through bolt hole in place of regular coupling bolt. Paddle blades may be set at any angle to produce the desired degree of agitation. Paddle conveyor screws are used for mixing, blending or stirring dry or fluid materials.

Paddles-type 1



Type 1 Paddle									
Screw Diameter Inches	Pipe OD	Part Numbers	Weight, Pounds	A	B	C	D	F	G
				Inches					
4	1 1/2	161-59-A	.21	2	1 1/2	1 1/8	3/8	3/8	1 1/8
6	2 1/2	161-59-B	.54	3	2 1/8	1 1/8	3/4	1/2	1 1/8
9	2 1/2	161-59-C	.82	4 1/2	2 1/2	3 1/8	3/4	1/2	1 1/2
	2 1/2	161-59-D	1.00	4 1/2	2 1/2	3 1/8	3/4	1/2	1 1/2
10	2 1/2	161-59-E	.94	5	3 1/2	3 1/8	3/4	1/2	1 1/2
	2 1/2	161-59-F	1.10	5	3 1/2	3 1/8	3/4	1/2	1 1/2
12	2 1/2	161-59-G	1.90	6	3 1/8	4 1/8	3/4	3/4	1 1/2
	3 1/2	161-59-H	1.90	6	3 1/8	4 1/8	3/4	3/4	1 1/2
	4	161-59-J	2.20	6	3 1/8	4	3/4	3/4	2
14	3 1/2	161-59-K	2.30	7	4 1/4	5 1/4	3/4	3/4	2
	4	161-59-L	2.70	7	4 1/4	5	3/4	3/4	2 1/2
16	4	161-60-A	3.20	8	4 3/8	6	3/4	3/4	2 1/2
	4 1/2	161-60-B	3.60	8	4 3/8	5 1/2	3/4	3/4	2 1/2
18	4	161-60-C	3.70	9	5 1/2	7	3/4	3/4	2 1/2
	4 1/2	161-60-D	4.10	9	5 1/2	6 1/2	3/4	3/4	2 1/2
20	4	161-60-E	4.50	10	6 1/2	8	3/4	3/4	2 1/2
	4 1/2	161-60-F	4.90	10	6 1/2	7 1/2	3/4	3/4	2 1/2
24	4 1/2	161-60-G	8.10	12	7 3/4	9 1/4	3/4	3/4	2 1/2



Drive shafts deliver the driving power, and are designed to provide adequate torque, bending and shear strength, and correct bearing clearances. For extra heavy loads, high carbon steel or heat-treated alloy steel shafts are used. Jig-drilled coupling bolt holes and accurately cut keyseats contribute to ease of assembly.

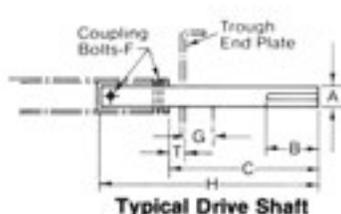
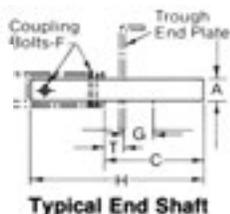
End shafts serve only as support for the last section of conveyor screw and are furnished of cold-finished steel.

Drive Shafts and End Shafts									
Screw Diameter, Inches	Shaft Diameter, Inches	Drive Shaft Number For Steel Plate Trough End				End Shaft Number For Steel Plate Trough End			
		Without Trough End Seal		With Trough End Seal		Without Trough End Seal		With Trough End Seal	
		Babbitted and Bronze Bearing	Ball Bearing	Babbitted and Bronze Bearing	Ball Bearing	Babbitted and Bronze Bearing	Ball Bearing	Babbitted and Bronze Bearing	Ball Bearing
4	1	716-2-1	716-2-11	—	—	716-1-9	716-1-8	—	—
6, 9, 10	1 1/2	716-2-17	716-2-14	716-2-46	716-2-15	716-1-2	716-1-11	716-1-44	716-1-38
9, 10, 12	2	716-2-24	716-2-20	716-2-48	716-2-47	716-1-3	716-1-16	716-1-45	716-1-3
12, 14	2 1/8	716-2-51	716-2-49	716-2-52	716-2-50	716-1-47	716-1-46	716-1-25	716-1-4
12, 14, 16, 18, 20	3	716-2-54	716-2-53	716-2-55	716-2-8	716-1-41	716-1-27	716-1-31	716-1-30
18, 20, 24	3 1/8	716-2-58	716-2-56	716-2-40	716-2-57	716-1-43	716-1-33	716-1-49	716-1-48

Drive Shafts For Double Ball Bearing Flanged Blocks.												
Shaft Dia. A Inches	Part Numbers ⁽¹⁾		Weight, Lbs.		B	C		F	G ⁽²⁾	H		T
	No Seal	For Seal	No Seal	For Seal		No Seal	For Seal					
	Inches											
1 1/2	1462-86-G	1462-86-K	6.6	7.5	3 1/2	9	10 1/2	1 1/2	1 1/2	13 1/2	15 1/2	1 1/2
2	1462-86-V	1462-86-Y	13	15	3 1/2	10 1/2	12 1/2	1 1/2	1 1/2	15 1/2	16 1/2	1 1/2
2 1/8	1462-86-AH	1462-86-AL	21	23	4 1/2	11 1/2	13 1/2	1 1/2	1 1/2	16 1/2	18 1/2	1 1/2
3	1462-86-AW	1462-86-AZ	36	40	5 1/2	13 1/2	15 1/2	1 1/2	1 1/2	18 1/2	20 1/2	1 1/2
3 1/8	1462-86-BJ	1462-86-BM	59	65	5 1/2	16 1/2	18 1/2	1 1/2	2 1/2	23 1/2	25 1/2	2 1/2

⁽¹⁾Includes snap rings and washers.
⁽²⁾Trough end seal width.

component selection



End Shafts For Double Ball Bearing Flanged Blocks.

Shaft Dia. A Inches	Part Numbers (1)				Weight, Lbs.		C				H			T
	No Seal		For Seal		No Seal	For Seal	F	G (1)	No Seal	For Seal				
	Inches													
1 1/2	716-1-69	716-1-70	5.4	6.3	6	7 1/2	1 1/2	1 1/2	10 1/2	12 1/2			1 1/2	
2	716-1-71	716-1-72	10	12	6 1/2	8 1/2	1 1/2	1 1/2	11 1/2	13 1/2			1 1/2	
2 1/2	716-1-73	716-1-74	17	19	7 1/2	9 1/2	1 1/2	1 1/2	12 1/2	14 1/2			1 1/2	
3	716-1-75	716-1-76	28	31	8 1/2	10 1/2	1 1/2	1 1/2	13 1/2	15 1/2			1 1/2	
3 1/2	716-1-77	716-1-78	46	52	10 1/2	13 1/2	1 1/2	2 1/2	17 1/2	19 1/2			2 1/2	

(1)Includes snap rings and washers.
(2)Trough end seal width.

Drive Shafts For Babbitted, Bronze and Single Ball Bearing Flanged Blocks.

Shaft Dia. A Inches	Part Numbers				Weight, Lbs.				B	C				F	G (1)	H				T
	No Seal		For Seal		No Seal	For Seal	No Seal	For Seal		No Seal	For Seal	No Seal	For Seal			No Seal	For Seal			
	Babb. Brz.	Ball	Babb. Brz.	Ball	Babb. Brz.	Ball	Babb. Brz.	Ball		Babb. Brz.	Ball	Babb. Brz.	Ball			Babb. Brz.	Ball			
1	716-2-1	716-2-11	716-2-61	716-2-59	1.8	1.7	2.2	2.0	2 1/2	5 1/2	4	7	6	1 1/2	8	7	10	9	1 1/2	
1 1/2	716-2-17	716-2-14	716-2-46	716-2-15	6.5	6.1	7.4	7.0	4 1/2	8	7	10 1/2	9	1 1/2	13	12	15 1/2	14	1 1/2	
2	716-2-24	716-2-20	716-2-48	716-2-47	13	12	15	13	4 1/2	9 1/2	8 1/2	11	10 1/2	1 1/2	14 1/2	13 1/2	16 1/2	14 1/2	1 1/2	
2 1/2	716-2-51	716-2-49	716-2-52	716-2-50	23	20	26	22	5 1/2	12 1/2	10	14 1/2	11	1 1/2	17 1/2	15	19 1/2	16	1 1/2	
3	716-2-54	716-2-53	716-2-55	716-2-8	38	32	42	36	6	14 1/2	11	15 1/2	12	1 1/2	19	16	20	17	1 1/2	
3 1/2	716-2-58	716-2-56	716-2-40	716-2-57	63	54	67	59	7 1/2	16	13	19	15	2 1/2	23	20	25	22	2 1/2	

(1)Trough end seal thickness.

End Shafts For Babbitted, Bronze and Single Ball Bearing Flanged Blocks.

Shaft Dia. A Inches	Part Numbers				Weight, Lbs.				B	C				F	G (1)	H				T
	No Seal		For Seal		No Seal	For Seal	No Seal	For Seal		No Seal	For Seal	No Seal	For Seal			No Seal	For Seal			
	Babb. Brz.	Ball	Babb. Brz.	Ball	Babb. Brz.	Ball	Babb. Brz.	Ball		Babb. Brz.	Ball	Babb. Brz.	Ball			Babb. Brz.	Ball			
1	716-1-9	716-1-8	716-1-52	716-1-50	1.4	1.2	1.7	1.5	3 1/2	2	4	4	1 1/2	1 1/2	6	5	7	7	1 1/2	
1 1/2	716-1-2	716-1-11	716-1-44	716-1-38	4.7	4.1	5.6	4.9	4	3	6	5	1 1/2	1 1/2	9	8	11	10	1 1/2	
2	716-1-3	716-1-16	716-1-45	716-1-3	9.0	7.4	10	9.0	5	3	7	5	1 1/2	1 1/2	10	8	12	10	1 1/2	
2 1/2	716-1-47	716-1-46	716-1-25	716-1-47	15	12	18	14	7	4	9	7	1 1/2	1 1/2	12	9	14	11	1 1/2	
3	716-1-41	716-1-27	716-1-31	716-1-30	26	20	29	23	8	5	10	6	1 1/2	1 1/2	13	10	15	11	1 1/2	
3 1/2	716-1-43	716-1-33	716-1-49	716-1-48	43	34	47	39	10	6	12	8	2 1/2	2 1/2	16	13	18	15	2	

(1)Trough end seal thickness.

Drive Shafts For Outboard Bracket Bearings Reference page 82

Shaft Dia. A Inches	Part Numbers(1)			Weight, Lbs. Maximum	B	C			F	G (1)		H			T
	Babb. Brz.	Ball	Roller			Babb. Brz.	Ball	Roller		Babb. Brz.	Ball Roller	Babb. Brz.	Ball	Roller	
	Inches														
1 1/2	716-31-L	716-31-A	716-31-B	7.9	3 1/2	11 1/2	10	11 1/2	1 1/2	4	4	16 1/2	15	16 1/2	1 1/2
2	716-31-M	716-31-C	716-31-D	15	4 1/2	13 1/2	12 1/2	13	1 1/2	5 1/2	5 1/2	18	17	17 1/2	1 1/2
2 1/2	716-31-N	716-31-E	716-31-F	27	5 1/2	16 1/2	14 1/2	15 1/2	1 1/2	6	5 1/2	21	19 1/2	20 1/2	1 1/2
3	716-31-P	716-31-G	716-31-H	47	5 1/2	19 1/2	16 1/2	17 1/2	1 1/2	7	6 1/2	24 1/2	21 1/2	22 1/2	1 1/2
3 1/2	716-31-R	716-31-J	716-31-K	73	6 1/2	21 1/2	19 1/2	19 1/2	1 1/2	8	7 1/2	28 1/2	26 1/2	26 1/2	2 1/2

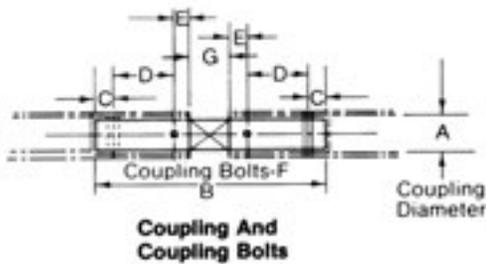
(1)Includes snap rings and washers.
(2)Distance from outside of trough end plate to centerline of pillow block.

End Shafts For Outboard Bracket Bearings Reference page 82

Shaft Dia. A Inches	Part Numbers			Weight, Lbs. Maximum	C			F	G (1)		H			T
	Babb. Brz.	Ball	Roller		Babb. Brz.	Ball	Roller		Babb. Brz.	Ball	Roller			
	Inches													
1 1/2	716-31-77	716-31-57	716-31-59	6.2	7 1/2	7	7	1 1/2	4	4	12 1/2	11	12 1/2	1 1/2
2	716-31-79	716-31-61	716-31-63	12	9 1/2	8	8	1 1/2	5 1/2	5 1/2	14	13	13 1/2	1 1/2
2 1/2	716-31-81	716-31-65	716-31-67	21	11 1/2	9 1/2	10 1/2	1 1/2	6	5 1/2	16	14 1/2	15 1/2	1 1/2
3	716-31-83	716-31-69	716-31-71	36	13 1/2	10	11	1 1/2	7	6 1/2	18 1/2	15	16	1 1/2
3 1/2	716-31-85	716-31-73	716-31-75	56	14 1/2	12 1/2	13 1/2	1 1/2	8	7 1/2	21 1/2	19 1/2	19 1/2	2 1/2

(1)Distance from outside of trough end plate to centerline of pillow block.

component selection



Standard Coupling

Coupling Diameter, A Inches	Part Numbers		Weight, Pounds	B	C	D	E	F	G
	Cold Rolled Steel	Hardened Steel ⁽¹⁾							
1	170-13-2	170-38-9	1.5	7½	½	2	½	¾	1½
1½	170-13-3	170-38-10	5.6	11½	¾	3	¾	¾	2
2	170-13-4	170-38-11	9.8	11½	¾	3	¾	¾	2
2½	170-13-5	170-38-12	15	12¾	¾	3	¾	¾	3
3	170-13-6	170-38-13	24	13	1	3	1	¾	3
3½	170-13-7	170-38-14	43	17½	1¼	4	1½	¾	4

⁽¹⁾Only bearing length G is hardened.

Close Coupling

Coupling Diameter, A Inches	Part Numbers	Weight, Pounds	B	C	D	E	F ⁽¹⁾
1	170-69-001	1.4	6¼	½	2	½	¾
1½	170-69-002	4.9	10¾	¾	3	¾	½
2	170-69-003	9	10½	¾	3	¾	¾
2½	170-69-004	14	11¼	¾	3	¾	¾
3	170-69-005	20	10½	1	3	1	¾
3½	170-69-006	39	14¾	1¼	4	1½	¾

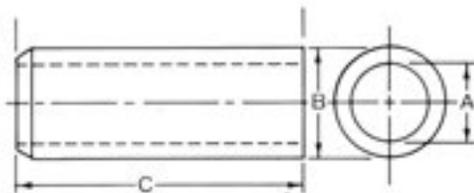
⁽¹⁾Drill two holes at one end, in assembly, 1/32" over bolt diameter.

Coupling Bolts

Coupling Diameter, Inches	Part Numbers				Average Weight Per Hundred Pieces, Pounds	Diameter and Length, Inches
	Regular	Galvanized	High Strength	Stainless Steel ⁽¹⁾		
1	126-527-A	126-528-A	86-50-A	126-627-A	13	¾ x 2½
1½	126-527-C	126-528-C	86-50-C	126-627-C	32	½ x 3
2	126-527-E	126-528-E	86-50-E	126-627-E	56	¾ x 3¾
2½	126-527-G	126-528-G	86-50-G	126-627-G	63	¾ x 4¼
3	126-527-J	126-528-J	86-50-J	126-627-J	105	¾ x 5
3½	126-527-AA	126-528-AA	86-50-AA	126-627-AA	157	¾ x 5½

⁽¹⁾Type 304, other types can be furnished.

Internal Collars



Coupling Dia. Inches	Nominal Inside Dia. of Pipe Inches	Part Numbers		Weight Pounds	A	B	C
		Carbon Steel	Stainless Steel ⁽¹⁾				
1	1¼	129-43-6	496-475-2	0.7	1	1¾	3¼
1½	2	129-43-34	496-475-4	2.2	1½	2½	5
2	2½	129-43-51	496-475-6	2.4	2	2½	5
2½	3	129-43-72	496-475-53	4.1	2½	3½	5½
3	3½	129-43-93	496-475-55	4.3	3	3½	5¼
3½	4	129-43-105	496-475-42	7.3	3½	4½	7

⁽¹⁾Type 304, other types can be furnished.

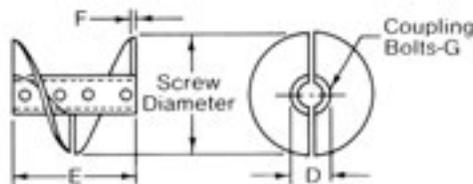
component selection



End Lugs are die-formed steel plates welded to both ends of helicoid flighting and to the pipe to strengthen the end of flighting.

Lugs							
Screw Diameter Inches	Part Numbers				Avg. Wgt. Per/C Pounds	A. Approximate	
	Feed End		Discharge End			Feed End	Discharge End
	Right Hand	Left Hand	Right Hand	Left Hand		Inches	
6	163-5-3	163-5-5	163-5-4	163-5-6	5	1 ¹¹ / ₁₆	1 ¹¹ / ₁₆
9&10	163-6-3	163-6-5	163-6-4	163-6-6	13	2 ¹¹ / ₁₆	2 ¹¹ / ₁₆
12	163-7-3	163-7-5	163-7-4	163-7-6	26	4 ¹ / ₂	4 ¹ / ₂
14&16	163-8-3	163-8-5	163-8-4	163-8-6	38	5 ¹ / ₂	5 ¹ / ₂

All lugs are made of 12 gauge steel.



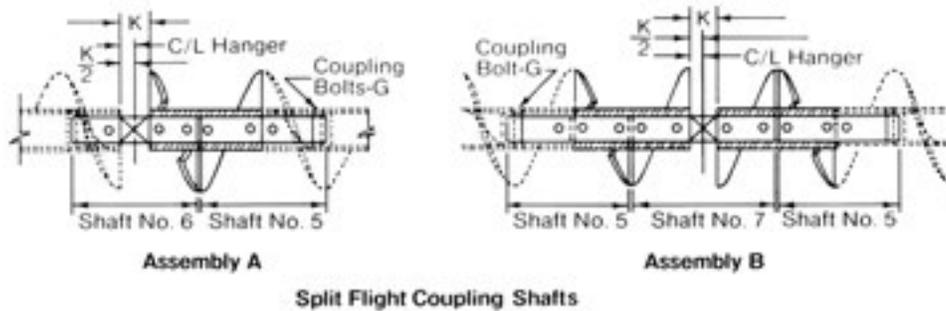
Split Flight Coupling

Split Flight Couplings permit installing or removing individual conveyor screws without disturbing adjoining sections. With split flight couplings installed on both sides of each hanger, conveyor screws can be removed without disturbing the hangers. The split flight coupling is sturdily constructed and jig drilled for coupling bolts.

Split Flight Couplings								
Screw Diameter, Inches	Coupling Diameter, Inches	Split Flight Coupling Number ⁽¹⁾		Weight, Pounds	D	E	F	G
		Right Hand	Left Hand					
4	1	502-3-A	502-3-B	3	1 ¹ / ₂	4 ¹¹ / ₁₆	10 ga.	³ / ₈
6	1 ¹ / ₂	502-3-C	502-3-D	9	2 ¹ / ₂	6 ¹¹ / ₁₆	¹ / ₂ in.	¹ / ₂
9	1 ¹ / ₂	502-3-E	502-3-F	14	2 ¹ / ₂	9 ¹¹ / ₁₆	³ / ₁₆ in.	¹ / ₂
	2	502-3-G	502-3-H	17	2 ¹ / ₂	9 ¹¹ / ₁₆	¹ / ₂ in.	¹ / ₂
10	1 ¹ / ₂	502-3-J	502-3-K	16	2 ¹ / ₂	10 ¹¹ / ₁₆	10 ga.	¹ / ₂
	2	502-3-L	502-3-M	21	2 ¹ / ₂	10 ¹¹ / ₁₆	¹ / ₂ in.	¹ / ₂
12	2	502-3-N ⁽¹⁾	502-3-P ⁽¹⁾	29	2 ¹ / ₂	12 ¹¹ / ₁₆	¹ / ₂ in.	¹ / ₂
	2 ¹ / ₁₆	502-3-R	502-3-S	31	3 ¹ / ₂	12 ¹¹ / ₁₆	³ / ₁₆ in.	¹ / ₂
	3	502-3-T ⁽¹⁾	502-3-U ⁽¹⁾	40	4	12 ¹¹ / ₁₆	¹ / ₂ in.	¹ / ₂
14	2 ¹ / ₁₆	502-3-V	502-3-W	42	3 ¹ / ₂	14 ¹ / ₂	³ / ₁₆ in.	¹ / ₂
	3	502-3-X	502-3-Y	51	4	14 ¹ / ₂	¹ / ₂ in.	¹ / ₂
16	3	502-3-Z	502-3-AA	61	4	16 ¹ / ₂	¹ / ₂ in.	¹ / ₂
18	3	502-3-AB	502-3-AC	75	4	18 ¹ / ₂	¹ / ₂ in.	¹ / ₂
	3 ¹ / ₁₆	502-3-AK	502-3-AL	76	4 ¹ / ₂	18 ¹ / ₂	¹ / ₂ in.	¹ / ₂
20	3	502-3-AD	502-3-AE	75	4	20 ¹ / ₂	¹ / ₂ in.	¹ / ₂
	3 ¹ / ₁₆	502-3-AF	502-3-AG	84	4 ¹ / ₂	20 ¹ / ₂	¹ / ₂ in.	¹ / ₂
24	3 ¹ / ₁₆	502-3-AH	502-3-AJ	114	4 ¹ / ₂	24 ¹ / ₂	¹ / ₂ in.	¹ / ₂

⁽¹⁾Indicates split flight couplings normally carried in stock. Coupling bolts are included.

component selection

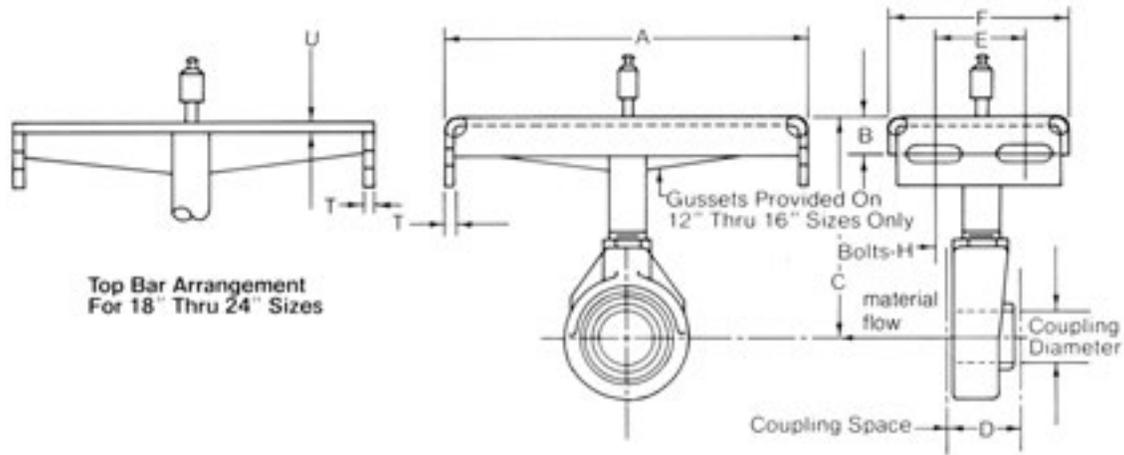


Split Flight Coupling Shafts are used to transmit rotation and to position accurately and support the split flight couplings.

Split Flight Coupling Shafts															
Screw Diameter, Inches	Coupling Diameter, Inches	Part Numbers						Weight, Pounds			Length, Inches			G	K
		Shaft No.						Shaft No.			Shaft No.				
		5	6		7		5	6	7	5	6	7	Inches		
		Regular	Hardened ⁽¹⁾	Regular	Hardened ⁽¹⁾										
4	1	170-28-1	170-29-1	170-32-1	170-30-1	170-33-1	1.1	1.4	1.3	5½	6¾	6	¾	1½	
6	1½	170-28-2	170-29-2	170-32-2	170-30-2	170-33-2	3.8	4.7	4.0	8	10	8½	½	2	
9	1½	170-28-3	170-29-3	170-32-3	170-30-3	170-33-3	4.5	5.4	5.4	9½	11½	11½	½	2	
	2	170-28-5	170-29-5	170-32-5	170-30-5	170-33-5	8.2	9.5	9.5	9½	11½	11½	¾	2	
10	1½	170-28-4	170-29-4	170-32-4	170-30-4	170-33-4	4.8	5.6	5.9	10	12	12½	½	2	
	2	170-28-6	170-29-6	170-32-6	170-30-6	170-33-6	8.6	10	10	10	12	12½	¾	2	
12	2	170-28-7	170-29-7	170-32-7	170-30-7	170-33-7	9.4	11	12	11	13	14½	¾	2	
	2½	170-28-8	170-29-8	170-32-8	170-30-8	170-33-8	14	18	19	11¾	14¾	15½	¾	3	
	3	170-28-10	170-29-10	170-32-10	170-30-10	170-33-10	22	27	29	11¾	14¾	15½	¾	3	
14	2½	170-28-9	170-29-9	170-32-9	170-30-9	170-33-9	16	19	22	12¾	15¾	17½	¾	3	
	3	170-28-11	170-29-11	170-32-11	170-30-11	170-33-11	24	29	33	12¾	15¾	17½	¾	3	
16	3	170-28-12	170-29-12	170-32-12	170-30-12	170-33-12	26	30	36	13¾	16¾	19½	¾	3	
18	3	170-28-13	170-29-13	170-32-13	170-30-13	170-33-13	28	32	39	14¾	17¾	21½	¾	3	
	3½	170-28-17	170-29-17	170-32-17	170-30-17	170-33-17	41	49	55	16¾	20¾	22½	¾	4	
20	3	170-28-14	170-29-14	170-32-14	170-30-14	170-33-14	30	34	41	15¾	18¾	23½	¾	3	
	3½	170-28-15	170-29-15	170-32-15	170-30-15	170-33-15	44	51	54	17¾	21¾	24½	¾	4	
24	3½	170-28-16	170-29-16	170-32-16	170-30-16	170-33-16	49	56	69	19¾	23¾	28½	¾	4	

⁽¹⁾Only bearing length K is hardened.

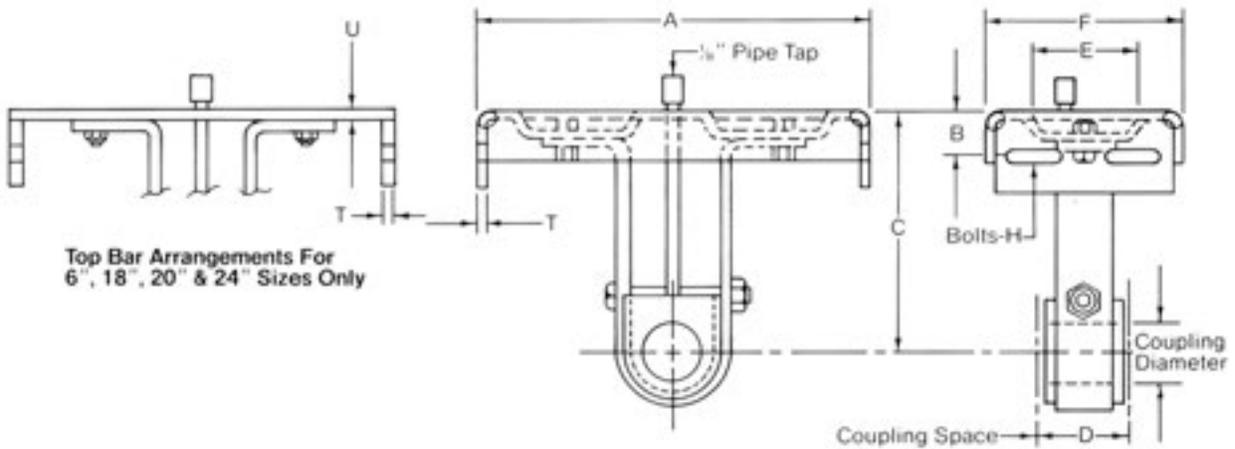
component selection



No. 270 Hangers have formed steel frames and self-aligning ball bearings which reduce power consumption and noise levels.

No. 270 Ball Bearing Hangers												
Screw Diameter, Inches	Coupling Diameter, Inches	Part Numbers	Weight Pounds	A	B	C	D	E	F	H	T	U
				Inches								
6	1½	162-513-A	8.1	7	¾	4½	2	2½	5	¾	¾	—
9	1½	162-514-A	9.4	10	1	6½	2	2½	5	¾	¾	—
	2	162-515-A	11	10	1	6½	2	2½	5	¾	¾	—
10	1½	162-516-A	10	11	1	6½	2	2½	5	¾	¾	—
	2	162-517-A	11	11	1	6½	2	2½	5	¾	¾	—
12	2	162-518-A	13	13	1½	7½	2	2½	5	½	¾	—
	2⅞	162-519-A	16	13	1½	7½	3	2½	5	½	¾	—
	3	162-520-A	22	13	1½	7½	3	2½	5	½	¾	—
14	2⅞	162-521-A	18	15	1½	9¼	3	2½	5	½	¾	—
	3	162-522-A	23	15	1½	9¼	3	2½	5	½	¾	—
16	3	162-523-A	24	17	1½	10%	3	2½	5	½	¾	—
18	3	162-524-A	36	19	1½	12½	3	3½	6	¾	¾	½
	3⅞	162-525-A	38	19	1½	12½	4	3½	6	¾	¾	½
20	3	162-526-A	38	21	1½	13½	3	3½	6	¾	¾	½
	3⅞	162-527-A	43	21	1½	13½	4	3½	6	¾	¾	½
24	3⅞	162-528-A	50	25	1½	16½	4	3½	6	¾	¾	¾

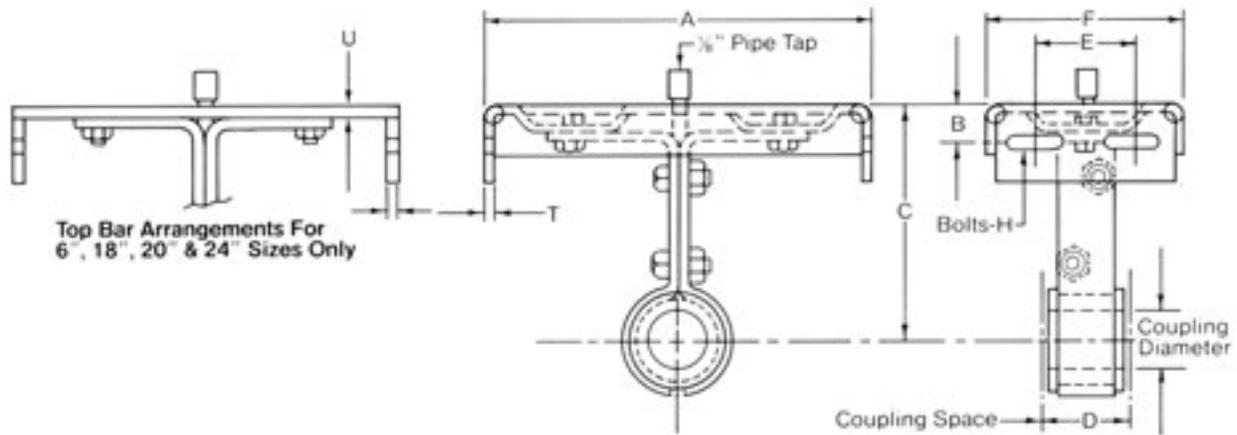
component selection



No. 216 Hangers have formed steel frames of superior strength and rigidity and are excellent for heavy service. These hangers are normally furnished with hard iron, babbitted: bronze, oil impregnated wood or molded fabric bearings, but can also be furnished with special bearings.

No. 216 Hangers													
Screw Diameter, Inches	Coupling Diameter, Inches	Part Numbers		Weight Pounds	A	B	C	D	E	F	H	T	U
		Without Oil Pipe	With Oil Pipe										
Inches													
6	1½	162-353-B	162-353-C	4.2	7	¾	4½	2	2½	5	¾	¾	¾
9	1½	162-473-B	162-473-C	6.7	10	1	6¾	2	2½	5	¾	¾	—
	2	162-474-B	162-474-C	7.8	10	1	6¾	2	2½	5	¾	¾	—
10	1½	162-475-B	162-475-C	7.1	11	1	6¾	2	2½	5	¾	¾	—
	2	162-476-B	162-476-C	8.2	11	1	6¾	2	2½	5	¾	¾	—
12	2	162-477-B	162-477-C	9.6	13	1¼	7¾	2	2½	5	½	¾	—
	2⅞	162-478-B	162-478-C	9.7	13	1¼	7¾	3	2½	5	½	¾	—
	3	162-479-B	162-479-C	12	13	1¼	7¾	3	2½	5	½	¾	—
14	2⅞	162-480-B	162-480-C	12	15	1¾	9¼	3	2½	5	½	¾	—
	3	162-481-B	162-481-C	14	15	1¾	9¼	3	2½	5	½	¾	—
16	3	162-482-B	162-482-C	15	17	1¾	10¾	3	2½	5	½	¾	—
18	3	162-364-B	162-364-C	26	19	1¾	12¾	3	3½	6	¾	¾	½
	3⅞	162-365-B	162-365-C	35	19	1¾	12¾	4	3½	6	¾	¾	½
20	3	162-366-B	162-366-C	30	21	1¾	13½	3	3½	6	¾	¾	½
	3⅞	162-367-B	162-367-C	38	21	1¾	13½	4	3½	6	¾	¾	½
24	3⅞	162-368-B	162-368-C	49	25	1¾	16½	4	3½	6	¾	¾	¾

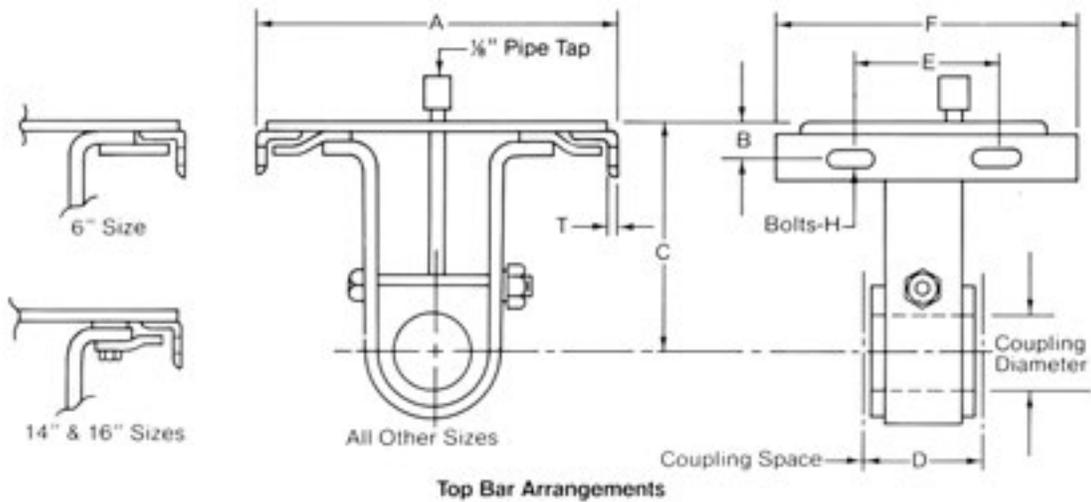
component selection



No. 226 Hangers have a rigid formed steel frame with clearance for passage of material in large volume. These hangers are normally furnished with hard iron, babbitted, bronze, oil impregnated wood or molded fabric bearings, but can also be furnished with special bearings. Stainless steel frames can be furnished.

No. 226 Hangers													
Screw Diameter, Inches	Coupling Diameter, Inches	Part Numbers		Weight Pounds	A	B	C	D	E	F	H	T	U
		Without Oil Pipe	With Oil Pipe										
4	1	162-409-B	—	2.5	5	3/4	3 3/4	1 1/2	2	3 1/2	3/4	3/16	3/16
6	1 1/2	162-381-B	162-381-C	5.6	7	3/4	4 1/2	2	2 1/2	5	3/4	3/16	3/16
9	1 1/2	162-483-B	162-483-C	8.3	10	1	6 1/2	2	2 1/2	5	3/4	3/16	—
	2	162-484-B	162-484-C	8.6	10	1	6 1/2	2	2 1/2	5	3/4	3/16	—
10	1 1/2	162-485-B	162-485-C	9.9	11	1	6 3/4	2	2 1/2	5	3/4	3/16	—
	2	162-486-B	162-486-C	10	11	1	6 3/4	2	2 1/2	5	3/4	3/16	—
12	2	162-487-B	162-487-C	12	13	1 1/4	7 3/4	2	2 1/2	5	1/2	3/16	—
	2 7/16	162-488-B	162-488-C	16	13	1 1/4	7 3/4	3	2 1/2	5	1/2	3/16	—
	3	162-489-B	162-489-C	16	13	1 1/4	7 3/4	3	2 1/2	5	1/2	3/16	—
14	2 7/16	162-490-B	162-490-C	18	15	1 3/8	9 1/4	3	2 1/2	5	1/2	3/16	—
	3	162-491-B	162-491-C	18	15	1 3/8	9 1/4	3	2 1/2	5	1/2	3/16	—
16	3	162-492-B	162-492-C	26	17	1 3/8	10 3/4	3	2 1/2	5	1/2	3/16	—
18	3	162-392-B	162-392-C	35	19	1 3/8	12 3/4	3	3 1/2	6	3/4	3/16	1/2
	3 7/16	162-393-B	162-393-C	50	19	1 3/8	12 3/4	4	3 1/2	6	3/4	3/16	1/2

component selection

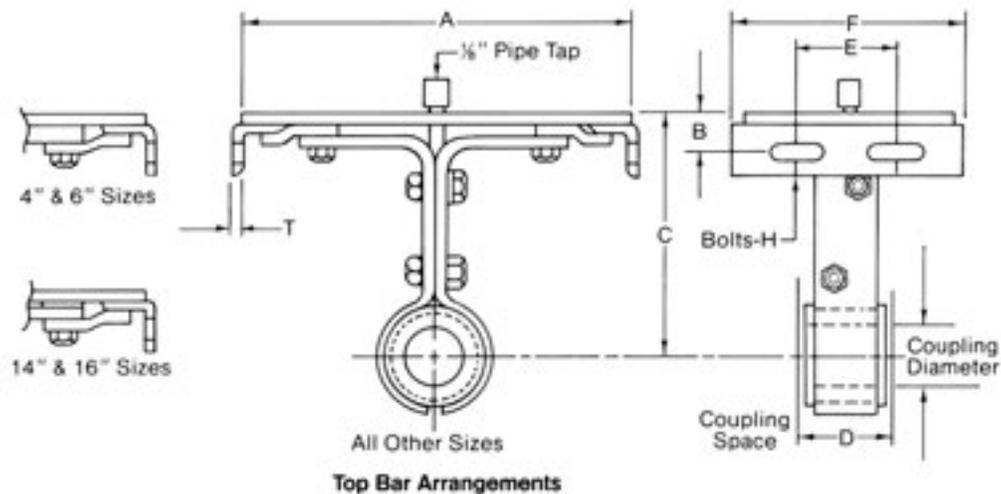


No. 316 Hangers are similar in construction to No. 216 hangers, except that they are self-adjusting. The top bars are arranged to slide on angle guides fastened to the troughs. These hangers are normally furnished with hard iron, babbitted, bronze, oil impregnated wood or molded fabric bearings, but can also be furnished with special bearings.

No. 316 Hangers

Screw Diameter, Inches	Coupling Diameter, Inches	Part Numbers		Weight Pounds	A	B	C	D	E	F	H	T
		Without Oil Pipe	With Oil Pipe									
6	1½	162-65-B	162-65-C	4.6	7	¾	4½	2	2½	6	¾	¾
9	1½	162-503-B	162-503-C	7.7	10	1	6¾	2	2½	6	¾	¾
	2	162-504-B	162-504-C	8.7	10	1	6¾	2	2½	6	¾	¾
10	1½	162-505-B	162-505-C	8.1	11	1	6¾	2	2½	6	¾	¾
	2	162-506-B	162-506-C	9.2	11	1	6¾	2	2½	6	¾	¾
12	2	162-507-B	162-507-C	13	13	1¼	7¾	2	2½	6½	½	¾
	2½	162-508-B	162-508-C	14	13	1¼	7¾	3	2½	6½	½	¾
	3	162-509-B	162-509-C	16	13	1¼	7¾	3	2½	6½	½	¾
14	2½	162-510-B	162-510-C	20	15	1¾	9¼	3	2½	6½	½	¾
	3	162-511-B	162-511-C	22	15	1¾	9¼	3	2½	6½	½	¾
16	3	162-512-B	162-512-C	24	17	1¾	10¾	3	2½	6½	½	¾
18	3	162-331-B	162-331-C	30	19	1¾	12¾	3	3½	6½	¾	¾
	3½	162-332-B	162-332-C	37	19	1¾	12¾	4	3½	6½	¾	¾
20	3	162-333-B	162-333-C	32	21	1¾	13½	3	3½	6½	¾	¾
	3½	162-334-B	162-334-C	40	21	1¾	13½	4	3½	6½	¾	¾
24	3½	162-335-B	162-335-C	54	25	1¾	16½	4	3½	7	¾	¾

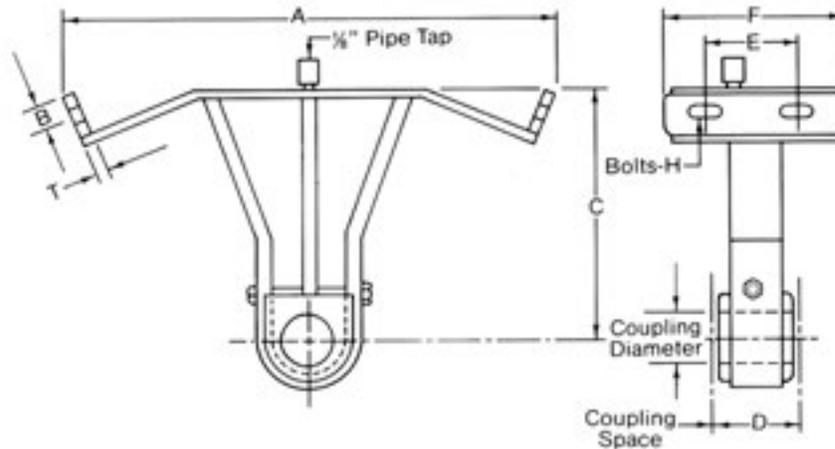
component selection



No. 326 Hangers are similar in construction to No. 226 hangers, except that they are self-adjusting. The top bars are arranged to slide on angle guides fastened to the troughs. These hangers are normally furnished with hard iron, babbitted, bronze, oil impregnated wood or molded fabric bearings, but can also be furnished with special bearings.

No. 326 Hangers												
Screw Diameter, Inches	Coupling Diameter, Inches	Part Numbers		Weight Pounds	A	B	C	D	E	F	H	T
		Without Oil Pipe	With Oil Pipe									
4	1	162-410-B	—	3.0	5	$\frac{3}{8}$	$3\frac{3}{8}$	$1\frac{1}{2}$	2	5	$\frac{1}{4}$	$\frac{1}{8}$
6	$1\frac{1}{2}$	162-336-B	162-336-C	5.9	7	$\frac{3}{8}$	$4\frac{1}{2}$	2	$2\frac{1}{2}$	6	$\frac{3}{8}$	$\frac{1}{8}$
9	$1\frac{1}{2}$	162-493-B	162-493-C	9.3	10	1	$6\frac{1}{8}$	2	$2\frac{1}{2}$	6	$\frac{3}{8}$	$\frac{3}{16}$
	2	162-494-B	162-494-C	9.5	10	1	$6\frac{1}{8}$	2	$2\frac{1}{2}$	6	$\frac{3}{8}$	$\frac{3}{16}$
10	$1\frac{1}{2}$	162-495-B	162-495-C	11	11	1	$6\frac{1}{8}$	2	$2\frac{1}{2}$	6	$\frac{3}{8}$	$\frac{3}{16}$
	2	162-496-B	162-496-C	11	11	1	$6\frac{1}{8}$	2	$2\frac{1}{2}$	6	$\frac{3}{8}$	$\frac{3}{16}$
12	2	162-497-B	162-497-C	16	13	$1\frac{1}{4}$	$7\frac{3}{4}$	2	$2\frac{1}{2}$	$6\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{16}$
	$2\frac{3}{16}$	162-498-B	162-498-C	20	13	$1\frac{1}{4}$	$7\frac{3}{4}$	3	$2\frac{1}{2}$	$6\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{16}$
	3	162-499-B	162-499-C	20	13	$1\frac{1}{4}$	$7\frac{3}{4}$	3	$2\frac{1}{2}$	$6\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{16}$
14	$2\frac{3}{16}$	162-500-B	162-500-C	26	15	$1\frac{1}{8}$	$9\frac{1}{4}$	3	$2\frac{1}{2}$	$6\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$
	3	162-501-B	162-501-C	27	15	$1\frac{1}{8}$	$9\frac{1}{4}$	3	$2\frac{1}{2}$	$6\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$
16	3	162-502-B	162-502-C	34	17	$1\frac{1}{8}$	$10\frac{5}{8}$	3	$2\frac{1}{2}$	$6\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$
18	3	162-347-B	162-347-C	39	19	$1\frac{1}{8}$	$12\frac{1}{4}$	3	$3\frac{1}{2}$	$6\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{4}$
	$3\frac{3}{16}$	162-348-B	162-348-C	54	19	$1\frac{1}{8}$	$12\frac{1}{4}$	4	$3\frac{1}{2}$	$6\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{4}$

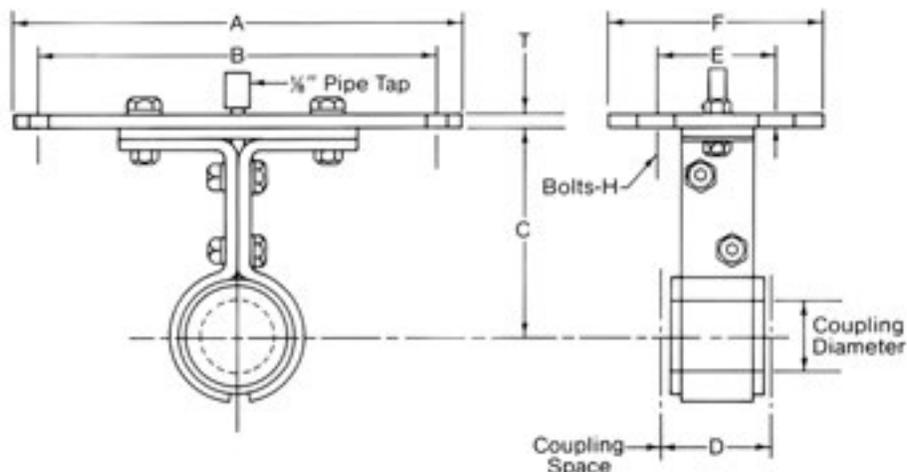
component selection



No. 216F Hangers are similar in construction to No. 216 hangers, except that they are designed for mounting in flared trough. These hangers are normally furnished with hard iron, babbitted, bronze, oil impregnated wood or molded fabric bearings, but can also be furnished with special bearings.

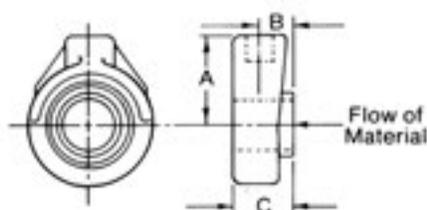
No. 216F Hangers												
Screw Diameter, Inches	Coupling Diameter, Inches	Part Numbers		Weight Pounds	A	B	C	D	E	F	H	T
		Without Oil Pipe	With Oil Pipe									
6	1½	162-419-B	162-419-A	9.4	14	¾	7	2	2½	5	¾	⅝
9	1½	162-420-B	162-420-A	14	18	¾	9	2	2½	5	¾	⅝
	2	162-421-B	162-421-A	17	18	¾	9	2	2½	5	¾	⅝
12	2	162-422-B	162-422-A	24	22	1½	10	2	2½	5	½	¾
	2⅞	162-423-B	162-423-A	28	22	1½	10	3	2½	5	½	¾
	3	162-424-B	162-424-A	32	22	1½	10	3	2½	5	½	¾
14	2⅞	162-425-B	162-425-A	31	24	1½	11	3	2½	5	½	¾
	3	162-426-B	162-426-A	34	24	1½	11	3	2½	5	½	¾
16	3	162-427-B	162-427-A	38	28	1½	11½	3	2½	5	½	¾
18	3	162-462-B	162-462-A	52	31	1½	12½	3	3½	6	¾	¾
	3⅞	162-463-B	162-463-A	61	31	1½	12½	4	3½	6	¾	¾
20	3	162-464-B	162-464-A	55	34	1½	13½	3	3½	6	¾	¾
	3⅞	162-465-B	162-465-A	64	34	1½	13½	4	3½	6	¾	¾
24	3⅞	162-466-B	162-466-A	71	40	1½	16½	4	3½	6	¾	¾

component selection



No. 220 Hangers are similar in construction to No. 226 hangers, except that they are mounted on top of the trough angles or flanges. These hangers are normally furnished with hard iron, babbitted, bronze, oil impregnated wood or molded fabric bearings, but can also be furnished with special bearings. Stainless steel frames can be furnished.

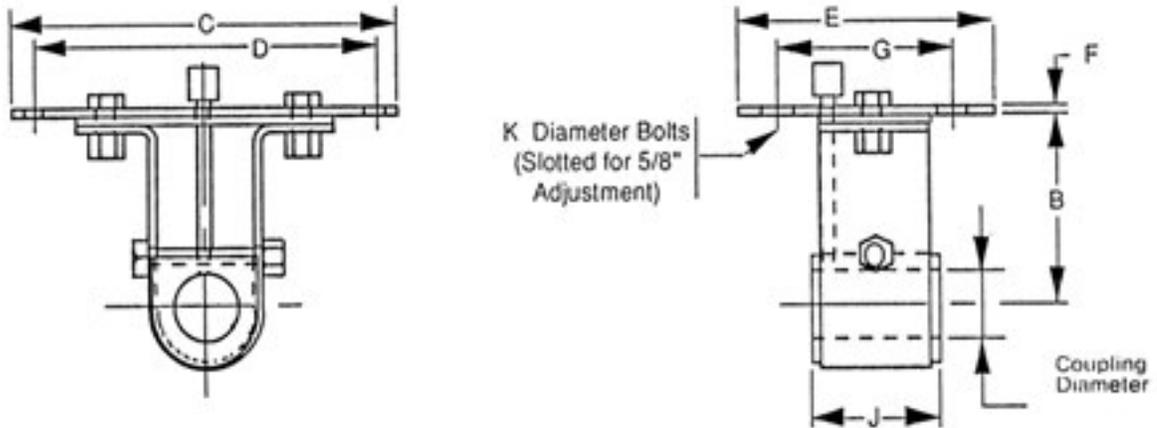
No. 220 Hangers												
Screw Diameter, Inches	Coupling Diameter, Inches	Part Numbers		Weight Pounds	A	B	C	D	E	F	H	T
		Without Oil Pipe	With Oil Pipe									
6	1½	162-369-B	162-369-C	5.4	9½	8½	4½	2	2½	4½	¾	¾
9	1½	162-370-B	162-370-C	8.3	13½	12½	6½	2	2½	4½	¾	¾
	2	162-371-B	162-371-C	8.5	13½	12½	6½	2	2½	4½	¾	¾
10	1½	162-372-B	162-372-C	10	14½	13½	6½	2	2½	4½	¾	¾
	2	162-373-B	162-373-C	11	14½	13½	6½	2	2½	4½	¾	¾
12	2	162-374-B	162-374-C	17	17½	15½	7½	2	2½	5	½	¾
	2½	162-375-B	162-375-C	21	17½	15½	7½	3	2½	5	½	¾
	3	162-376-B	162-376-C	22	17½	15½	7½	3	2½	5	½	¾
14	2½	162-377-B	162-377-C	28	19½	17½	9½	3	2½	5	½	¾
	3	162-378-B	162-378-C	29	19½	17½	9½	3	2½	5	½	¾
16	3	162-379-B	162-379-C	36	21½	19½	10½	3	2½	5	½	¾
18	3	162-380-B	162-380-C	45	24½	22½	12½	3	3½	6	¾	¾



Hanger Bearing
270

No. 270 Hanger Bearings				
Coupling Diameter, Inches	Part Numbers	A	B	C
1½	324-154-1	2½	1½	1½
2	324-154-2	3¼	1¾	2
2½	324-154-3	4	1¾	2½
3	324-154-4	4¾	1¾	2½
3½	324-154-5	6	1¾	3½

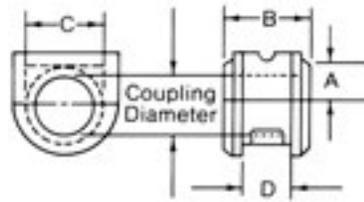
component selection



No. 230 Hangers are similar in construction to No. 216 hangers, except that they are mounted on top of the trough angles or flanges. These hangers are normally furnished with hard iron, babitted, bronze, oil impregnated wood or molded fabric bearings, but can also be furnished with special bearings. Stainless steel frames can be furnished.

No. 230 Hangers												
Screw Diameter Inches	Coupling Diameter Inches	Part Numbers		Weight Pounds	B	C	D	E	F	G	J	K
		Without Oil Pipe	With Oil Pipe		Inches							
6	1½	162-571-FA	162-571-FAP	4	4½	9¼	8¼	4½	¾	2½	1½	¾
9	1½	162-571-FB	162-571-FBP	7	6½	13½	12¼	4½	¾	2½	1½	¾
	2	162-571-FC	162-571-FCP	8	6½	13½	12¼	4½	¾	2½	1½	¾
10	1½	162-571-FD	162-571-FDP	8	6½	14½	13¼	4½	¾	2½	1½	¾
	2	162-571-FE	162-571-FEP	8	6½	14½	13¼	4½	¾	2½	1½	¾
12	2	162-571-FF	162-571-FFP	14	7¼	17½	15¼	5	¾	2½	1½	½
	2½	162-571-FG	162-571-FGP	15	7¼	17½	15¼	5	¾	2½	2½	½
	3	162-571-FH	162-571-FHP	16.63	7¼	17½	15¼	5	¾	2½	2½	½
14	2½	162-571-FJ	162-571-FJP	22	9¼	19½	17¾	5	½	2½	2½	½
	3	162-571-FK	162-571-FKP	24	9¼	19½	17¾	5	½	2½	2½	½
16	3	162-571-FL	162-571-FLP	26	10¾	21½	19¾	5	½	2½	2½	½
18	3	162-571-FM	162-571-FMP	35	12½	24½	22¼	6	½	3½	2½	5/8
	3½	162-571-FN	162-571-FNP	41	12½	24½	22¼	6	½	3½	3½	5/8
20	3	162-571-FP	162-571-FPP	40	13½	26½	24¼	6	½	3½	2½	5/8
	3½	162-571-FR	162-571-FRP	42	13½	26½	24¼	6	½	3½	3½	5/8
24	3½	162-571-FS	162-571-FSP	61	16½	30½	28¼	6	5/8	3½	3½	5/8

component selection

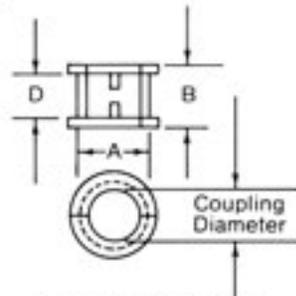


**No. 216 And 316
Hanger Bearings**

No. 216, 216F and 316 Hanger Bearings ▲

Coupling Diameter, Inches	Bearing	Part Numbers				A	B	C	D	
		Hard Iron		Babbitted	Bronze					Oil Impregnated Wood
		No Oil Pipe	For Oil Pipe			Inches				
1½	Upper	283-120-1	283-168-A	283-16-C	283-39-C	283-56-D	1½/₂	1½/₄	2¼	1½/₄
	Lower	283-21-4								
2	Upper	283-121-1	283-168-B	283-16-E	283-39-E	283-57-D	1½/₂	1½/₄	3¼	1½/₄
	Lower	283-23-4								
2½/₄	Upper	283-122-1	283-168-C	283-16-F	283-39-F	283-58-B	1¾/₂	2½/₄	4	1½/₄
	Lower	283-25-4								
3	Upper	283-123-1	283-168-D	283-16-H	283-39-H	283-59-D	1¾/₂	2½/₄	4½	2½/₄
	Lower	283-27-5								
3¾/₄	Upper	283-136-1	283-168-E	283-16-J	283-39-J	283-60-B	2¾/₂	3¾/₄	4¾	2¾/₄
	Lower	283-137-1								
3½/₄	Upper	283-30-3	283-168-F	—	283-39-K	—	2¾/₂	3¾/₄	5¼	3¾/₄
	Lower	283-31-3								

▲ For numbers 16, 16B, 24, and 24A, old style hangers.



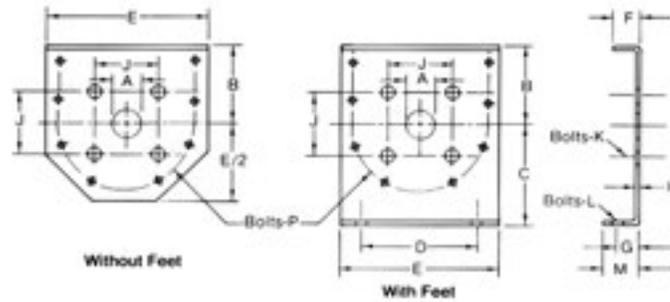
**No. 220, 226 And 326
Hanger Bearings**

No. 220, 226 and 326 Hanger Bearings •

Coupling Diameter, Inches	Bearing	Part Numbers						A	B	D	
		Hard Iron		Babbitted	Bronze	Oil Impregnated Wood	Wearite				Nylon with MOS2
		No Oil Pipe	For Oil Pipe					Inches			
1	Upper	283-69-3	—	283-61-F	283-84-A	283-97-D	—	—	1½	1½/₄	1½/₄
	Lower	283-69-3									
1½	Upper	283-70-3	283-70-4	283-61-A	283-84-B	283-98-D	283-171-A	283-147-1	2½	1½/₄	1½/₄
	Lower	283-70-3									
2	Upper	283-72-3	283-72-4	283-61-B	283-84-C	283-99-D	283-171-B	283-147-2	2¾	1½/₄	1½/₄
	Lower	283-72-3									
2¾/₄	Upper	283-73-3	283-73-4	283-61-C	283-84-D	283-100-B	283-171-C	283-147-3	3¼	2½/₄	2¾
	Lower	283-73-3									
3	Upper	283-74-3	283-74-4	283-61-D	283-84-E	283-101-D	283-171-D	283-147-4	4	2½/₄	2¾
	Lower	283-74-3									
3¾/₄	Upper	283-138-1	—	283-61-E	283-84-F	283-102-B	283-171-E	283-147-5	4¾	3¾/₄	3¾
	Lower	283-138-1									
3½/₄	Upper	283-114-1	—	—	—	—	—	—	5¼	3¾/₄	3¾
	Lower	283-114-1									

• For numbers 20A, 20B, 26A, 26B, 28A, 28B old style hangers.

component selection



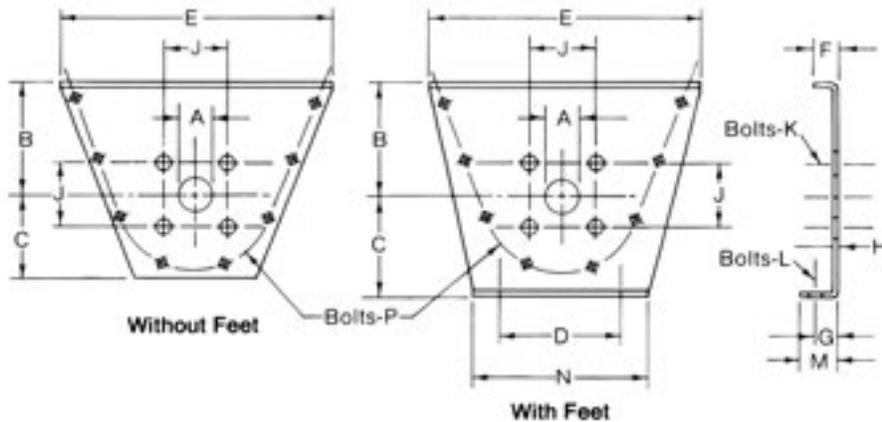
Trough End Plates consist of heavy steel plate, flanged at the top for supporting the trough cover. They can be furnished with or without feet, formed by a flange at the bottom for supporting the conveyor trough. They are drilled and countersunk on the back side, to suit either babbitted, bronze, or ball bearing flanged units, or shaft-mounted screw conveyor drive adapter housings. Trough end plates with mounting holes located other than shown, can be furnished. Stainless steel trough end plates with or without feet, can be furnished.

Trough End Plates—U, for Babbitt, Bronze or Ball Bearings

Screw Dia.	Shaft Dia.	Trough End Plate				A	B	C	D	E	F	G	H	J	K	L	M	P		
		With Feet		Without Feet																
Inches		Part No.	Weight	Part No.	Weight	Inches														
4	1	651-536-1	5	651-536-4	3	1 1/4	3 3/8	4 3/8	5 3/4	7 3/4	1 7/16	1	3/16	2 1/4	3/8	1 1/8	3/16	3/16	1 1/8	3/16
6	1 1/2	651-536-7	7	651-536-10	5	1 3/4	4 1/2	5 3/8	8 1/8	9 3/4	1 1/2	1	3/16	4	1/2	3/8	1 1/4	3/16	1 1/4	3/16
9	1 1/2	651-536-13	17	651-536-19	12	1 3/4	6 1/8	7 7/8	9 3/8	13 3/4	1 5/8	1 1/2	1/4	4	1/2	1/2	2 1/8	3/16	3/16	2 1/8
	2	651-536-16	17	651-536-22	12	2 1/4	6 1/8	7 7/8	9 3/8	13 3/4	1 5/8	1 1/2	1/4	5 1/8	3/8	1/2	2 1/8	3/16	3/16	2 1/8
10	1 1/2	651-536-25	20	651-536-31	14	1 3/4	6 3/8	8 7/8	9 1/2	14 3/4	1 3/4	1 3/4	1/4	4	1/2	1/2	2 1/8	3/16	3/16	2 1/8
	2	651-536-28	20	651-536-34	14	2 1/4	6 3/8	8 7/8	9 1/2	14 3/4	1 3/4	1 3/4	1/4	5 1/8	3/8	1/2	2 1/8	3/16	3/16	2 1/8
12	2	651-536-37	28	651-536-46	19	2 1/4	7 3/4	9 3/8	12 1/4	17 1/4	2	1 5/8	1/4	5 1/8	3/8	3/8	2 1/4	1/8	1/8	2 1/4
	2 7/16	651-536-40	28	651-536-49	19	2 11/16	7 3/4	9 3/8	12 1/4	17 1/4	2	1 5/8	1/4	5 1/8	3/8	3/8	2 1/4	1/8	1/8	2 1/4
14	3	651-536-43	28	651-536-52	19	3 1/4	7 3/4	9 3/8	12 1/4	17 1/4	2	1 5/8	1/4	6	3/4	3/8	2 1/4	1/8	1/8	2 1/4
	2 7/16	651-536-55	42	651-536-61	32	2 11/16	9 1/4	10 7/8	13 1/2	19 1/4	2	1 5/8	5/16	5 1/8	3/8	3/8	2 1/4	1/8	1/8	2 1/4
16	3	651-536-58	42	651-536-64	32	3 1/4	9 1/4	10 7/8	13 1/2	19 1/4	2	1 5/8	5/16	6	3/4	3/8	2 1/4	1/8	1/8	2 1/4
	3	651-536-67	54	651-536-70	41	3 1/4	10 3/8	12	14 7/8	21 1/4	2 1/2	2	5/16	6	3/4	3/8	3 1/4	3/16	3/16	3 1/4
18	3	651-536-73	80	651-536-79	61	3 1/4	12 1/8	13 3/8	16	24 1/4	2 1/2	2	3/8	6	3/4	3/8	3 1/4	3/16	3/16	3 1/4
	3 7/16	651-536-76	80	651-536-82	61	3 11/16	12 1/8	13 3/8	16	24 1/4	2 1/2	2	3/8	6 3/4	3/4	3/8	3 1/4	3/16	3/16	3 1/4
20	3	651-536-85	96	651-536-91	72	3 1/4	13 1/2	15	19 1/4	26 1/4	2 1/2	2 1/4	3/8	6	3/4	3/4	3 1/4	3/16	3/16	3 1/4
	3 7/16	651-536-88	96	651-536-94	72	3 11/16	13 1/2	15	19 1/4	26 1/4	2 1/2	2 1/4	3/8	6 3/4	3/4	3/4	3 1/4	3/16	3/16	3 1/4
24	3	651-536-97	130	651-536-103	96	3 1/4	16 1/2	18 1/2	20	30 1/4	2 1/2	2 1/2	3/8	6	3/4	3/4	4 1/8	3/16	3/16	4 1/8
	3 7/16	651-536-100	130	651-536-106	96	3 11/16	16 1/2	18 1/2	20	30 1/4	2 1/2	2 1/2	3/8	6 3/4	3/4	3/4	4 1/8	3/16	3/16	4 1/8

(¹) Six bolt holes (²) Ten bolt holes
 (³) Eight bolt holes (⁴) Twelve bolt holes

component selection



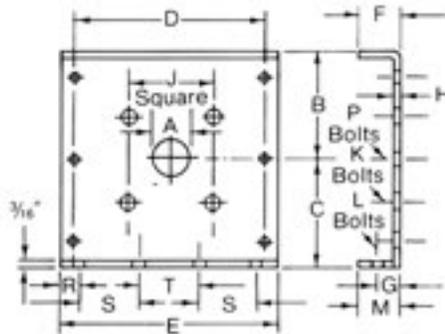
Trough End Plates—Flared, for Babbitt, Bronze or Ball Bearings

Screw Dia.	Shaft Dia.	Trough End Plate				A	B	C		D	E	F	G	H	J	K	L	M	N	P
		With Feet		Without Feet				W/Feet	W/O Feet											
Inches		Part No.	Weight	Part No.	Weight	Inches														
6	1 1/2	651-537-1	10	651-537-4	9	1 3/4	7	5 3/8	5	8 1/8	16 1/8	1 1/2	1	3/8	4	1/2	3/8	1 3/4	10 1/4	3/8(*)
9	1 1/2	651-537-7	25	651-537-13	21	1 3/4	9	7 1/8	6 3/4	9 3/8	21 1/4	1 3/8	1 1/2	1/4	4	1/2	1/2	2 3/8	14 3/8	3/8(?)
	2	651-537-10	24	651-537-16	20	2 1/4	9	7 1/8	6 3/4	9 3/8	21 1/4	1 3/8	1 1/2	1/4	5 1/8	3/8	1/2	2 3/8	14 3/8	3/8(?)
12	2	651-537-19	36	651-537-28	31	2 1/4	10	9 3/8	8 3/4	12 1/4	26 3/8	2	1 3/8	1/4	5 1/8	3/8	3/8	2 3/4	17 3/8	1/2(?)
	2 7/16	651-537-22	36	651-537-31	31	2 11/16	10	9 3/8	8 3/4	12 1/4	26 3/8	2	1 3/8	1/4	5 1/8	3/8	3/8	2 3/4	17 3/8	1/2(?)
	3	651-537-25	35	651-537-34	30	3 1/4	10	9 3/8	8 3/4	12 1/4	26 3/8	2	1 3/8	1/4	6	3/4	3/8	2 3/4	17 3/8	1/2(?)
14	2 7/16	651-537-37	54	651-537-43	46	2 11/16	11	10 3/8	9 3/4	13 1/2	28 3/8	2	1 3/8	3/8	5 3/8	3/8	3/8	2 7/8	19 3/8	1/2(?)
	3	651-537-40	53	651-537-46	46	3 1/4	11	10 3/8	9 3/4	13 1/2	28 3/8	2	1 3/8	3/8	6	3/4	3/8	2 7/8	19 3/8	1/2(?)
16	3	651-537-49	66	651-537-52	57	3 3/4	11 1/2	12	10 3/8	14 7/8	32 1/2	2 1/2	2	3/8	6	3/4	3/8	3 1/4	21 3/4	3/8(?)
18	3	651-537-A	107	651-537-G	91	3 3/4	12 1/8	13 3/8	12 1/4	16	36 1/2	2 1/2	2	3/8	6	3/4	3/8	3 3/4	24 3/4	3/8(?)
	3 7/16	651-537-D	107	651-537-K	91	3 7/16	12 1/8	13 3/8	12 1/4	16	36 1/2	2 1/2	2	3/8	6 3/4	3/4	3/8	3 3/4	24 3/4	3/8(?)
20	3	651-537-N	129	651-537-V	106	3 3/4	13 1/2	15	13 3/4	19 1/4	39 1/2	2 1/2	2 1/4	3/8	6	3/4	3/4	3 3/4	26 7/8	3/8(?)
	3 7/16	651-537-S	128	651-537-Y	106	3 7/16	13 1/2	15	13 3/4	19 1/4	39 1/2	2 1/2	2 1/4	3/8	6 3/4	3/4	3/4	3 3/4	26 7/8	3/8(?)
24	3	651-537-AB	175	651-537-AH	143	3 3/4	16 1/2	18 1/8	15 1/4	20	45 1/2	2 1/2	2 1/2	3/8	6	3/4	3/4	4 1/8	31	3/8(*)
	3 7/16	651-537-AE	175	651-537-AL	142	3 7/16	16 1/2	18 1/8	15 1/4	20	45 1/2	2 1/2	2 1/2	3/8	6 3/4	3/4	3/4	4 1/8	31	3/8(*)

(*)Six bolt holes
(?)Eight bolt holes

(?)Ten bolt holes
(*)Twelve bolt holes

component selection



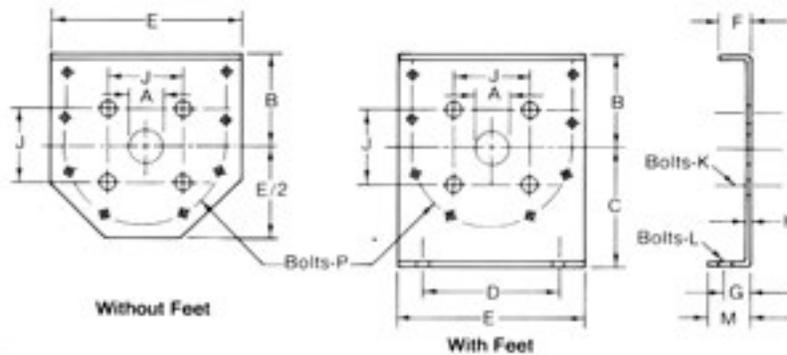
Trough End Plates—Flush End, for Babbitt, Bronze or Ball Bearings

Screw Dia.	Shaft Dia.	Part Number	Weight, Pounds	A	B	C	D	E	F	G	H	J	K	L	M	P	R	S	T
Inches				Inches															
4	1	651-538-A	4	1 1/4	3 3/8	3 3/4	7	7 3/4	1 7/8	7/8	3/8	2 3/4	3/8	1/4 ⁽¹⁾	1 1/4	3/8 ⁽²⁾	1/2	2 1/4	2 1/4
6	1 1/2	651-538-D	6	1 3/4	4 1/2	5	8 7/8	9 3/4	1 1/2	1 1/8	3/8	4	1/2	3/8 ⁽¹⁾	1 1/2	3/8 ⁽²⁾	3/8	2 3/8	3
9	1 1/2	651-538-G	14	1 3/4	6 1/8	7 1/8	12 1/2	13 3/4	1 5/8	1	1/4	4	1/2	3/8 ⁽¹⁾	1 1/2	3/8 ⁽²⁾	7/8	4	4
	2	651-538-K	14	2 1/4	6 1/8	7 1/8	12 1/2	13 3/4	1 5/8	1	1/4	5 1/8	5/8	3/8 ⁽¹⁾	1 1/2	3/8 ⁽²⁾	7/8	4	4
10	1 1/2	651-538-N	17	1 3/4	6 3/8	7 7/8	13 1/4	14 3/4	1 3/4	1	1/4	4	1/2	3/8 ⁽¹⁾	1 5/8	3/8 ⁽²⁾	7/8	4 1/8	4 1/4
	2	651-538-S	17	2 1/4	6 3/8	7 7/8	13 1/4	14 3/4	1 3/4	1	1/4	5 1/8	5/8	3/8 ⁽¹⁾	1 5/8	3/8 ⁽²⁾	7/8	4 1/8	4 1/4
12	2	651-538-V	22	2 1/4	7 3/4	8 7/8	15 7/8	17 1/4	2	1 1/4	1/4	5 1/8	5/8	3/8 ⁽¹⁾	2 1/8	1/2 ⁽²⁾	7/8	5 1/8	5 1/4
	2 7/8	651-538-Y	22	2 11/8	7 3/4	8 7/8	15 7/8	17 1/4	2	1 1/4	1/4	5 1/8	5/8	3/8 ⁽¹⁾	2 1/8	1/2 ⁽²⁾	7/8	5 1/8	5 1/4
	3	651-538-AB	22	3 1/4	7 3/4	8 7/8	15 7/8	17 1/4	2	1 1/4	1/4	6	3/4	3/8 ⁽¹⁾	2 1/8	1/2 ⁽²⁾	7/8	5 1/8	5 1/4
14	2 7/8	651-538-AE	37	2 11/8	9 1/4	10 1/8	17 7/8	19 1/4	2	1 1/4	5/8	5 1/8	5/8	3/8 ⁽²⁾	2 1/8	1/2 ⁽²⁾	7/8	3 1/2	3 1/2
	3	651-538-AH	36	3 1/4	9 1/4	10 1/8	17 7/8	19 1/4	2	1 1/4	5/8	6	3/4	3/8 ⁽²⁾	2 1/8	1/2 ⁽²⁾	7/8	3 1/2	3 1/2
16	3	651-538-AL	45	3 1/4	10 3/8	11 1/8	20	21 1/4	2 1/2	1 1/4	5/8	6	3/4	3/8 ⁽²⁾	2 1/8	5/8 ⁽²⁾	7/8	3 1/4	4
18	3	651-538-AP	69	3 1/4	12 1/8	12 1/8	22	24 1/4	2 1/2	1 1/2	3/8	6	3/4	1/2 ⁽²⁾	2 3/8	5/8 ⁽⁴⁾	1 1/8	4 1/8	4 3/8
	3 7/8	651-538-AT	68	3 11/8	12 1/8	12 1/8	22	24 1/4	2 1/2	1 1/2	3/8	6 3/4	3/4	1/2 ⁽²⁾	2 3/8	5/8 ⁽⁴⁾	1 1/8	4 1/8	4 3/8
20	3	651-538-AW	82	3 1/4	13 1/2	13 3/8	24 3/8	26 1/4	2 1/2	1 1/2	3/8	6	3/4	1/2 ⁽²⁾	2 3/8	5/8 ⁽⁴⁾	1 1/8	4 7/8	4 3/4
	3 7/8	651-538-AZ	81	3 11/8	13 1/2	13 3/8	24 3/8	26 1/4	2 1/2	1 1/2	3/8	6 3/4	3/4	1/2 ⁽²⁾	2 3/8	5/8 ⁽⁴⁾	1 1/8	4 7/8	4 3/4
24	3	651-538-BC	111	3 1/4	16 1/2	15 3/8	28 1/2	30 1/4	2 1/2	1 1/2	3/8	6	3/4	1/2 ⁽²⁾	2 3/8	5/8 ⁽²⁾	1 1/8	5 1/8	5 1/2
	3 7/8	651-538-BF	110	3 11/8	16 1/2	15 3/8	28 1/2	30 1/4	2 1/2	1 1/2	3/8	6 3/4	3/4	1/2 ⁽²⁾	2 3/8	5/8 ⁽²⁾	1 1/8	5 1/8	5 1/2

(¹) Four bolt holes
 (²) Six bolt holes
 (³) Eight bolt holes

(⁴) Ten bolt holes
 (⁵) Twelve bolt holes

component selection



Trough End Plates – U, For Double Roller Bearings

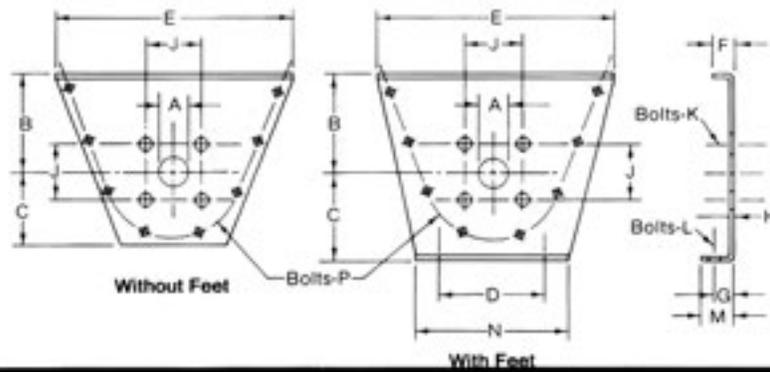
Screw Dia., Inches	Shaft Dia., Inches	Trough End Plate				A ⁽¹⁾	B	C	D	E	F	G	H	J	K	L	M	P
		With Foot		Without Foot														
		Part Number	Weight, Pounds	Part Number	Weight, Pounds													
6	1½	651-123-1	11	651-123-64	8	4¾	4½	5%	8%	9%	1½	1	¾	5%	¾	¾	1¾	¾ ⁽¹⁾
9	1½	651-123-2	24	651-123-65	17	4¾	6%	7%	9%	13%	1½	1½	¾	5%	¾	¾	2%	¾ ⁽²⁾
		651-123-2	24	651-123-65	17	4¾	6%	7%	9%	13%	1½	1½	¾	5%	¾	¾	2%	¾ ⁽²⁾
10	1½	651-123-3	30	651-123-67	19	4¾	6%	8%	9%	14%	1½	1½	¾	5%	¾	¾	2%	¾ ⁽²⁾
		651-123-3	30	651-123-67	19	4¾	6%	8%	9%	14%	1½	1½	¾	5%	¾	¾	2%	¾ ⁽²⁾
12	2	651-123-4	37	651-123-69	28	4¾	7%	9%	12%	17%	2	1%	¾	5%	¾	¾	2%	¾ ⁽²⁾
		651-123-5	36	651-123-70	27	5%	7%	9%	12%	17%	2	1%	¾	6%	¾	¾	2%	¾ ⁽²⁾
		651-123-6	36	651-123-71	27	6	7%	9%	12%	17%	2	1%	¾	8	1	¾	2%	¾ ⁽²⁾
14	2½	651-123-7	61	651-123-72	47	5½	9%	10%	13%	19%	2	1%	¾	6%	¾	¾	2%	¾ ⁽²⁾
		651-123-8	61	651-123-73	46	6	9%	10%	13%	19%	2	1%	¾	8	1	¾	2%	¾ ⁽²⁾
16	3	651-123-9	77	651-123-74	60	6	10%	12	14%	21%	2½	2	¾	8	1	¾	3%	¾ ⁽²⁾
		651-123-A	113	651-123-S	92	6	12%	13%	16	24%	2½	2	¾	8	1	¾	3%	¾ ⁽²⁾
18	3½	651-123-A	113	651-123-S	92	6	12%	13%	16	24%	2½	2	¾	8	1	¾	3%	¾ ⁽²⁾
		651-123-A	113	651-123-S	92	6	12%	13%	16	24%	2½	2	¾	8	1	¾	3%	¾ ⁽²⁾
		651-123-A	113	651-123-S	92	6	12%	13%	16	24%	2½	2	¾	8	1	¾	3%	¾ ⁽²⁾
20	3¾	651-123-C	136	651-123-U	109	6	13%	15	19%	26%	2½	2½	¾	8	1	¾	3%	¾ ⁽²⁾
		651-123-C	136	651-123-U	109	6	13%	15	19%	26%	2½	2½	¾	8	1	¾	3%	¾ ⁽²⁾
		651-123-C	136	651-123-U	109	6	13%	15	19%	26%	2½	2½	¾	8	1	¾	3%	¾ ⁽²⁾
24	3¾	651-123-E	186	651-123-W	147	6	16%	18%	20	30%	2½	2½	¾	8	1	¾	4%	¾ ⁽²⁾
		651-123-E	186	651-123-W	147	6	16%	18%	20	30%	2½	2½	¾	8	1	¾	4%	¾ ⁽²⁾

(¹)Six bolt holes (²)Ten bolt holes (³)Tolerance + .010"
 (⁴)Eight bolt holes (⁵)Twelve bolt holes

Trough End Plates – Flared, For Double Roller Bearings

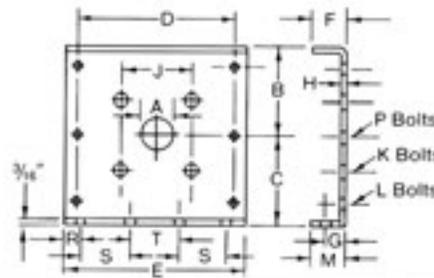
Screw Dia., Inches	Shaft Dia., Inches	Trough End Plate				A ⁽¹⁾	B	C		D	E	F	G	H	J	K	L	M	N	P
		With Feet		Without Feet				With Foot	W/O Foot											
		Part No.	Weight	Part No.	Weight															
6	1½	651-447-35	19	651-480-35	16	4¾	7	5%	5	8%	16%	1½	1	¾	5%	¾	¾	1¾	10%	¾ ⁽¹⁾
9	1½ & 2	651-447-36	36	651-480-36	30	4¾	9	7%	6%	9%	21%	1½	1½	¾	5%	¾	¾	2%	14%	¾ ⁽²⁾
12	2	651-447-37	53	651-480-37	46	4¾	10	9%	8%	12%	26%	2	1%	¾	5%	¾	¾	2%	17%	¾ ⁽²⁾
		651-447-38	53	651-480-38	45	5½	10	9%	8%	12%	26%	2	1%	¾	6%	¾	¾	2%	17%	¾ ⁽²⁾
		651-447-39	52	651-480-39	44	6	10	9%	8%	12%	26%	2	1%	¾	8	1	¾	2%	17%	¾ ⁽²⁾
14	2½	651-447-40	83	651-480-40	72	5½	11	10%	9%	13%	28%	2	1%	¾	6%	¾	¾	2%	19%	¾ ⁽²⁾
		651-447-41	82	651-480-41	71	6	11	10%	9%	13%	28%	2	1%	¾	8	1	¾	2%	19%	¾ ⁽²⁾

component selection



		Trough End Plate				A	B	C		D	E	F	G	H	J	K	L	M	N	P
Screw Dia.	Shaft Dia.	With Feet		Without Feet		Inches														
Inches	Inches	Part No.	Weight	Part No.	Weight															
16	3	651-447-42	103	651-480-42	88	6	11½	12	10½	14½	32½	2½	2	½	8	1	¾	3¼	21¼	¾ ⁽²⁾
18	3	651-512-S	140	651-512-A	118	6	12½	13½	12½	16	36½	2½	2	½	8	1	¾	3¼	24¼	¾ ⁽²⁾
	3 7/16	651-512-S	140	651-512-A	118	6	12½	13½	12½	16	36½	2½	2	½	8	1	¾	3¼	24¼	¾ ⁽²⁾
	3 9/16	651-512-S	140	651-512-A	118	6	12½	13½	12½	16	36½	2½	2	½	8	1	¾	3¼	24¼	¾ ⁽²⁾
20	3	651-512-U	168	651-512-C	139	6	13½	15	13½	19½	39½	2½	2½	½	8	1	¾	3¼	26½	¾ ⁽²⁾
	3 7/16	651-512-U	168	651-512-C	139	6	13½	15	13½	19½	39½	2½	2½	½	8	1	¾	3¼	26½	¾ ⁽²⁾
	3 9/16	651-512-U	168	651-512-C	139	6	13½	15	13½	19½	39½	2½	2½	½	8	1	¾	3¼	26½	¾ ⁽²⁾
24	3 7/16	651-512-W	230	651-512-E	188	6	16½	18½	15½	20	45½	2½	2½	½	8	1	¾	4¼	31	¾ ⁽⁴⁾
	3 9/16	651-512-W	230	651-512-E	188	6	16½	18½	15½	20	45½	2½	2½	½	8	1	¾	4¼	31	¾ ⁽⁴⁾

(¹)Six bolt holes (²)Ten bolt holes (³)Tolerance +.010"
 (⁴)Eight bolt holes (⁵)Twelve bolt holes

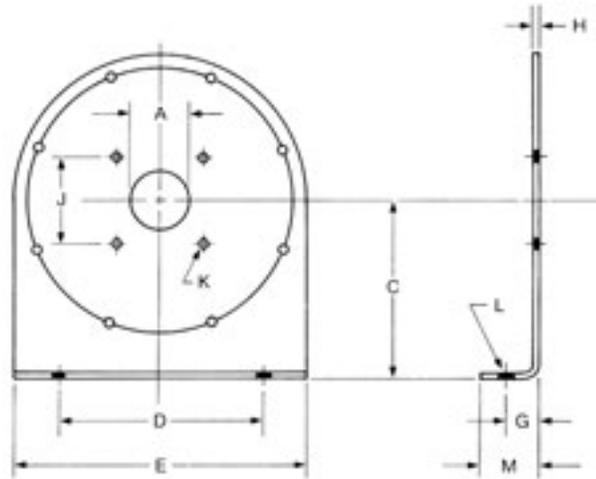


		Trough End Plates — Flush End, For Double Roller Bearings																	
Screw Dia.	Shaft Dia.	Part Number	Weight, Pounds	A ⁽¹⁾	B	C	D	E	F	G	H	J	K	L	M	P	R	S	T
Inches	Inches	Inches																	
6	1½	651-502-A	10	4¼	4½	5	8½	9½	1½	¾	¾	5¼	¾	¾ ⁽¹⁾	1½	¾ ⁽²⁾	¾	2 7/16	3
9	1½	651-502-D	21	4¼	6¼	7¼	12½	13½	1¼	1	¾	5¼	¾	¾ ⁽¹⁾	1½	¾ ⁽²⁾	¾	4	4
	2	651-502-D	21	4¼	6¼	7¼	12½	13½	1¼	1	¾	5¼	¾	¾ ⁽¹⁾	1½	¾ ⁽²⁾	¾	4	4
10	1½	651-502-G	24	4¼	6¼	7¼	13½	14½	1¼	1	¾	5¼	¾	¾ ⁽¹⁾	1½	¾ ⁽²⁾	¾	4 7/16	4¼
	2	651-502-G	24	4¼	6¼	7¼	13½	14½	1¼	1	¾	5¼	¾	¾ ⁽¹⁾	1½	¾ ⁽²⁾	¾	4 7/16	4¼
12	2	651-502-AB	35	4¼	7¼	8¼	15½	17½	2	1¼	¾	5¼	¾	¾ ⁽¹⁾	2½	¾ ⁽²⁾	¾	5¼	5¼
	2 7/16	651-502-AE	34	5½	7¼	8¼	15½	17½	2	1¼	¾	6¼	¾	¾ ⁽¹⁾	2½	¾ ⁽²⁾	¾	5¼	5¼
	3	651-502-AH	34	6	7¼	8¼	15½	17½	2	1¼	¾	8	1	¾ ⁽¹⁾	2½	¾ ⁽²⁾	¾	5¼	5¼
14	2 7/16	651-502-AL	55	5½	9¼	10¼	17½	19½	2	1¼	¾	6¼	¾	¾ ⁽²⁾	2½	¾ ⁽²⁾	¾	3½	3½
	3	651-502-AP	54	6	9¼	10¼	17½	19½	2	1¼	¾	8	1	¾ ⁽²⁾	2½	¾ ⁽²⁾	¾	3½	3½
16	3	651-502-AT	69	6	10¼	11¼	20	21¼	2½	1¼	¾	8	1	¾ ⁽²⁾	2½	¾ ⁽²⁾	¾	3¾	4
18	3	651-502-K	104	6	12¼	12¼	22	24¼	2½	1¼	¾	8	1	¾ ⁽²⁾	2½	¾ ⁽²⁾	1¼	4 7/16	4¼
	3 7/16	651-502-K	104	6	12¼	12¼	22	24¼	2½	1¼	¾	8	1	¾ ⁽²⁾	2½	¾ ⁽²⁾	1¼	4 7/16	4¼
	3 9/16	651-502-K	104	6	12¼	12¼	22	24¼	2½	1¼	¾	8	1	¾ ⁽²⁾	2½	¾ ⁽²⁾	1¼	4 7/16	4¼
20	3	651-502-V	122	6	13¼	13¼	24¼	26¼	2½	1¼	¾	8	1	¾ ⁽²⁾	2½	¾ ⁽²⁾	1¼	4¼	4¼
	3 7/16	651-502-V	122	6	13¼	13¼	24¼	26¼	2½	1¼	¾	8	1	¾ ⁽²⁾	2½	¾ ⁽²⁾	1¼	4¼	4¼
	3 9/16	651-502-V	122	6	13¼	13¼	24¼	26¼	2½	1¼	¾	8	1	¾ ⁽²⁾	2½	¾ ⁽²⁾	1¼	4¼	4¼
24	3 7/16	651-502-Y	163	6	16¼	15¼	28¼	30¼	2½	1¼	¾	8	1	¾ ⁽²⁾	2½	¾ ⁽²⁾	1¼	5¼	5¼
	3 9/16	651-502-Y	163	6	16¼	15¼	28¼	30¼	2½	1¼	¾	8	1	¾ ⁽²⁾	2½	¾ ⁽²⁾	1¼	5¼	5¼

(¹)Four bolt holes (²)Eight bolt holes (³)Twelve bolt holes
 (⁴)Six bolt holes (⁵)Ten bolt holes (⁶)Tolerance +.010"

component description

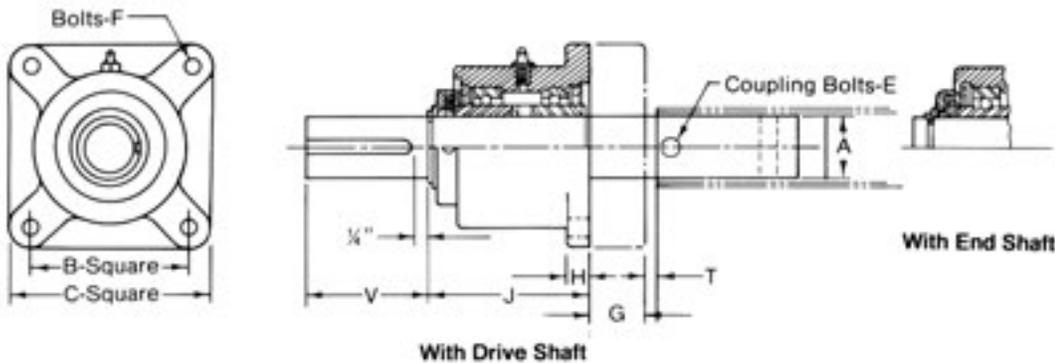
Trough Ends



Trough End Plates—Tubular, for Babbitt, Bronze, or Ball Bearings																
Screw Dia.	Shaft Dia.	Part Number*			Weight, Pounds		A	C	D	E	G	H	J	K	L	M
		C.S.	304sst	316sst	C.S.	SST										
6	1½	546-1	547-1	548-1	6	6.7	1½	5½	8½	10	1	¾	4	¾	¾	1½
9	1½	546-2	547-2	548-2	15.5	17	1½	7½	9½	13½	1½	¾	4	¾	¾	2½
	2	546-3	547-3	548-3			5½						1½			
12	2	546-4	547-4	548-4	23.9	26	2½	9½	12½	17½	1½	¾	5½	1½	1½	2½
	2½	546-5	547-5	548-5			2½						1½			
	3	546-6	547-6	548-6			3½						6			
14	2½	546-7	547-7	548-7	37	40	2½	10½	12½	19½	1½	¾	5½	1½	1½	2½
	3	546-8	547-8	548-8			3½						6			
16	3	546-9	547-9	548-9	45	48.6	3½	12	14½	21½	2	¾	6	1½	1½	3½
18	3	546-10	547-10	548-10	68.3	73.7	3½	13½	16	24½	2	¾	6	1½	1½	3½
	3½	546-11	547-11	548-11			3½						6			
20	3	546-12	547-12	548-12	82	88.5	3½	15	19½	26½	2½	¾	6	1½	1½	3½
	3½	546-13	547-13	548-13			3½						6			
24	3	546-14	547-14	548-14	111	120	3½	18½	20	30½	2½	¾	6	1½	1½	4½
	3½	546-15	547-15	548-15			3½						6			

* Complete part number by adding prefix 651-. Example: 651-546-7

component selection



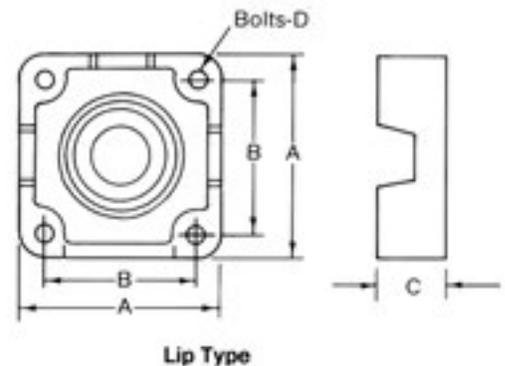
Double Ball Bearing Flanged Blocks with drive shafts consist of rigid shafts operating in two single row, deep groove ball bearings which are effectively sealed and mounted in heavy, one-piece gray iron housings. Spring locking collars with two set screws hold bearings firmly on shafts. This unit will accommodate radial and thrust loads. Shafts are available for use with or without trough end seals. These flanged blocks can also be furnished with tail shafts.

Trough End Bearings—Flanged-Double Ball Bearing

Shaft Diameter A, Inches	Flanged Block With Shaft					B	C	E	F	G	H	J	T	V	Keyseat	
	No Provision For Trough End Seal		Weight, Pounds (1)	With Provision For Trough End Seal												Weight Pounds (1)
	Part Numbers			Part Numbers												
	Drive Shaft	End Shaft		Drive Shaft	End Shaft	Inches										
1½	153-96-BA	153-96-DA	17	153-96-FC	153-96-FD	18	4	5½	½	½	1½	¾	4½	1½	3½	¾ x ¾
2	153-97-BA	153-97-DA	30	153-97-FC	153-97-FD	32	5½	6½	¾	¾	1½	1½	5½	1½	4	¾ x ¾
2¾	153-98-AG	153-98-CC	44	153-98-EA	153-98-EB	46	5½	6½	¾	¾	1½	1½	5½	1½	4½	¾ x ¾
3	153-99-BJ	153-99-EG	70	153-99-HG	153-99-HH	74	6	7½	¾	¾	1½	¾	6½	1½	5½	¾ x ¾
3¾	153-100-BA	153-100-DA	107	153-100-FC	153-100-FD	112	6½	8½	¾	¾	2½	1	7½	2½	6	¾ x ¾

(1)Weights are for assemblies with drive shaft.

Trough End Seals provide bearing protection against dust or fumes from within the trough and against entrance of dirt, moisture or lubricant along the shaft. The gray iron seal housings are designed for assembly between bearing flanged blocks and the trough end plates. They can be provided with lip-type seals for maximum protection for or against the materials being handled, with felt seals when handling dusty materials, or with waste packing when handling abrasive materials.



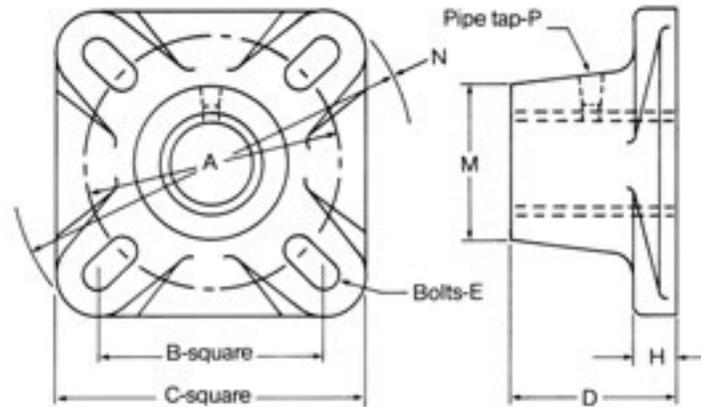
Trough End Seals

Shaft Diameter, Inches	Trough End Seal Number		Weight Pounds	A	B	C	D
	Lip Type(1)	Waste-Pack Type(1)					
1½	121-83-KL		4.3	5½	4	1½	¾
2	121-83-SL		6.0	6½	5½	1½	¾
2¾	121-83-UL		7.0	6½	5½	1½	¾
3	121-83-XL		10.0	7½	6	1½	¾
3¾	121-83-YL		15.5	8½	6½	2½	¾

(1)Normally carried in stock as unassembled parts.

(2) 304 and 316 SST applications use 121-92.

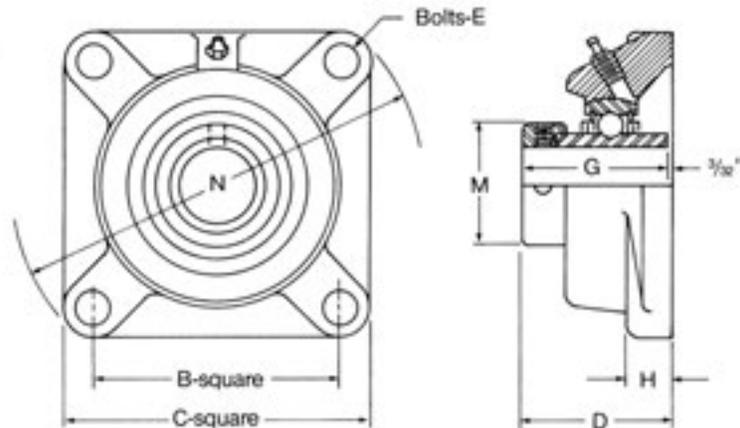
Screw conveyor



Babbitted and bronze bearing — flanged blocks

Shaft diameter, inches	Part numbers		Weight, pounds	A	B	C	D	E	H	M	N	P
	Babbitted	Bronze		Inches								
1	176-62-C	556-6-C	2.4	3	2 $\frac{1}{2}$	3 $\frac{1}{2}$	2	$\frac{3}{8}$	$\frac{1}{2}$	1 $\frac{1}{2}$	4 $\frac{7}{32}$	$\frac{1}{8}$
1 $\frac{1}{2}$	176-62-H	556-6-H	5.3	4 $\frac{1}{2}$	4	5 $\frac{1}{2}$	3	$\frac{1}{2}$	$\frac{3}{8}$	2 $\frac{1}{2}$	6 $\frac{13}{32}$	$\frac{1}{8}$
2	176-62-AB	556-6-AB	10.3	5 $\frac{1}{2}$	5 $\frac{1}{2}$	6 $\frac{1}{2}$	4	$\frac{3}{8}$	$\frac{3}{8}$	3 $\frac{1}{2}$	8 $\frac{1}{2}$	$\frac{1}{8}$
2 $\frac{1}{16}$	176-62-AE	556-6-AE	16.5	6 $\frac{1}{2}$	5 $\frac{1}{2}$	6 $\frac{1}{2}$	5	$\frac{3}{8}$	1	4	9 $\frac{1}{8}$	$\frac{1}{8}$
3	176-62-AK	556-6-AK	26.0	7 $\frac{1}{2}$	6	7 $\frac{1}{2}$	6	$\frac{3}{8}$	1 $\frac{1}{2}$	4 $\frac{1}{2}$	10 $\frac{1}{2}$	$\frac{1}{8}$
3 $\frac{1}{16}$	176-62-BC	556-6-BC	35.0	8 $\frac{1}{2}$	6 $\frac{1}{2}$	8 $\frac{1}{16}$	7	$\frac{3}{8}$	1 $\frac{1}{2}$	5 $\frac{1}{2}$	11 $\frac{1}{8}$	$\frac{1}{8}$

Grease cups or fittings are not included.

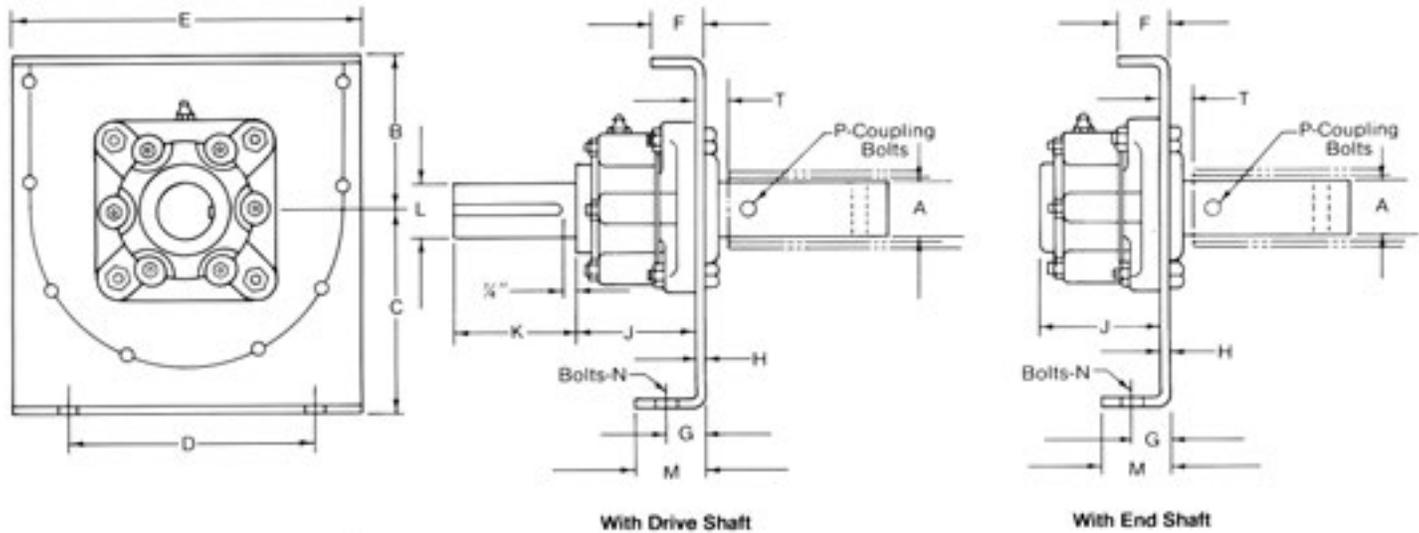


Ball bearing — flanged blocks

Shaft diameter, inches	Part number	Weight, pounds	B	C	D	E	G	H	M	N
			Inches							
1	292	2.0	2 $\frac{1}{2}$	3 $\frac{1}{2}$	1 $\frac{27}{64}$	$\frac{7}{16}$	1 $\frac{27}{64}$	$\frac{7}{32}$	1 $\frac{1}{2}$	4 $\frac{27}{32}$
1 $\frac{1}{2}$	301	5.2	4	5 $\frac{1}{2}$	2 $\frac{27}{64}$	$\frac{1}{2}$	1 $\frac{27}{32}$	$\frac{3}{8}$	2 $\frac{11}{16}$	6 $\frac{27}{32}$
2	309	9.5	5 $\frac{1}{2}$	6 $\frac{1}{2}$	2 $\frac{17}{64}$	$\frac{3}{8}$	2 $\frac{1}{2}$	$\frac{3}{8}$	3 $\frac{1}{2}$	8 $\frac{1}{2}$
2 $\frac{1}{16}$	318	11.0	5 $\frac{1}{2}$	6 $\frac{1}{2}$	2 $\frac{27}{64}$	$\frac{3}{8}$	2 $\frac{1}{2}$	$\frac{11}{16}$	3 $\frac{27}{32}$	9 $\frac{1}{32}$
3	39	17.0	6	7 $\frac{1}{2}$	2 $\frac{21}{32}$	$\frac{3}{8}$	2 $\frac{1}{2}$	$\frac{3}{8}$	4 $\frac{1}{2}$	10 $\frac{1}{4}$
3 $\frac{1}{16}$	42	26.0	6 $\frac{1}{2}$	8 $\frac{1}{16}$	3 $\frac{21}{32}$	$\frac{3}{8}$	3 $\frac{1}{16}$	1	5 $\frac{1}{16}$	11 $\frac{1}{8}$

* Complete number by adding prefix 1040-10. Example: 1040-10-9.
 Blocks include grease fittings, are greased and ready for operation.
 These are Series F3-U200N thru 2 $\frac{1}{16}$ " size and Series F 200 for 3" and over.

component selection



Drive Shaft Trough Ends with Double Roller Bearings have large radial capacity. In addition, the assembly accommodates heavy thrust loads in either direction, making separate thrust provisions unnecessary.

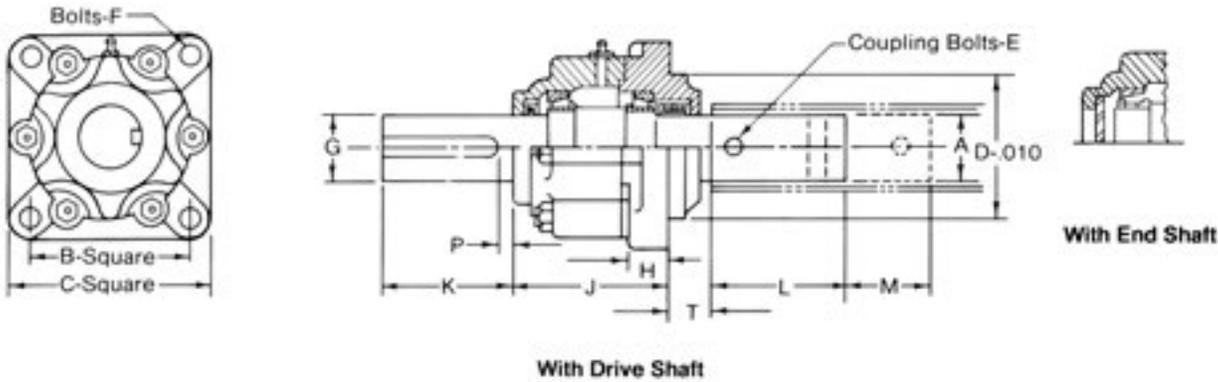
Trough End with Double Roller Bearings

Screw Diameter, Inches	A, Shaft Dia.	Part Numbers		Weight, Pounds (*)	B	C	D	E	F	G	H	J	K	L	M	N	P	T
		Drive Shaft	End Shaft		Inches													
6	1 1/2	155-6-AD	155-6-BD	65	4 1/2	5	8	9	1 1/2	1	3/4	6 1/2	4	1 1/8	1 3/4	3/4	1/2	1 1/2
	1 1/2	155-6-AE	155-6-BE	78	6 1/2	7 1/2	9 1/2	13 1/2	1 1/2	1 1/2	3/4	6 1/2	4	1 1/8	2 1/2	1/2	1/2	1 1/2
9	2	155-7-AD	155-7-BD	81	6 1/2	7 1/2	9 1/2	13 1/2	1 1/2	1 1/2	3/4	6 1/2	4 1/2	1 1/8	2 1/2	1/2	1/2	1 1/2
	1 1/2	155-6-AF	155-6-BF	84	6 1/2	8	9 1/2	14 1/2	1 1/2	1 1/2	3/4	6 1/2	4	1 1/8	2 1/2	1/2	1/2	1 1/2
10	2	155-7-AE	155-7-BE	87	6 1/2	8	9 1/2	14 1/2	1 1/2	1 1/2	3/4	6 1/2	4 1/2	1 1/8	2 1/2	1/2	1/2	1 1/2
	2 1/8	155-7-AF	155-7-BF	94	7 1/2	9 1/2	12 1/2	17 1/2	2	1 1/2	3/4	6 1/2	4 1/2	1 1/8	2 1/2	1/2	1/2	1 1/2
12	3	153-130-L	153-130-H	102	7 1/2	9 1/2	12 1/2	17 1/2	2	1 1/2	3/4	6 1/2	5 1/2	2 1/8	2 1/2	1/2	1/2	1 1/2
	2 1/8	153-131-W	153-131-P	165	7 1/2	9 1/2	12 1/2	17 1/2	2	1 1/2	3/4	8 1/2	6	2 1/8	2 1/2	1/2	1/2	2
14	3	153-130-M	153-130-J	127	9 1/2	10 1/2	13 1/2	19 1/2	2	1 1/2	1/2	6 1/2	5 1/2	2 1/8	2 1/2	1/2	1/2	1 1/2
	2 1/8	153-131-X	153-131-R	190	9 1/2	10 1/2	13 1/2	19 1/2	2	1 1/2	1/2	8 1/2	6	2 1/8	2 1/2	1/2	1/2	2
16	3	153-131-Y	153-131-S	206	10 1/2	12	14 1/2	21 1/2	2 1/2	2	1/2	8 1/2	6	2 1/8	3 1/4	1/2	1/2	2
	3 1/8	153-131-Z	153-131-T	242	12 1/2	13 1/2	16	24 1/2	2 1/2	2	1/2	8 1/2	6	2 1/8	3 1/4	1/2	1/2	2
18	3 1/8	153-142-R	153-142-K	264	12 1/2	13 1/2	16	24 1/2	2 1/2	2	1/2	8 1/2	7	3 1/8	3 1/4	1/2	1/2	2 1/2
	3 1/8	153-143-R	153-143-K	280	12 1/2	13 1/2	16	24 1/2	2 1/2	2	1/2	8 1/2	6 1/2	3 1/8	3 1/4	1/2	1	2 1/2
20	3	153-131-AA	153-131-U	265	13 1/2	15	19 1/2	26 1/2	2 1/2	2 1/4	1/2	8 1/2	6	2 1/8	3 3/4	1/2	1/2	2
	3 1/8	153-142-S	153-142-L	287	13 1/2	15	19 1/2	26 1/2	2 1/2	2 1/4	1/2	8 1/2	7	3 1/8	3 3/4	1/2	1/2	2 1/2
24	3 1/8	153-143-S	153-143-L	303	13 1/2	15	19 1/2	26 1/2	2 1/2	2 1/4	1/2	8 1/2	6 1/2	3 1/8	3 3/4	1/2	1	2 1/2
	3 1/8	153-142-T	153-142-M	337	16 1/2	18 1/2	20	30 1/2	2 1/2	2 1/2	1/2	8 1/2	7	3 1/8	4 1/4	1/2	1/2	2 1/2
24	3 1/8	153-143-T	153-143-M	353	16 1/2	18 1/2	20	30 1/2	2 1/2	2 1/2	1/2	8 1/2	6 1/2	3 1/8	4 1/4	1/2	1	2 1/2

(*)Weights are for drive shaft assembly.

Bearing blocks are provided with grease fittings and are greased ready for operation. Coupling bolts are not included.

component selection



Double Roller Bearing Flanged Blocks with drive shafts consist of rigid shafts operating in two oversize roller bearings which are effectively sealed and mounted in rugged two-piece gray iron housings. The bearings are held in place by necked shafts and are suitable for heavy thrust loads in either direction in addition to carrying radial loads for overhung drive applications. These flanged blocks can also be furnished with tail shafts.

Trough End Bearings—Flanged—Double Roller (Part Numbers and Weights)

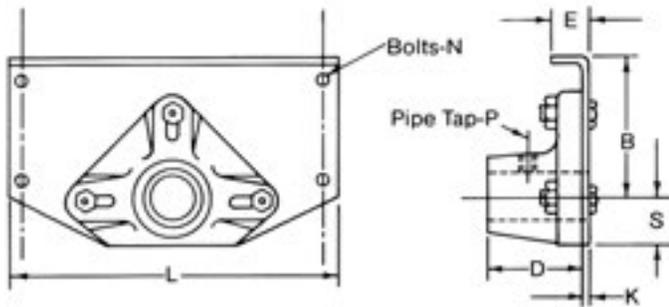
Shaft Diameter Inches	With Drive Shaft	With End Shaft	Without Drive Shaft	Without End Shaft	Weight,(*) Pounds
1½	155-6-AB	155-6-BB	155-6-B	155-6-C	52
2	155-7-AB	155-7-BB	155-7-B	155-7-C	55
2⅞	153-130-K	153-130-G	153-130-D	153-130-A	63
3	153-131-V	153-131-N	153-131-G	153-131-A	125
3⅞	153-142-P	153-142-J	153-142-E	153-142-A	147
3⅞	153-143-P	153-143-J	153-143-E	153-143-A	163

(*)Weights are for drive shaft assembly. Blocks include grease fittings, are greased and ready for operation. Bore tolerance for mounting +.010"—.000" For unusually heavy loads extend shaft and provide outboard bearing.

Trough End Bearings – Flanged – Double Roller (Dimensions)

Shaft Dia. A	B	C	D	E	F	G	H	J	K	L	M	P	T	Keyseat
Inches														
1½	5¼	7¼	4.75	½	¾	1⅞	1¼	6¼	4	4¼	3	¼	1¾	¾ x ¾
2	5¼	7¼	4.75	⅝	¾	1⅞	1¼	6¼	4½	4¼	3	¼	1¾	½ x ¾
2⅞	6¼	8	5.50	⅝	¾	2⅞	1½	6¼	5½	4¾	3	¼	1¾	⅝ x ⅝
3	8	10	6.00	¾	1	2⅞	1½	8¼	6	5	3	¼	2	¾ x ¾
3⅞	8	10	6.00	¾	1	3⅞	1½	8¼	7	7	4	¼	2½	¾ x ¾
3⅞	8	10	6.00	1	1	3⅞	1½	8¼	6½	7	4	¼	2½	1 x ½

component selection



Outside Discharge Trough Ends are for bolting to conventional trough flanges, permitting free discharge of material below the trough end. They are made of heavy steel with a top flange to support the trough cover and are fitted with babbitted, bronze or ball bearing flanged blocks.

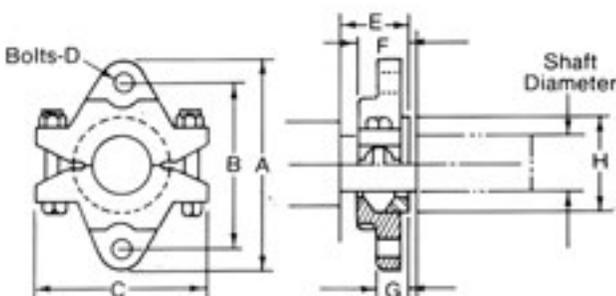
Outside Discharge Trough Ends																
Screw Diameter, Inches	Coupling Diameter, Inches	Part Numbers			Weight/Lbs.		B	D		E	K	L	N	P Babb. Brz. (1)	S	
		Babbitted Bearing	Bronze Bearing	Ball Bearing (1)	Babbitted or Bronze	Ball Bearing		Babb. Brz.	Ball							
Inches																
6	1½	153-127-A	153-128-A	—	9.2	—	4½	3	—	1½	¾	9%	¾(1)	¾	1½	—
9	1½	153-127-B	153-128-B	153-129-B	13	13.	6%	3	2	1%	¾	13%	¾(1)	¾	1½	2
	2	153-127-C	153-128-C	153-129-C	20	18.	6%	4	2 11/32	1%	¾	13%	¾(1)	¾	1½	2 11/16
10	1½	153-127-D	153-128-D	153-129-D	14	14.	6%	3	2	1%	¾	14%	¾(1)	¾	1½	2
	2	153-127-E	153-128-E	153-129-E	21	19.	6%	4	2 11/32	1%	¾	14%	¾(1)	¾	1½	2 11/16
12	2	153-127-F	153-128-F	153-129-F	23	22.	7%	4	2 11/32	2	¾	17%	¾(1)	¾	1½	2 11/16
	2 7/16	153-127-G	153-128-G	153-129-G	30	23.	7%	5	2 11/32	2	¾	17%	¾(1)	¾	2½	3
	3	153-127-H	153-128-H	153-129-H	39	30.	7%	6	2 11/32	2	¾	17%	¾(1)	¾	2½	3½
14	2 7/16	153-127-J	153-128-J	153-129-J	38	31.	9%	5	2 11/32	2	¾	19%	¾(1)	¾	2½	3
	3	153-127-K	153-128-K	153-129-K	48	39.	9%	6	2 11/32	2	¾	19%	¾(1)	¾	2½	3½
16	3	153-127-L	153-128-L	153-129-L	54	44.	10%	6	2 11/32	2 1/2	¾	21%	¾(1)	¾	2½	3½
	3 7/16	153-127-M	153-128-M	153-129-M	67	57.	12%	6	2 11/32	2 1/2	¾	24%	¾(1)	¾	2½	3½
18	3 7/16	153-127-N	153-128-N	153-129-N	74	65.	12%	7	3 1/32	2 1/2	¾	24%	¾(1)	¾	3½	3½
	3	153-127-P	153-128-P	153-129-P	74	64.	13%	6	2 11/32	2 1/2	¾	26%	¾(1)	¾	2½	3½
20	3 7/16	153-127-R	153-128-R	153-129-R	81	71.	13%	7	3 1/32	2 1/2	¾	26%	¾(1)	¾	3½	3½
	3 7/16	153-127-S	153-128-S	153-129-S	98	89.	16%	7	3 1/32	2 1/2	¾	30%	¾(2)	¾	3½	3½

(1) Four bolt holes

(2) Six bolt holes

(3) Series FX-3-U200N for 1½"; Series F3-U200N for 2" and 2 7/16"; Series F200 for 3" & 3 7/16"

(4) Babbitted or bronze bearings.

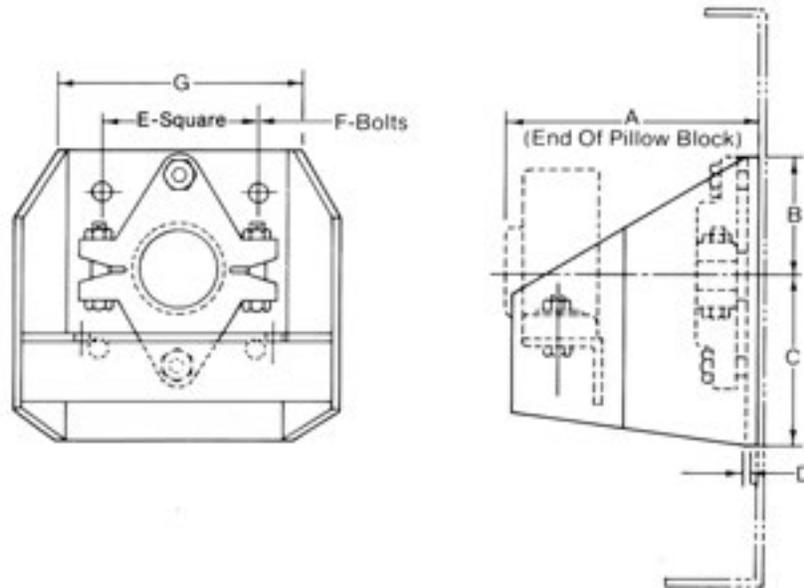


Seal Glands are mounted internally on all trough ends except the outboard bearing type where they are externally mounted. They consist of gray iron split flanges in which packing materials are compressed against machined steel collars. These seals provide maximum protection for or against materials being handled.

Seal Glands										
Shaft Diameter, Inches	Part Numbers (1)	Weight, Each Pounds	A	B	C	D	E	F	G	H
			Inches							
1½	318-9-A	3	5%	4%	4 1/16	½	2	1 1/16	¾	2 1/2
2	318-9-B	5	6%	5%	5%	½	2	1 1/2	¾	3%
2 7/16	318-9-C	7	7%	6%	6%	¾	2	1%	1	3 1/16
3	318-9-D	8	8%	7%	7%	¾	2	1%	1	4%
3 7/16	318-9-E	15	10%	8%	8%	¾	3	2%	1 1/4	4 1/16
3 7/16	318-9-F	15	10%	9	9	¾	2%	1%	1%	5%

(1) Mounting bolts not included

component selection



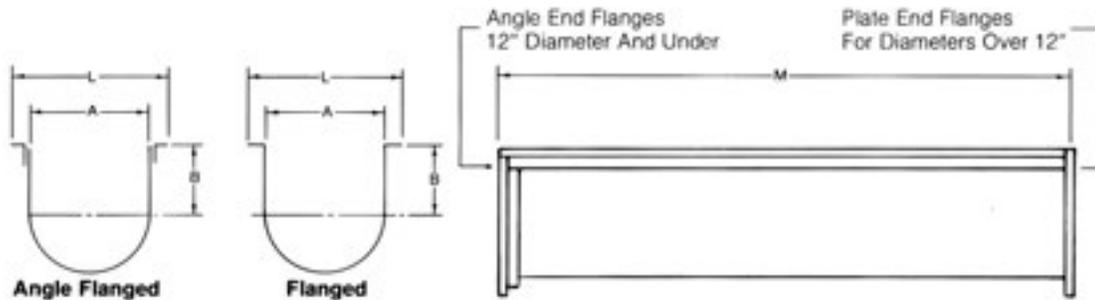
Outboard Bearing Trough End Brackets permit the use of pillow block bearings to accommodate greater thrust, radial loads and special sealing arrangements.

Trough End Bracket, Outboard Bearing (Dimensions)										
Shaft Diameter	Screw Diameter	A			B	C	D	E	F	G
		Roller	Ball	Sleeve						
Inches										
1½	6-9-10	6	5⅞	6¼	3	4½	¼	4	½	6½
2	9-10-12	7	6½	7½	3½	4¾	¼	5¼	¾	8
2⅞	12-14	7¾	7¼	8¾	4	5½	⅞	5¾	¾	8¾
3	12-14	9	8¾	10	4½	6¾	¾	6	¾	9¾
	16-18-20	9	8¾	10	4½	6¾	¾	6	¾	9¾
3⅞	20-24	10⅞	9¾	12¾	5¼	7½	¾	6¾	¾	10¾

Trough End Bracket, Outboard Bearing (Part Numbers and Weights)											
Shaft Diameter, Inches	Shell & Seal Gland Assembly Only			Shell & Seal Gland Assembly with Pillow Block(*)							
	For Ball or Roller Bearing	For Sleeve Bearing	Weight, Pounds	Ball Bearing	Weight, Pounds	Roller Bearing	Weight, Pounds	Babbitted Bearing	Weight, Pounds	Brz. Bushed Bearing	Weight, Pounds
1½	154-437-A	154-437-F	11	154-437-L	16	154-437-S	18	154-437-X	15	154-437-AC	15
2	154-437-B	154-437-G	16	154-437-M	24	154-437-T	28	154-437-Y	24	154-437-AD	24
2⅞	154-437-C	154-437-H	25	154-437-N	37	154-437-U	42	154-437-Z	39	154-437-AE	39
3	154-437-D	154-437-J	39	154-437-P	58	154-437-V	66	154-437-AA	61	154-437-AF	61
	154-437-E	154-437-K	57	154-437-R	71	154-437-W	101	154-437-AB	90	154-437-AG	90

(*)Ball bearing pillow blocks are series P3-U200N thru 2⅞" bore, and P-200 for 3" & 3⅞" bore. Roller bearing pillow blocks are series P-B22400H. Sleeve bearing pillow blocks are series 2-1200 for babbitt and 2-1200Z for bronze.

component selection

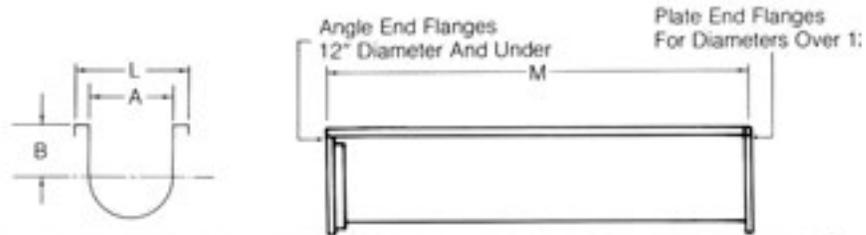


Screw Conveyor U-Troughs are made in two basic types: angle flanged and flanged. Angle flanged troughs consist of steel angles welded lengthwise to the trough plates to form the top flanges. Flanged troughs are made by forming the top flanges integrally with the trough sides from a single steel plate. Steel end flanges are securely welded to each end of the trough plate

in special fixtures to assure square, true connections. They also preserve trough contour and facilitate assembly. Angle end flanges are used on troughs for 4-through 12-inch diameter screws, and plate end flanges on all other sizes. Troughs made of stainless steel, or other kinds of special metals for specific purposes, can be furnished.

U-Trough													
Screw Diameter, Inches	Trough Thickness	Part Numbers		Weight, Pounds		A	B	L	M				
		Angle Flanged Trough	Flanged Trough	Angle Flanged Trough	Flanged Trough					Inches			
4	16 ga.	157-73-F	157-63-F	48	39	5	3 $\frac{3}{8}$	7 $\frac{1}{2}$	10				
	14 ga.	157-73-G	157-63-G	56	48	5	3 $\frac{3}{8}$	7 $\frac{1}{2}$	10				
	12 ga.	157-73-H	157-63-H	71	66	5	3 $\frac{3}{8}$	7 $\frac{1}{4}$	10				
6	16 ga.	157-74-G	157-64-G	76	52	7	4 $\frac{1}{2}$	9 $\frac{3}{8}$	10				
	14 ga.	157-74-H	157-64-H	86	64	7	4 $\frac{1}{2}$	9 $\frac{3}{8}$	10				
	12 ga.	157-74-J	157-64-J	106	87	7	4 $\frac{1}{2}$	9 $\frac{3}{8}$	10				
	10 ga.	157-74-K	157-64-K	127	110	7	4 $\frac{1}{2}$	9 $\frac{3}{8}$	10				
	$\frac{3}{16}$ "	157-74-L	157-64-L	159	145	7	4 $\frac{1}{2}$	9 $\frac{3}{8}$	10				
9	14 ga.	157-75-K	157-65-K	117	89	10	6 $\frac{1}{8}$	13 $\frac{3}{8}$	10				
	12 ga.	157-75-L	157-65-L	145	121	10	6 $\frac{1}{8}$	13 $\frac{3}{8}$	10				
	10 ga.	157-75-M	157-65-M	174	153	10	6 $\frac{1}{8}$	13 $\frac{3}{8}$	10				
	$\frac{3}{16}$ "	157-75-N	157-65-N	219	201	10	6 $\frac{1}{8}$	13 $\frac{3}{8}$	10				
	$\frac{1}{4}$ "	157-75-P	157-65-P	281	270	10	6 $\frac{1}{8}$	13 $\frac{3}{8}$	10				
10	14 ga.	157-76-K	157-66-K	123	95	11	6 $\frac{1}{8}$	14 $\frac{1}{8}$	10				
	12 ga.	157-76-L	157-66-L	153	129	11	6 $\frac{1}{8}$	14 $\frac{1}{8}$	10				
	10 ga.	157-76-M	157-66-M	184	164	11	6 $\frac{1}{8}$	14 $\frac{1}{8}$	10				
	$\frac{3}{16}$ "	157-76-N	157-66-N	232	215	11	6 $\frac{1}{8}$	14 $\frac{1}{8}$	10				
	$\frac{1}{4}$ "	157-76-P	157-66-P	299	288	11	6 $\frac{1}{8}$	14 $\frac{1}{8}$	10				
12	12 ga.	157-77-N	157-67-N	232	191	13	7 $\frac{1}{8}$	17 $\frac{1}{8}$	12				
	10 ga.	157-77-P	157-67-P	276	241	13	7 $\frac{1}{8}$	17 $\frac{1}{8}$	12				
	$\frac{3}{16}$ "	157-77-R	157-67-R	343	315	13	7 $\frac{1}{8}$	17 $\frac{1}{8}$	12				
	$\frac{1}{4}$ "	157-77-S	157-67-S	439	422	13	7 $\frac{1}{8}$	17 $\frac{1}{2}$	12				
14	12 ga.	157-78-N	157-68-N	254	214	15	9 $\frac{1}{8}$	19 $\frac{1}{8}$	12				
	10 ga.	157-78-P	157-68-P	307	272	15	9 $\frac{1}{8}$	19 $\frac{1}{8}$	12				
	$\frac{3}{16}$ "	157-78-R	157-68-R	385	358	15	9 $\frac{1}{8}$	19 $\frac{1}{8}$	12				
	$\frac{1}{4}$ "	157-78-S	157-68-S	498	482	15	9 $\frac{1}{8}$	19 $\frac{1}{2}$	12				
16	12 ga.	157-79-N	157-69-N	281	241	17	10 $\frac{1}{8}$	21 $\frac{1}{8}$	12				
	10 ga.	157-79-P	157-69-P	341	306	17	10 $\frac{1}{8}$	21 $\frac{1}{8}$	12				
	$\frac{3}{16}$ "	157-79-R	157-69-R	430	403	17	10 $\frac{1}{8}$	21 $\frac{1}{8}$	12				
	$\frac{1}{4}$ "	157-79-S	157-69-S	559	543	17	10 $\frac{1}{8}$	21 $\frac{1}{2}$	12				
18	12 ga.	157-80-N	157-70-N	354	279	19	12 $\frac{1}{8}$	24 $\frac{1}{8}$	12				
	10 ga.	157-80-P	157-70-P	421	352	19	12 $\frac{1}{8}$	24 $\frac{1}{8}$	12				
	$\frac{3}{16}$ "	157-80-R	157-70-R	522	463	19	12 $\frac{1}{8}$	24 $\frac{1}{8}$	12				
	$\frac{1}{4}$ "	157-80-S	157-70-S	667	622	19	12 $\frac{1}{8}$	24 $\frac{1}{2}$	12				
20	10 ga.	157-81-P	157-71-P	456	387	21	13 $\frac{1}{2}$	26 $\frac{1}{8}$	12				
	$\frac{3}{16}$ "	157-81-R	157-71-R	568	509	21	13 $\frac{1}{2}$	26 $\frac{1}{8}$	12				
	$\frac{1}{4}$ "	157-81-S	157-71-S	729	684	21	13 $\frac{1}{2}$	26 $\frac{1}{2}$	12				
24	10 ga.	157-82-P	157-72-P	529	461	25	16 $\frac{1}{8}$	30 $\frac{1}{8}$	12				
	$\frac{3}{16}$ "	157-82-R	157-72-R	664	605	25	16 $\frac{1}{8}$	30 $\frac{1}{8}$	12				
	$\frac{1}{4}$ "	157-82-S	157-72-S	858	813	25	16 $\frac{1}{8}$	30 $\frac{1}{2}$	12				

component selection

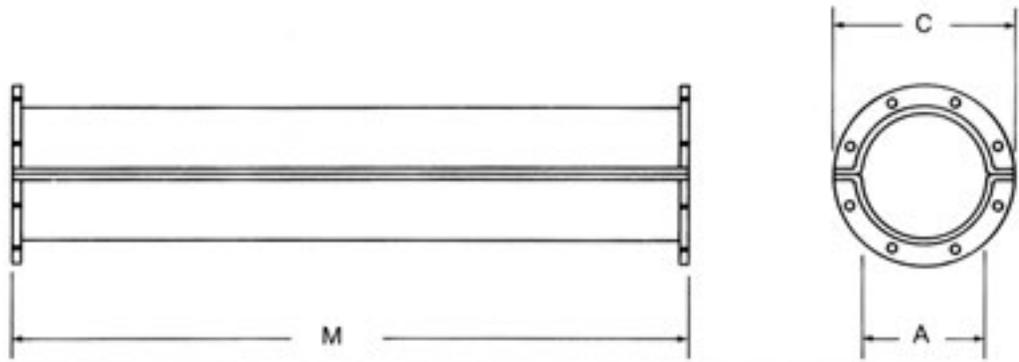


Double Flanged U-Trough							
Screw Diameter, Inches	Trough Thickness	Part Number	Weight Pounds	A	B	L	M
				Inches			Feet
6	16 ga.	157-174-A	55	7	4½	10½	10
	14 ga.	157-174-C	68	7	4½	10½	10
	12 ga.	157-174-J	93	7	4½	10½	10
	10 ga.	157-174-L	118	7	4½	10½	10
9	14 ga.	157-175-A	95	10	6½	13½	10
	12 ga.	157-175-E	130	10	6½	13½	10
	10 ga.	157-175-G	164	10	6½	13½	10
12	12 ga.	157-176-B	200	13	7½	17½	12
	10 ga.	157-176-D	251	13	7½	17½	12
14	12 ga.	157-177-B	223	15	9½	19½	12
	10 ga.	157-177-D	281	15	9½	19½	12
16	12 ga.	157-178-B	250	17	10½	21½	12
	10 ga.	157-178-D	316	17	10½	21½	12
18	10 ga.	157-179-B	358	19	12½	24½	12
20	10 ga.	157-180-B	391	21	13½	26½	12
24	10 ga.	157-181-B	463	25	16½	30½	12



Trough - Flared								
Screw Diameter, Inches	Trough Thickness	Part Number	Weight Pounds	A	B	D	L	M
				Inches				Feet
6	14 ga.	157-87-C	81	14	7	3½	16½	10
	12 ga.	157-87-D	111	14	7	3½	16½	10
9	12 ga.	157-88-C	148	18	9	5	21½	10
	10 ga.	157-88-D	188	18	9	5	21½	10
12	12 ga.	157-89-G	215	22	10	6½	26½	12
	10 ga.	157-89-H	273	22	10	6½	26½	12
	¾"	157-89-J	360	22	10	6½	26½	12
14	12 ga.	157-90-G	238	24	11	7½	28½	12
	10 ga.	157-90-H	302	24	11	7½	28½	12
	¾"	157-90-J	398	24	11	7½	28½	12
16	10 ga.	157-91-G	310	28	11	8½	32½	12
	¾"	157-91-H	436	28	11½	8½	32½	12
	½"	157-91-J	587	28	11	8½	32½	12
18	10 ga.	157-149-G	369	31	12½	9½	36½	12
	¾"	157-149-H	486	31	12½	9½	36½	12
	½"	157-149-J	653	31	12½	9½	36½	12
20	10 ga.	157-150-G	405	34	13½	10½	39½	12
	¾"	157-150-H	533	34	13½	10½	39½	12
	½"	157-150-J	717	34	13½	10½	39½	12
24	10 ga.	157-151-G	481	40	16½	12½	45½	12
	¾"	157-151-H	633	40	16½	12½	45½	12
	½"	157-151-J	851	40	16½	12½	45½	12

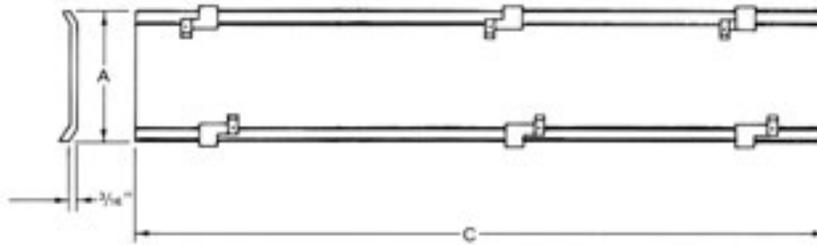
component selection



Tubular Trough								
Trough Diameter	Trough Thk.	Part Numbers*			Dimensions			Weight, Pounds
		Carbon Steel	304SST	316SST	A	M	C	
6	14 ga.	A	AA	BA	7	120	10	75
	12 ga.	B	AB	BB				105
	10 ga.	C	AC	BC				135
9	14 ga.	D	AD	BD	10	120	13 ³ / ₄	105
	12 ga.	E	AE	BE				145
	10 ga.	F	AF	BF				185
	3/16	G	AG	BG				245
12	12 ga.	H	AH	BH	13	144	17 ¹ / ₂	235
	10 ga.	J	AJ	BJ				300
	3/16	K	AK	BK				395
14	10 ga.	L	AL	BL	15	144	19 ¹ / ₂	265
	3/16	M	AM	BM				445
16	10 ga.	N	AN	BN	17	144	21 ¹ / ₂	370
	3/16	P	AP	BP				490
18	3/16	R	AR	BR	19	144	24 ¹ / ₂	565
	1/4	S	AS	BS				745
20	3/16	T	AT	BT	21	144	26 ¹ / ₂	610
	1/4	U	AU	BU				805
24	3/16	V	AV	BV	25	144	30 ¹ / ₂	710
	1/4	W	AW	BW				940

*Complete Part Number by Adding Prefix 157-243-. Example:157-243-AD

component selection



Screw Conveyor Trough Covers are used for the protection of operating personnel, dust control or protection for or against the material being handled. Covers for U and flared troughs are made in semi-flanged, flanged or hip roof types.

Covers — Semi-Flanged, U-Trough Spring Clamped						
Screw Diameter, Inches	Trough Thickness	Cover Thickness	Part Number	Weight, Pounds	Inches	
					A	C
4	3/16" & under	16 ga.	188-37-AK	19	8 1/4	120
6	1/4" & under	16 ga.	188-37-AL	24	10 1/4	120
9	3/8" & under	14 ga.	188-37-AM	41	14 1/2	120
10	3/8" & under	14 ga.	188-37-AN	44	15 1/2	120
12	1/2" & under	14 ga.	188-37-BG	62	18 1/4	144
14	1/2" & under	14 ga.	188-37-BJ	68	20 1/4	144
16	1/2" & under	14 ga.	188-37-BL	75	22 1/4	144
18	1/2" & under	12 ga.	188-37-BN	113	25 1/4	144
20	1/2" & under	12 ga.	188-37-BR	122	27 1/4	144
24	1/2" & under	12 ga.	188-37-BT	139	31 1/4	144

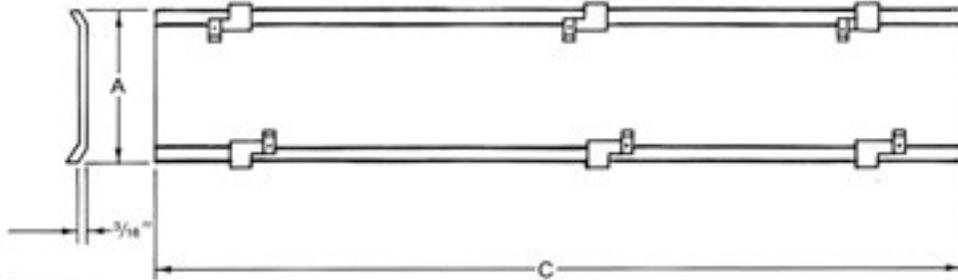
Covers for other trough lengths and thicknesses are available.



Covers — Flanged, U-Trough Screw Clamped						
Screw Diameter, Inches	Trough Thickness	Cover Thickness	Part Number	Weight, Pounds	Inches	
					A	C
4	3/16" & under	16 ga.	188-27-41	20	8	120
6	1/4" & under	16 ga.	188-27-42	22	10 1/4	120
9	3/8" & under	16 ga.	188-27-43	32	14	120
10	3/8" & under	16 ga.	188-27-44	34	15	120
12	1/2" & under	14 ga.	188-27-65	63	18	144
14	1/2" & under	14 ga.	188-27-66	70	20	144
16	1/2" & under	14 ga.	188-27-67	76	22	144
18	1/2" & under	14 ga.	188-27-68	86	25	144
20	1/2" & under	14 ga.	188-27-69	92	27	144
24	1/2" & under	14 ga.	188-27-70	105	31	144

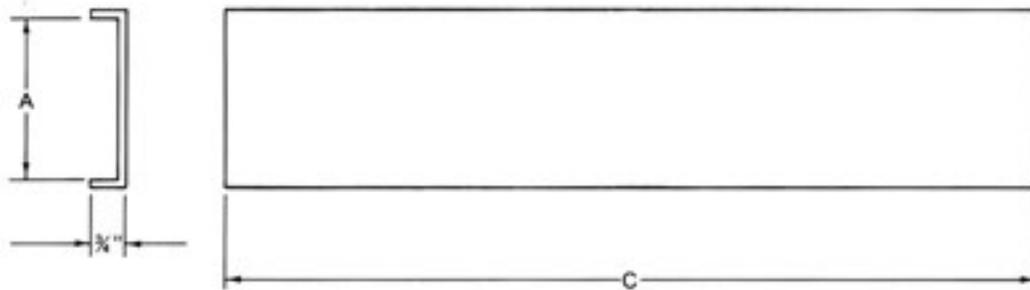
Covers for other trough lengths and thicknesses are available.

component selection



Covers — Semi-Flanged, Flared Trough Spring Clamped						
Screw Diameter, Inches	Trough Thickness	Cover Thickness	Part Number	Weight, Pounds	Inches	
					A	C
6	¼" & under	16 ga.	188-67-CA	39	17½	120
9	⅜" & under	14 ga.	188-67-CE	62	22½	120
12	½" & under	14 ga.	188-67-CL	91	27½	144
14	⅝" & under	14 ga.	188-67-CT	98	29½	144
16	¾" & under	14 ga.	188-67-CZ	111	33½	144
18	⅞" & under	12 ga.	188-67-DF	166	37½	144
20	1" & under	12 ga.	188-67-DM	179	40½	144
24	1¼" & under	12 ga.	188-67-DU	205	46½	144

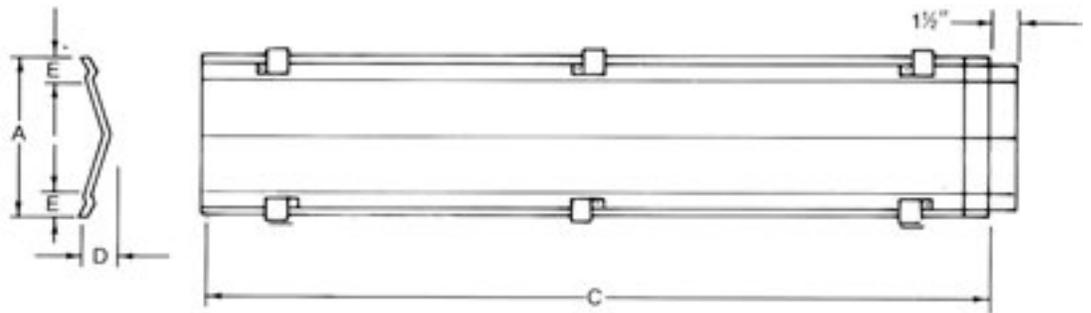
Covers for other trough lengths and thicknesses are available



Covers — Flanged, Flared Trough Screw Clamped						
Screw Diameter, Inches	Trough Thickness	Cover Thickness	Part Number	Weight, Pounds	Inches	
					A	C
6	¼" & under	16 ga.	188-77-B	38	16½	120
9	⅜" & under	16 ga.	188-77-D	48	21½	120
12	½" & under	14 ga.	188-77-G	91	26½	144
14	⅝" & under	14 ga.	188-77-K	98	28½	144
16	¾" & under	14 ga.	188-77-N	111	32½	144
18	⅞" & under	14 ga.	188-77-S	124	36½	144
20	1" & under	14 ga.	188-77-V	134	39½	144
24	1¼" & under	14 ga.	188-77-Y	153	45½	144

Covers for other trough lengths and thicknesses are available.

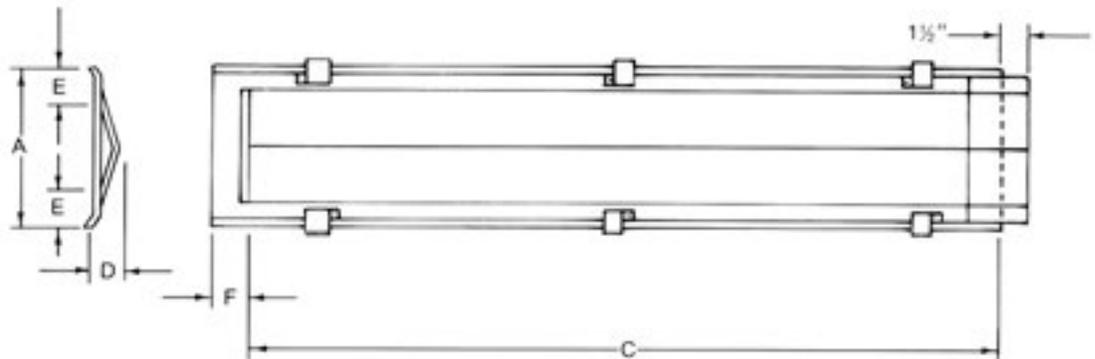
component selection



**Covers — Hip Roof, Spring Clamped — U-Trough
(Intermediate Cover with Butt Strap)**

Screw Diameter, Inches	Trough Thickness	Cover Thickness	Part Number	Weight, Pounds	A	C	D	E
					Inches			
6	1/4" & under	16 ga.	188-64-AN	24	10 1/2	120	1 1/8	1 1/8
9	3/8" & under	16 ga.	188-64-AP	33	14 1/2	120	2 3/8	1 1/8
10	3/8" & under	16 ga.	188-64-AR	36	15 1/2	120	2 3/8	1 1/8
12	1/2" & under	14 ga.	188-64-AS	62	18 1/4	144	2 1/8	2 3/8
14	1/2" & under	14 ga.	188-64-AT	68	20 1/4	144	2 3/8	2 3/8
16	1/2" & under	14 ga.	188-64-AU	75	22 1/4	144	3 1/8	2 3/8
18	1/2" & under	14 ga.	188-64-AV	84	25 1/4	144	3 1/8	2 1/8
20	1/2" & under	14 ga.	188-64-AW	90	27 1/4	144	3 1/8	2 1/8
24	1/2" & under	14 ga.	188-64-AX	103	31 1/4	144	3 1/8	2 1/8

Covers for other trough lengths and thicknesses are available.

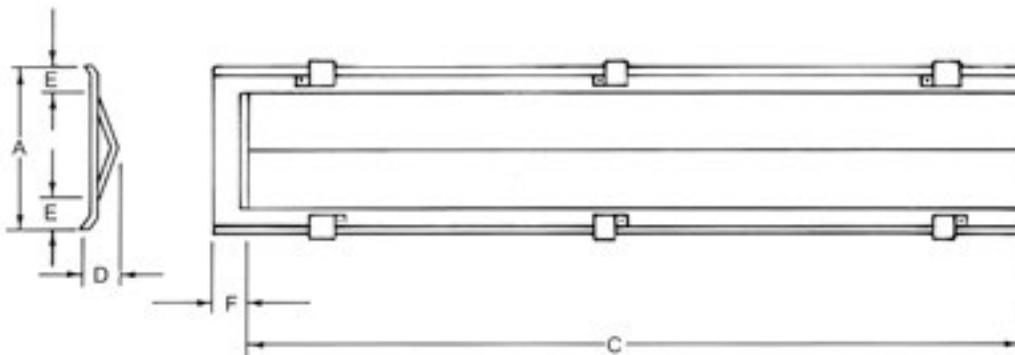


Covers — Hip Roof, Spring Clamped — U-Trough (Double End Cover)

Screw Diameter, Inches	Trough Thickness	Cover Thickness	Part Number	Weight, Pounds	A	C	D	E	F
					Inches				
6	1/4" & under	16 ga.	188-64-AY	26	10 1/2	120	1 1/8	1 1/8	1 1/2
9	3/8" & under	16 ga.	188-64-AZ	35	14 1/2	120	2 3/8	1 1/8	1 1/2
10	3/8" & under	16 ga.	188-64-BA	37	15 1/2	120	2 3/8	1 1/8	1 3/4
12	1/2" & under	14 ga.	188-64-BB	64	18 1/4	144	2 1/8	2 3/8	2
14	1/2" & under	14 ga.	188-64-BC	71	20 1/4	144	2 3/8	2 3/8	2
16	1/2" & under	14 ga.	188-64-BD	77	22 1/4	144	3 1/8	2 3/8	2 1/2
18	1/2" & under	14 ga.	188-64-BE	87	25 1/4	144	3 1/8	2 1/8	2 1/2
20	1/2" & under	14 ga.	188-64-BF	93	27 1/4	144	3 1/8	2 1/8	2 1/2
24	1/2" & under	14 ga.	188-64-BG	106	31 1/4	144	3 1/8	2 1/8	2 1/2

Covers for other trough lengths and thicknesses are available.

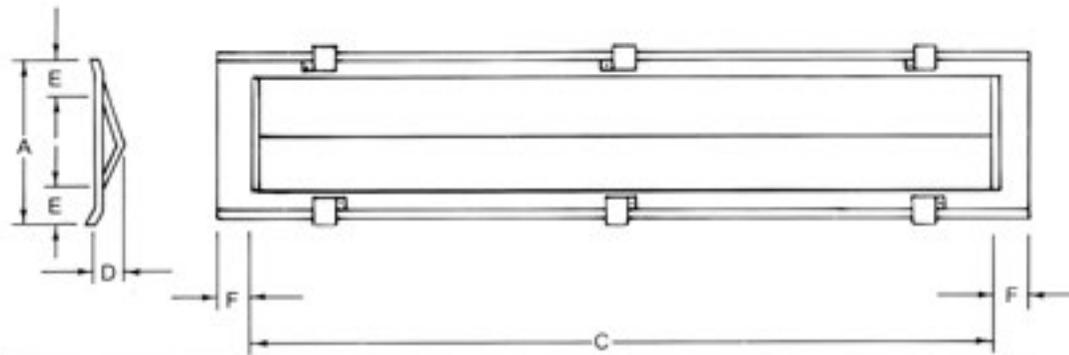
component selection



Covers — Hip Roof, Spring Clamped — U-Trough (Single End Cover)

Screw Diameter, Inches	Trough Thickness	Cover Thickness	Part Number	Weight, Pounds	A	C	D	E	F
					Inches				
6	¼" & under	16 ga.	188-64-BH	25	10½	120	1⅞	1⅞	1½
9	⅜" & under	16 ga.	188-64-BJ	34	14½	120	2⅞	1⅞	1½
10	⅜" & under	16 ga.	188-64-BK	36	15½	120	2⅞	1⅞	1¾
12	½" & under	14 ga.	188-64-BL	63	18½	144	2⅞	2⅞	2
14	½" & under	14 ga.	188-64-BM	69	20½	144	2⅞	2⅞	2
16	½" & under	14 ga.	188-64-BN	76	22½	144	3⅞	2⅞	2½
18	½" & under	14 ga.	188-64-BP	85	25½	144	3⅞	2⅞	2½
20	½" & under	14 ga.	188-64-BR	91	27½	144	3⅞	2⅞	2½
24	½" & under	14 ga.	188-64-BS	104	31½	144	3⅞	2⅞	2½

Covers for other trough lengths and thicknesses are available.

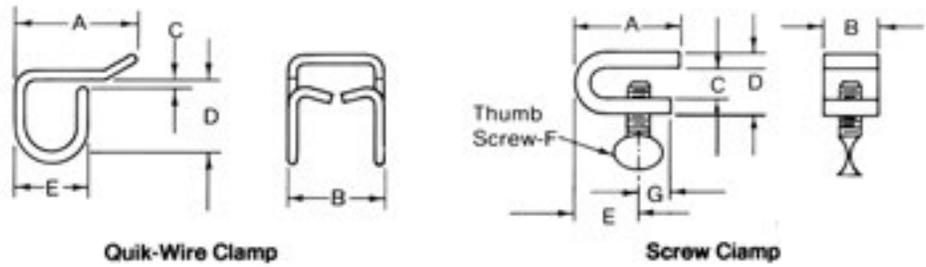
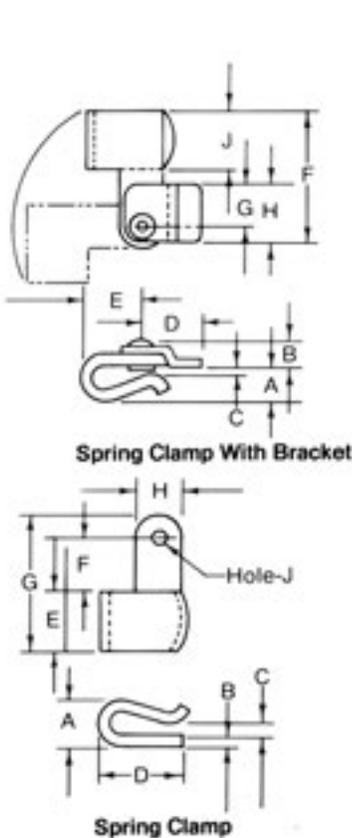


Covers — Hip Roof, Spring Clamped — U-Trough (Double End Cover)

Screw Diameter, Inches	Trough Thickness	Cover Thickness	Part Number	Weight, Pounds	A	C	D	E	F
					Inches				
6	¼" & under	16 ga.	188-64-BT	26	10½	120	1⅞	1⅞	1½
9	⅜" & under	16 ga.	188-64-BU	36	14½	120	2⅞	1⅞	1½
10	⅜" & under	16 ga.	188-64-BV	38	15½	120	2⅞	1⅞	1¾
12	½" & under	14 ga.	188-64-BW	65	18½	144	2⅞	2⅞	2
14	½" & under	14 ga.	188-64-BX	72	20½	144	2⅞	2⅞	2
16	½" & under	14 ga.	188-64-BY	78	22½	144	3⅞	2⅞	2½
18	½" & under	14 ga.	188-64-BZ	88	25½	144	3⅞	2⅞	2½
20	½" & under	14 ga.	188-64-CA	95	27½	144	3⅞	2⅞	2½
24	½" & under	14 ga.	188-64-CB	108	31½	144	3⅞	2⅞	2½

Covers for other trough lengths and thicknesses are available.

component selection

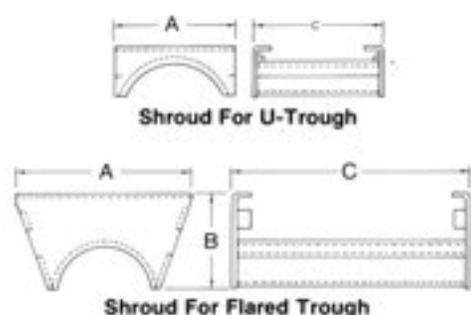


Clamps for attaching covers to screw conveyor troughs are available in spring, Quik-Wire and screw types. Quick-acting clamps are primarily used for drop bottom screw conveyor troughs. Spring clamps with brackets are attached to the top side of semi-flanged covers. Plain spring clamps are used for service doors, inspection doors or removable covers and panels. Quik-Wire clamps and screw clamps are normally used for attaching flanged covers to screw conveyor troughs, but can also be used for attaching plain and semi-flanged covers.

Clamps										
Type of Clamp	Part Number	Weight, Pounds	A	B	C	D	E	F	G	J
			Inches							
Spring clamp	368-16-1	.20	$\frac{3}{8}$.134	$\frac{1}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2 $\frac{1}{16}$	$\frac{3}{8}$
	368-18-1	.40	1	$\frac{3}{16}$	$\frac{1}{4}$	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	3 $\frac{3}{16}$	1 $\frac{1}{2}$
Spring clamp with bracket	368-15-A	.31	$\frac{1}{16}$	$\frac{3}{8}$	$\frac{3}{16}$	1 $\frac{1}{4}$	1 $\frac{1}{16}$	2 $\frac{1}{8}$	$\frac{3}{8}$	1 $\frac{1}{4}$
	368-15-B(*)	.31	$\frac{1}{16}$	$\frac{3}{8}$	$\frac{3}{16}$	1 $\frac{1}{4}$	1 $\frac{1}{16}$	2 $\frac{1}{8}$	$\frac{3}{8}$	1 $\frac{1}{4}$
	368-15-C(*)	.31	$\frac{1}{16}$	$\frac{3}{8}$	$\frac{3}{16}$	1 $\frac{1}{4}$	1 $\frac{1}{16}$	2 $\frac{1}{8}$	$\frac{3}{8}$	1 $\frac{1}{4}$
Screw clamp	368-35-A	.42	2 $\frac{1}{2}$	1	$\frac{3}{16}$	1 $\frac{1}{16}$	1 $\frac{1}{16}$	$\frac{3}{8}$	$\frac{3}{16}$	—
	368-35-B	.48	2 $\frac{1}{2}$	1	1 $\frac{1}{16}$	1 $\frac{1}{16}$	1 $\frac{1}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	—

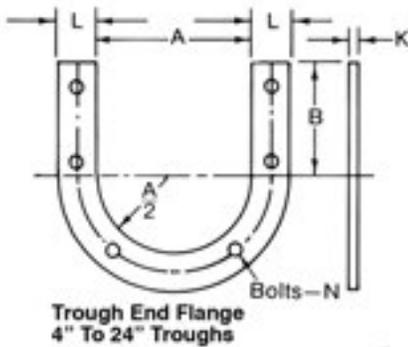
(*)Galvanized clamp with 304 stainless steel bracket
 (*)Zinc plated

Shrouds are used in trough sections of screw feeders to decrease the clearance between the cover and feeder screw to obtain proper feed regulation. Lengths are sufficient to prevent flushing of the majority of materials being handled and gauges are proportioned to trough size and gauge. Stainless steel shrouds can be furnished.



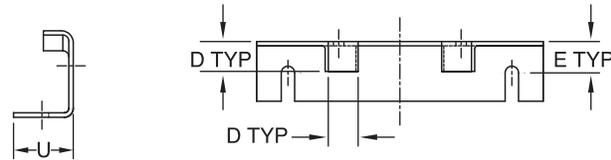
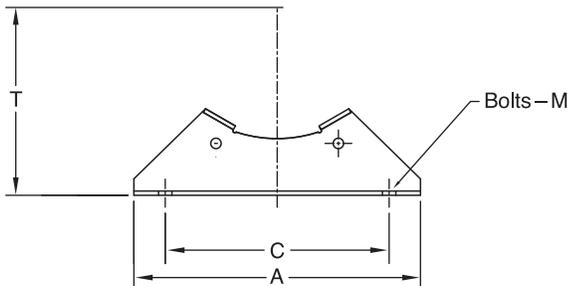
Screw Diameter, Inches	Shroud Thickness	Part Number		Weight, Pounds		A		B		C
		U-Trough	Flared	U-Trough	Flared	U-Trough	Flared	Inches		
								U-Trough	Flared	
4	7 ga.	157-131-A	—	5	—	5	—	2 $\frac{1}{2}$	—	8
	12 ga.	157-131-B	—	4	—	5	—	2 $\frac{1}{2}$	—	8
6	7 ga.	157-132-A	157-141-A	11	16	7	13 $\frac{1}{2}$	2 $\frac{11}{16}$	6 $\frac{1}{8}$	14
	12 ga.	157-132-B	157-141-B	7	13	7	13 $\frac{1}{2}$	2 $\frac{11}{16}$	6 $\frac{1}{8}$	14
9	7 ga.	157-133-A	157-142-A	17	28	10	17 $\frac{1}{2}$	3 $\frac{3}{16}$	8 $\frac{1}{16}$	18
	12 ga.	157-133-B	157-142-B	13	23	10	17 $\frac{1}{2}$	3 $\frac{3}{16}$	8 $\frac{1}{16}$	18
10	7 ga.	157-134-A	—	19	—	11	—	3 $\frac{3}{16}$	—	20
	12 ga.	157-134-B	—	14	—	11	—	3 $\frac{3}{16}$	—	20
12	7 ga.	157-135-A	157-143-A	28	41	13	21 $\frac{1}{2}$	4 $\frac{1}{8}$	9 $\frac{1}{2}$	24
	12 ga.	157-135-B	157-143-B	20	32	13	21 $\frac{1}{2}$	4 $\frac{1}{8}$	9 $\frac{1}{2}$	24
14	7 ga.	157-136-A	157-144-A	37	54	15	23 $\frac{1}{2}$	5 $\frac{1}{16}$	10 $\frac{1}{16}$	28
	12 ga.	157-136-B	157-144-B	30	42	15	23 $\frac{1}{2}$	5 $\frac{1}{16}$	10 $\frac{1}{16}$	28
16	7 ga.	157-137-A	157-145-A	47	68	17	27 $\frac{1}{2}$	6 $\frac{1}{16}$	11 $\frac{1}{8}$	32
	12 ga.	157-137-B	157-145-B	35	52	17	27 $\frac{1}{2}$	6 $\frac{1}{16}$	11 $\frac{1}{8}$	32
18	7 ga.	157-138-A	157-146-A	60	82	19	30 $\frac{1}{2}$	7 $\frac{1}{8}$	11 $\frac{1}{4}$	36
	12 ga.	157-138-B	157-146-B	45	63	19	30 $\frac{1}{2}$	7 $\frac{1}{8}$	11 $\frac{1}{4}$	36
20	7 ga.	157-139-A	157-147-A	71	100	21	33 $\frac{1}{2}$	8 $\frac{1}{16}$	13 $\frac{1}{8}$	40
	12 ga.	157-139-B	157-147-B	53	75	21	33 $\frac{1}{2}$	8 $\frac{1}{16}$	13 $\frac{1}{8}$	40
24	7 ga.	157-140-A	157-148-A	100	142	25	39 $\frac{1}{2}$	10 $\frac{1}{8}$	15 $\frac{1}{16}$	48

component selection



Trough End Flanges are made of steel plates, formed and punched to assure accurate, closely-fitted trough connections and complete interchangeability.

Trough End Flanges (Dimensions)									Trough End Flanges (Part Numbers & Weights)							
Screw Diameter Inches	A			B			L		N	End Flange						Weight Pounds
	Thru 10 Ga. Trough	3/16" and 1/4" Trough	Angle Flanged Trough Thru 1/4"	Flanged Trough		Thru 10 Ga. Trough	3/16" and 1/4" Trough	Part Number (1)								
				Thru 10 Ga.	3/16" and 1/4"			Angled Flanged Trough			Flanged Trough					
								Thru 10 Ga. Trough		3/16" Trough	1/4" Trough	Thru 10 Ga. Trough	3/16" Trough	1/4" Trough		
4	5 1/4	—	3 5/8	—	—	1 1/4	n/a	3/8(3)	278-19-1	278-19-4	n/a	278-19-7	278-19-10	n/a	1	
6	7 1/4	7 3/8	4 1/2	—	—	1 1/4	1 1/4	3/8(3)	278-19-13	278-19-16	278-19-19	278-19-22	278-19-25	278-19-28	3	
9	10 1/4	10 1/2	6 1/8	—	—	1 3/4	1 1/2	3/8(4)	278-19-31	278-19-34	278-19-34	278-19-40	278-19-43	278-19-43	5	
10	11 1/4	11 1/2	6 3/8	—	—	1 3/4	1 1/2	3/8(4)	278-19-U	278-19-X	278-19-X	278-19-BG	278-19-BK	278-19-BK	6	
12	13 1/4	13 1/2	7 3/4	—	—	2	2	1/2(4)	278-19-AD	278-19-AG	278-19-AG	278-19-BR	278-19-BU	278-19-BU	10	
14	15 1/4	15 1/2	9 1/4	9 3/8	9	2	2	1/2(4)	278-10-1	278-10-2	278-10-2	278-10-4	278-10-5	278-10-5	6.4	
16	17 1/4	17 1/2	10 5/8	10 1/2	10 5/8	2	2	5/8(4)	278-11-1	278-11-2	278-11-2	278-11-4	278-11-5	278-11-5	7.1	
18	19 1/4	19 1/2	12 3/8	12	11 7/8	2 1/2	2 1/2	5/8(5)	1278-12-1	278-12-2	278-12-2	278-12-4	278-12-5	278-12-5	10	
20	21 1/4	21 1/2	13 1/2	13 3/8	13 1/4	2 1/2	2 1/2	5/8(5)	278-13-1	278-13-2	278-13-2	278-13-4	278-13-5	278-13-5	11	
24	25 1/4	25 1/2	16 1/2	16 3/8	16 1/4	2 1/2	2 1/2	5/8(5)	278-15-1	278-15-2	278-15-2	278-15-4	278-15-5	278-15-5	13	



Support Foot / Saddle

Supporting Feet are of formed steel for use with end flanges and provide a convenient means of aligning and supporting conveyors from floors, and supporting structures.

Support Foot / Saddle												
Trough Diameter	Trough Thickness	Part Number C STL	Weight Pounds	Dimensions								
				A	C	D	E	T	U	Plate Thickness	M	
4	16 GA - 7 GA	166-14-1	1	7 3/8	5 3/4	1	7/8	4 5/8	1 1/2	3/16	3/8	
6	16 GA - 0.25	166-14-5	1 1/2	10	8 3/8	1	1 3/16	5 5/8	1 1/2	3/16	3/8	
9	16 GA - 0.25	166-14-9	3	12	9 3/8	1 1/4	1 9/16	7 7/8	2 1/2	3/16	1/2	
9	0.31 - 0.38	166-14-13	3	12	9 3/8	1 1/4	1 9/16	7 7/8	2 1/2	3/16	1/2	
10	16 GA - 0.25	166-14-17	3 1/2	12 3/8	9 1/2	1 1/4	1 9/16	8 7/8	2 1/2	3/16	1/2	
10	0.31 - 0.38	166-14-21	3 1/2	12 3/8	9 1/2	1 1/4	1 9/16	8 7/8	2 1/2	3/16	1/2	
12	16 GA - 0.25	166-14-25	4 1/2	15	12 1/4	1 1/4	1 3/8	9 3/8	2 1/2	3/16	5/8	
12	0.31 - 0.38	166-14-29	4 1/2	15	12 1/4	1 1/4	1 3/8	9 3/8	2 1/2	3/16	5/8	
14	16 GA - 0.25	166-14-33	6	16 1/2	13 1/2	1 1/2	1 3/8	10 7/8	2 1/2	1/4	5/8	
14	0.31 - 0.38	166-14-37	6	16 1/2	13 1/2	1 1/2	1 3/8	10 7/8	2 1/2	1/4	5/8	
16	16 GA - 0.25	166-14-41	7 1/2	18	14 3/8	1 1/2	1 3/4	12	3	1/4	5/8	
16	0.31 - 0.38	166-14-45	7 1/2	18	14 3/8	1 1/2	1 3/4	12	3	1/4	5/8	
18	16 GA - 0.25	166-14-49	8	19 3/8	16	1 1/2	1 3/4	13 3/8	3	1/4	5/8	
18	0.31 - 0.38	166-14-53	8	19 3/8	16	1 1/2	1 3/4	13 3/8	3	1/4	5/8	
20	16 GA - 0.25	166-14-57	12	22 3/4	19 1/4	2	2	15	3 1/2	1/4	3/4	
20	0.31 - 0.38	166-14-61	12	22 3/4	19 1/4	2	2	13	3 1/2	1/4	3/4	
24	16 GA - 0.25	166-14-65	14	24	20	2	2 1/4	18 3/8	4	1/4	3/4	
24	0.31 - 0.38	166-14-69	14	24	20	2	2 1/4	18 3/8	4	1/4	3/4	

(1) Bolts are not included. Support Foot / Saddle include clips for welding to trough.

(2) Supporting feet are regularly furnished. Only one supporting foot per trough section is normally required.

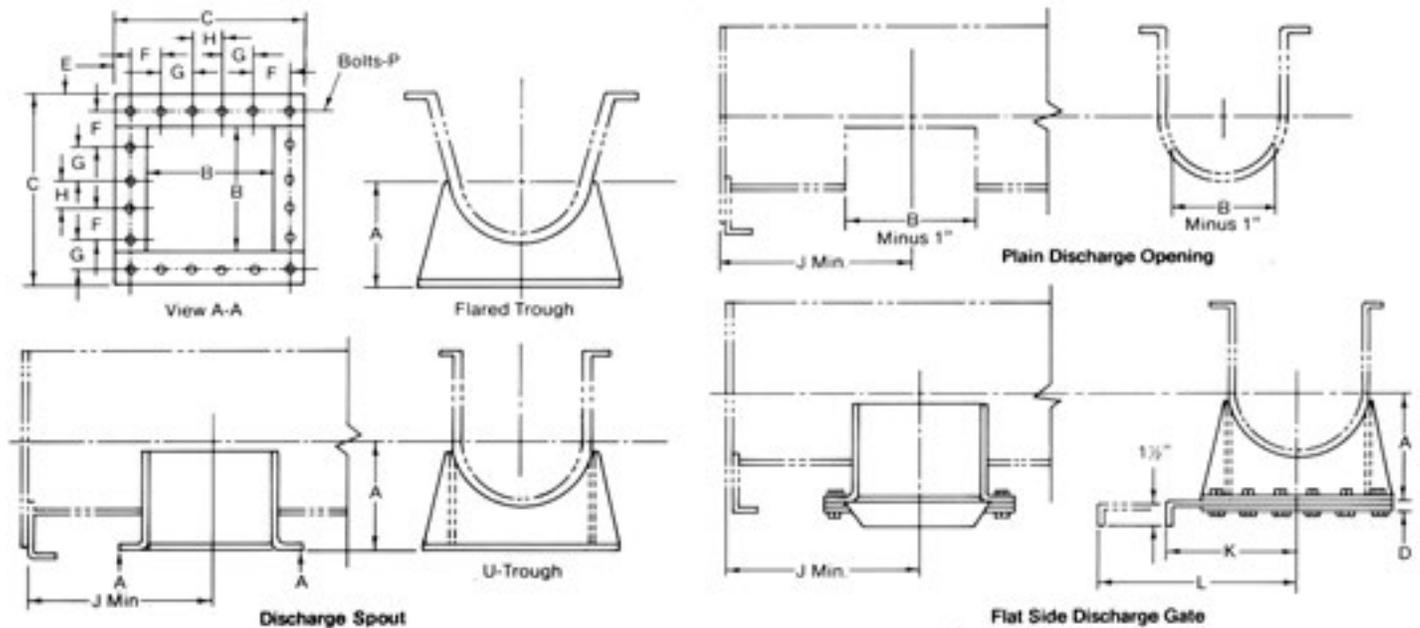
(3) Six bolt holes

(4) Eight bolt holes

(5) Ten bolt holes

(6) Twelve bolt holes

component selection



Discharge Spouts and Gates provide the means for discharging materials from the conveyor trough and for connection to succeeding equipment to which material is delivered. Gates provide for selective control of multiple spouts. When ordered separately, spouts or gates will be furnished loose. When ordered as parts of complete conveyors with locations determined, they will be furnished in place. Stainless steel discharge spouts and flat slide discharge gates can be furnished.

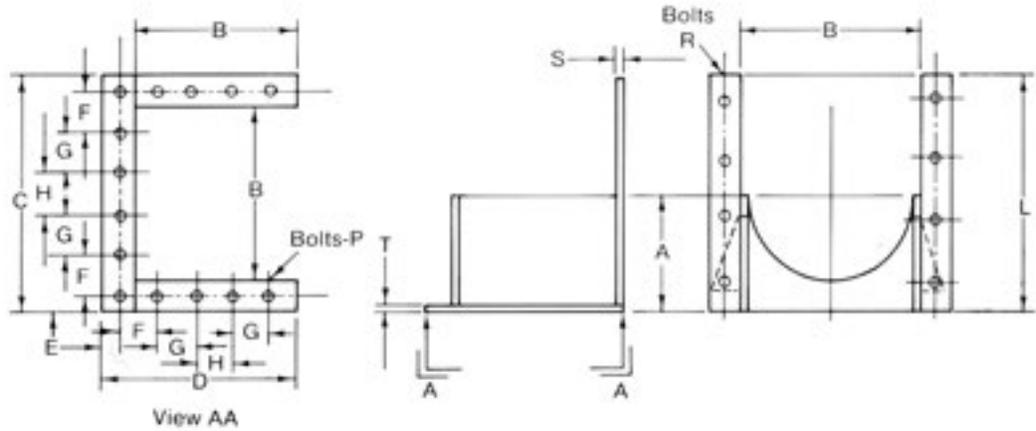
Discharge Spouts and Hand Slide Gates (Dimensions)													
Screw Diameter	A	B	C	D	E	F	G	H	J		K	L	P
									With Foot	W/O Foot			
Inches													
4	3 $\frac{3}{4}$	5	7 $\frac{1}{2}$	$\frac{5}{16}$	$\frac{3}{8}$	2 $\frac{1}{2}$	—	2 $\frac{1}{2}$	6	4	5 $\frac{1}{2}$	11	$\frac{3}{4}$ (¹)
6	5	7	10	$\frac{5}{16}$	$\frac{11}{16}$	2 $\frac{3}{8}$	—	3	7 $\frac{1}{2}$	6	6 $\frac{1}{2}$	14	$\frac{3}{4}$ (¹)
9	7 $\frac{1}{2}$	10	13	$\frac{5}{16}$	$\frac{1}{2}$	4	—	4	10	8	8	19	$\frac{3}{4}$ (¹)
10	7 $\frac{1}{2}$	11	14 $\frac{1}{2}$	$\frac{5}{16}$	$\frac{3}{8}$	4 $\frac{1}{2}$	—	4 $\frac{1}{2}$	11	9 $\frac{1}{2}$	8 $\frac{1}{2}$	20	$\frac{3}{4}$ (¹)
12	8 $\frac{1}{2}$	13	17 $\frac{1}{2}$	$\frac{5}{16}$	$\frac{3}{8}$	5 $\frac{1}{2}$	—	5 $\frac{1}{2}$	12 $\frac{1}{2}$	10 $\frac{1}{2}$	10 $\frac{1}{2}$	24	$\frac{3}{4}$ (¹)
14	10 $\frac{1}{2}$	15	19 $\frac{1}{2}$	$\frac{5}{16}$	$\frac{3}{8}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	13 $\frac{1}{2}$	11 $\frac{1}{2}$	11 $\frac{1}{2}$	27	$\frac{3}{4}$ (²)
16	11 $\frac{1}{2}$	17	21 $\frac{1}{2}$	$\frac{5}{16}$	$\frac{3}{8}$	3 $\frac{1}{2}$	4	4	14 $\frac{1}{2}$	13 $\frac{1}{2}$	12 $\frac{1}{2}$	30	$\frac{3}{4}$ (²)
18	12 $\frac{1}{2}$	19	24 $\frac{1}{2}$	$\frac{5}{16}$	1 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	16 $\frac{1}{2}$	14 $\frac{1}{2}$	13 $\frac{1}{2}$	33	$\frac{3}{4}$ (²)
20	13 $\frac{1}{2}$	21	26 $\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	17 $\frac{1}{2}$	15 $\frac{1}{2}$	14 $\frac{1}{2}$	36	$\frac{3}{4}$ (²)
24	15 $\frac{1}{2}$	25	30 $\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{1}{2}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$	20	17 $\frac{1}{2}$	16 $\frac{1}{2}$	42	$\frac{3}{4}$ (²)

(¹)12 bolt holes

(²)20 bolt holes

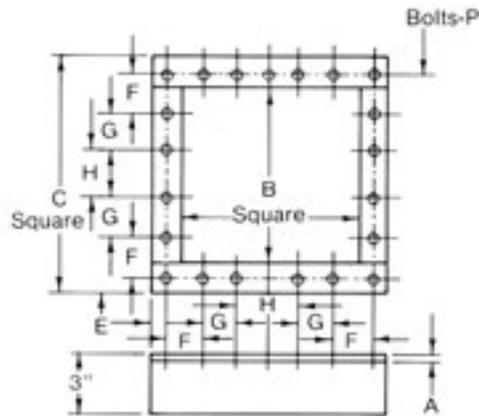
Discharge Spouts and Hand Slide Gates (Part Numbers and Weights)								
Screw Diameter, Inches	Trough Thickness	Spout and gate Thickness	Discharge Spouts				Hand Slide Gate Only	
			U-Trough		Flared Trough		Part Number	Weight, Pounds
Part Number	Weight, Pounds	Part Number	Weight, Pounds	Part Number	Weight, Pounds			
4	16 and 14 ga. 12, ga.	14 ga. 12 ga.	164-13-A	2	—	—	180-43-CA	4
			164-13-B	3	—	—	180-43-CA	4
6	16, 14, 12 & 10 ga. $\frac{3}{16}$ "	14 ga. 12 ga.	164-13-C	2	164-17-A	2	180-43-CD	7
			164-13-D	4	164-17-A	2	180-43-CD	7
9	14, 12 & 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	14 ga. 10 ga.	164-13-E	6	164-17-D	6	180-43-CG	10
			164-13-F	10	164-17-D	6	180-43-CG	10
10	14, 12 & 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	14 ga. 10 ga.	164-13-G	8	—	—	180-43-CK	11
			164-13-H	14	—	—	180-43-CK	11
12	12 & 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	12 ga. $\frac{3}{16}$ "	164-13-J	12	164-17-G	12	180-43-CN	18
			164-13-K	21	164-17-K	21	180-43-CN	18
14	12 & 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	12 ga. $\frac{3}{16}$ "	164-13-L	16	164-17-N	16	180-43-CS	24
			164-13-M	28	164-17-S	28	180-43-CS	24
16	12 & 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	12 ga. $\frac{3}{16}$ "	164-13-N	19	164-17-V	19	180-43-CV	28
			164-13-P	34	164-17-Y	34	180-43-CV	28
18	12 & 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	12 ga. $\frac{3}{16}$ "	164-13-Q	24	164-17-AB	24	180-43-CY	37
			164-13-R	43	164-17-AE	43	180-43-CY	37
20	10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	12 ga. $\frac{3}{16}$ "	164-13-S	28	164-17-AH	28	180-43-DC	41
			164-13-T	51	164-17-AL	51	180-43-DC	41
24	10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	12 ga. $\frac{3}{16}$ "	164-13-U	37	164-17-AP	37	180-43-DF	64
			164-13-V	67	164-17-AT	67	180-43-DF	64

component selection



Flush End Discharge Spout																	
Screw Diameter Inches	Trough Thickness	Part Number		Weight Pounds	A	B	C	D	E	F	G	H	L	P	R	S	T
		Flanged Trough	Angle Flanged Trough														
4	16 & 14 ga. 12 ga.	164-22-A	164-24-A	2	3 $\frac{1}{2}$	5 $\frac{1}{2}$	7 $\frac{1}{2}$	6 $\frac{1}{2}$	$\frac{1}{2}$	2 $\frac{1}{2}$	—	2 $\frac{1}{2}$	7 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (¹)	$\frac{1}{2}$	14 ga.
		164-22-B	164-24-B	3	3 $\frac{1}{2}$	5 $\frac{1}{2}$	7 $\frac{1}{2}$	6 $\frac{1}{2}$	$\frac{1}{2}$	2 $\frac{1}{2}$	—	2 $\frac{1}{2}$	7 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (¹)	$\frac{1}{2}$	12 ga.
6	16, 14, 12, & 10 ga. $\frac{3}{16}$ "	164-22-D	164-24-D	2	5	7 $\frac{1}{2}$	10	8 $\frac{1}{2}$	$\frac{1}{2}$	2 $\frac{1}{2}$	—	3	9 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (¹)	$\frac{3}{8}$	14 ga.
		164-22-E	164-24-E	4	5	7 $\frac{1}{2}$	10	8 $\frac{1}{2}$	$\frac{1}{2}$	2 $\frac{1}{2}$	—	3	9 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (¹)	$\frac{3}{8}$	12 ga.
9	14, 12 & 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	164-22-G	164-24-G	7	7 $\frac{1}{2}$	10 $\frac{1}{2}$	13	11 $\frac{1}{2}$	$\frac{1}{2}$	4	—	4	13 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (²)	$\frac{3}{8}$	14 ga.
		164-22-H	164-24-H	10	7 $\frac{1}{2}$	10 $\frac{1}{2}$	13	11 $\frac{1}{2}$	$\frac{1}{2}$	4	—	4	13 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (²)	$\frac{3}{8}$	10 ga.
10	14, 12 & 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	164-22-J	164-24-J	9	7 $\frac{1}{2}$	11 $\frac{1}{2}$	14 $\frac{1}{2}$	12 $\frac{1}{2}$	$\frac{1}{2}$	4 $\frac{1}{2}$	—	4 $\frac{1}{2}$	14 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (²)	$\frac{3}{8}$	12 ga.
		164-22-K	164-24-K	13	7 $\frac{1}{2}$	11 $\frac{1}{2}$	14 $\frac{1}{2}$	12 $\frac{1}{2}$	$\frac{1}{2}$	4 $\frac{1}{2}$	—	4 $\frac{1}{2}$	14 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (²)	$\frac{3}{8}$	$\frac{3}{16}$ "
12	12 & 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	164-22-L	164-24-L	14	8 $\frac{1}{2}$	13 $\frac{1}{2}$	17 $\frac{1}{2}$	15 $\frac{1}{2}$	$\frac{1}{2}$	5 $\frac{1}{2}$	—	5 $\frac{1}{2}$	16 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (²)	$\frac{1}{2}$	12 ga.
		164-22-M	164-24-M	20	8 $\frac{1}{2}$	13 $\frac{1}{2}$	17 $\frac{1}{2}$	15 $\frac{1}{2}$	$\frac{1}{2}$	5 $\frac{1}{2}$	—	5 $\frac{1}{2}$	16 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (²)	$\frac{1}{2}$	$\frac{3}{16}$ "
14	12 & 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	164-22-N	164-24-N	17	10 $\frac{1}{2}$	15 $\frac{1}{2}$	19 $\frac{1}{2}$	17 $\frac{1}{2}$	$\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	19 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (²)	$\frac{1}{2}$	12 ga.
		164-22-P	164-24-P	26	10 $\frac{1}{2}$	15 $\frac{1}{2}$	19 $\frac{1}{2}$	17 $\frac{1}{2}$	$\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	19 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (²)	$\frac{1}{2}$	$\frac{3}{16}$ "
16	12 & 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	164-22-R	164-24-R	20	11 $\frac{1}{2}$	17 $\frac{1}{2}$	21 $\frac{1}{2}$	19 $\frac{1}{2}$	$\frac{1}{2}$	3 $\frac{1}{2}$	4	4	21 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (²)	$\frac{1}{2}$	12 ga.
		164-22-S	164-24-S	32	11 $\frac{1}{2}$	17 $\frac{1}{2}$	21 $\frac{1}{2}$	19 $\frac{1}{2}$	$\frac{1}{2}$	3 $\frac{1}{2}$	4	4	21 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (²)	$\frac{1}{2}$	$\frac{3}{16}$ "
18	12 & 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	164-22-T	164-24-T	27	12 $\frac{1}{2}$	19 $\frac{1}{2}$	24 $\frac{1}{2}$	21 $\frac{1}{2}$	1 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	24 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (²)	$\frac{1}{2}$	12 ga.
		164-22-U	164-24-U	41	12 $\frac{1}{2}$	19 $\frac{1}{2}$	24 $\frac{1}{2}$	21 $\frac{1}{2}$	1 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	24 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (²)	$\frac{1}{2}$	$\frac{3}{16}$ "
20	10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	164-22-V	164-24-V	30	13 $\frac{1}{2}$	21 $\frac{1}{2}$	26 $\frac{1}{2}$	23 $\frac{1}{2}$	1 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	26 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (²)	$\frac{1}{2}$	12 ga.
		164-22-W	164-24-W	48	13 $\frac{1}{2}$	21 $\frac{1}{2}$	26 $\frac{1}{2}$	23 $\frac{1}{2}$	1 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	26 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (²)	$\frac{1}{2}$	$\frac{3}{16}$ "
24	10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	164-22-X	164-24-X	39	15 $\frac{1}{2}$	25 $\frac{1}{2}$	30 $\frac{1}{2}$	27 $\frac{1}{2}$	1 $\frac{1}{2}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$	31 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (²)	$\frac{1}{2}$	12 ga.
		164-22-Y	164-24-Y	61	15 $\frac{1}{2}$	25 $\frac{1}{2}$	30 $\frac{1}{2}$	27 $\frac{1}{2}$	1 $\frac{1}{2}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$	31 $\frac{1}{2}$	$\frac{1}{2}$ (²)	$\frac{1}{2}$ (²)	$\frac{1}{2}$	$\frac{3}{16}$ "

component selection

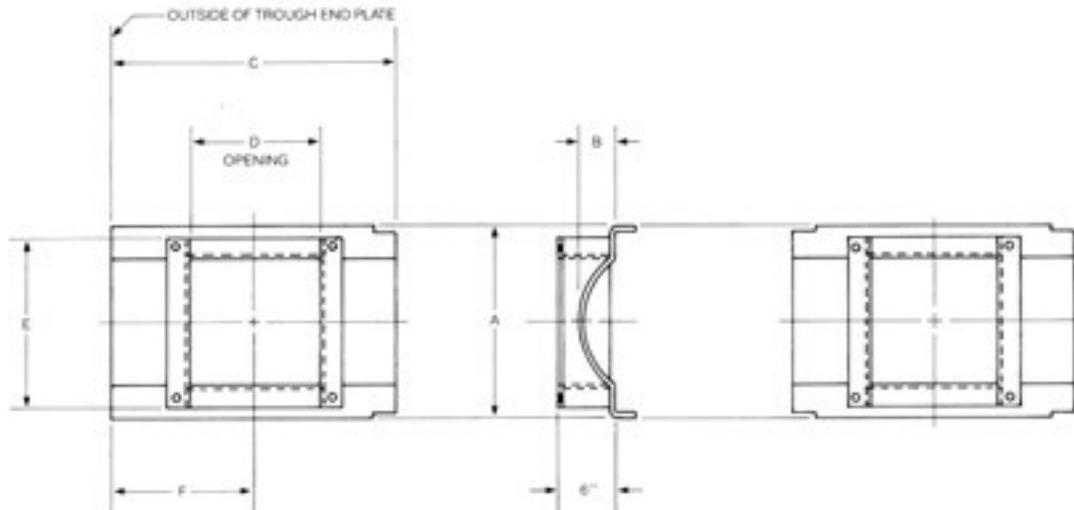


Inlet Spouts

Screw Diameter Inches	Part Number Carbon	Weight Pounds	Flange Thickness A	B	C	E	F	G	H	P
				Inches						
4	164-23-A	3.0	12 ga.	5	7½	¾	2¼	—	2¼	¾ ⁽¹⁾
6	164-23-D	4.2	12 ga.	7	10	1½	2½	—	3	¾ ⁽¹⁾
9	164-23-G	7.8	10 ga.	10	13	¾	4	—	4	¾ ⁽¹⁾
10	164-23-K	8.6	10 ga.	11	14½	¾	4½	—	4¾	3 ⁽¹⁾
12	164-23-N	11	10 ga.	13	17½	¾	5½	—	5½	¾ ⁽¹⁾
14	164-23-S	13	10 ga.	15	19½	¾	3¾	3¾	3¾	¾ ⁽²⁾
16	164-23-V	14	10 ga.	17	21½	¾	3¾	4	4	¾ ⁽²⁾
18	164-23-Z	20	10 ga.	19	24½	1¾	4½	4¾	4¾	¾ ⁽²⁾
20	164-23-AC	22	10 ga.	21	26½	1¾	4¾	4¾	4¾	¾ ⁽²⁾
24	164-23-AF	23	10 ga.	25	30½	1¾	5¾	5¾	5¾	¾ ⁽²⁾

(¹) 12 bolts

(²) 20 bolts



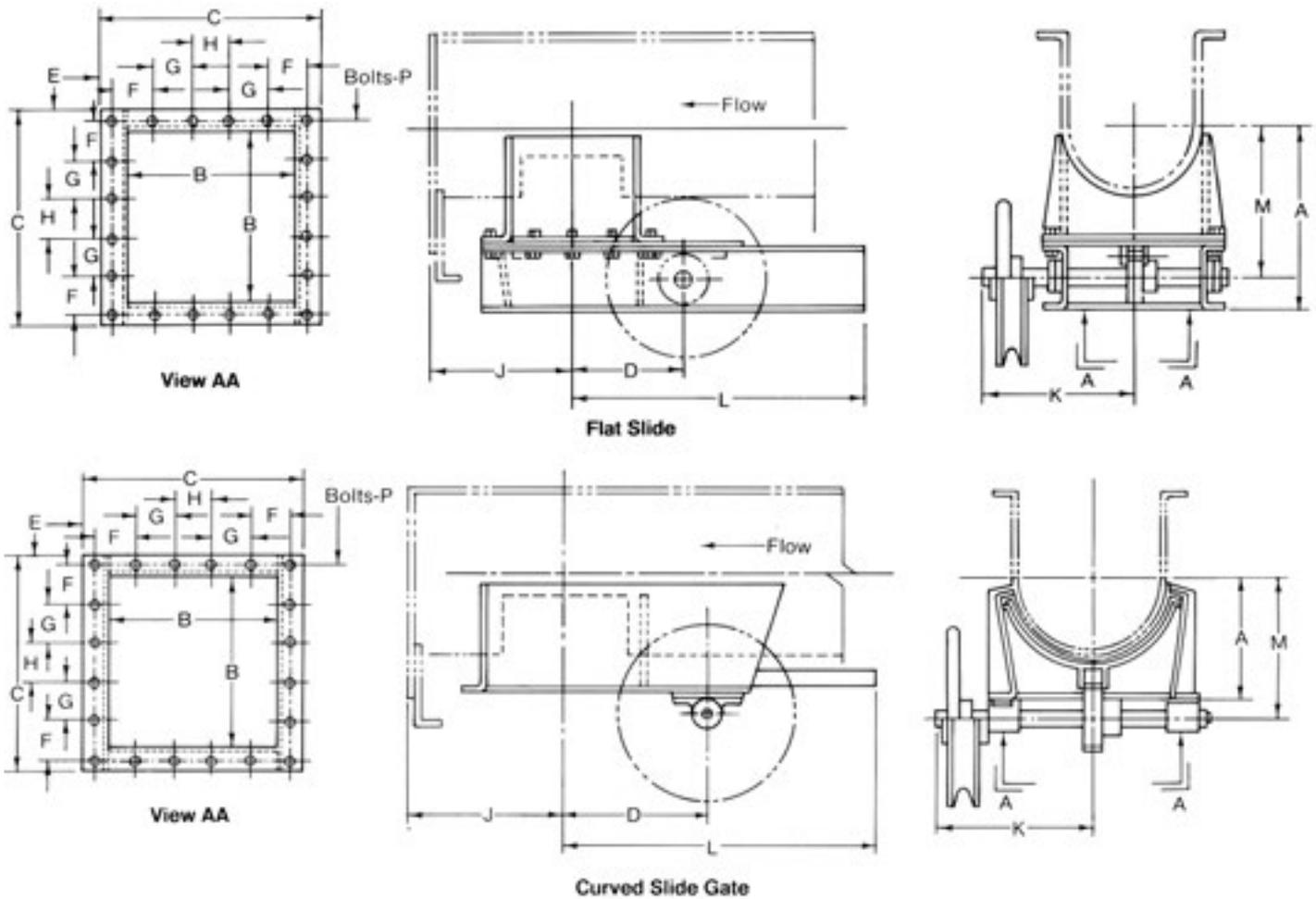
Inlet Spout—End and Intermediate—Carbon Steel (¹) Dome Cover

Shaft diameter, inches	Cover & Spout Thickness	Part Number		Wt., Lbs.	Dimensions, Inches						Cover Mounting Bolts (²)	
		End Inlet	Intermediate Inlet		A	B	C	D	E	F	Qty	Dia.
4	12 ga.	164-33-A	164-32-A	8	8½	1½	15	5	7½	7½	4	¾
6	12 ga.	164-33-B	164-32-B	13	10½	1½	18	7	10	9	4	¾
9	10 ga.	164-33-C	164-32-C	24	14½	1½	23½	10	13	11½	6	¾
10	10 ga.	164-33-D	164-32-D	27	15½	1¾	25½	11	14½	12½	6	¾
12	10 ga.	164-33-E	164-32-E	34	18½	2½	29	13	17½	14½	6	¾
14	10 ga.	164-33-F	164-32-F	39	20½	2¾	31	15	19½	15½	6	¾
16	10 ga.	164-33-G	164-32-G	44	22½	2¾	34	17	21½	17	8	¾
18	10 ga.	164-33-H	164-32-H	54	25½	2¾	38	19	24½	19	8	¾
20	10 ga.	164-33-J	164-32-J	59	27½	2¾	40	21	26½	20	8	¾
24	10 ga.	164-33-K	164-32-K	69	31½	3¾	45	25	30½	22½	8	¾

(¹) Stainless steel inlet spouts, can be furnished.

(²) Mounting bolts not included

component selection



Rack and Pinion Discharge Gates have cut-tooth racks welded to the slide plates and are actuated by cut-tooth pinions mounted on pinion shafts

operated by hand wheels or chain wheels. Stainless steel rack and pinions can be furnished.

Trough Rack and Pinion Discharge Gates (Dimensions)

Screw Diameter,	A		B	C	D		E	F	G	H	J		Flat Slide Gate			Curved Slide Gate				
	Flat Slide	Curved Slide			Flat Slide	Curved Slide					With Feet	Less Feet	K	L	M	K	L	M	P	
Inches																				
4	7	3½	5	7½	4½	6½	¾	2¼	—	2¼	6	4	5½	11½	5½	6½	12	18½	4½	¾ ⁽¹⁾
6	8½	5	7	10	5½	7½	1¼	2¾	—	3	7½	6	6½	14½	6½	8	15½	22½	5½	¾ ⁽¹⁾
9	10½	7½	10	13	7	9½	½	4	—	4	10	8	9½	19½	8½	10	20½	29½	8½	¾ ⁽¹⁾
10	11½	7½	11	14½	8½	10	¾	4½	—	4½	11	9½	10	21½	9½	10½	22	31½	9	¾ ⁽¹⁾
12	12½	8½	13	17½	9½	11½	¾	5½	—	5½	12½	10½	12½	25½	10½	12	25½	37	10	¾ ⁽¹⁾
14	13½	10½	15	19½	10½	12½	¾	3½	3½	3½	13½	11½	13½	28½	12½	13½	29	42	11½	¾ ⁽¹⁾
16	14½	11½	17	21½	11½	13½	¾	3½	4	4	14½	13½	14½	30½	13½	14½	32	45	12½	¾ ⁽¹⁾
18 ⁽²⁾	15½	12½	19	24½	12½	15	1¼	4¾	4½	4½	16½	14½	15½	33½	14½	15½	35½	49½	10½	¾ ⁽¹⁾
20 ⁽²⁾	16½	13½	21	26½	13½	16	1¼	4½	4½	4½	17½	15½	16½	36½	15½	16½	38½	54	11½	¾ ⁽¹⁾
24 ⁽²⁾	18½	15½	25	30½	16½	18	1¼	5½	5½	5½	20	17½	18½	43½	17½	18½	44½	63	13½	¾ ⁽¹⁾

(1) 12 bolt holes

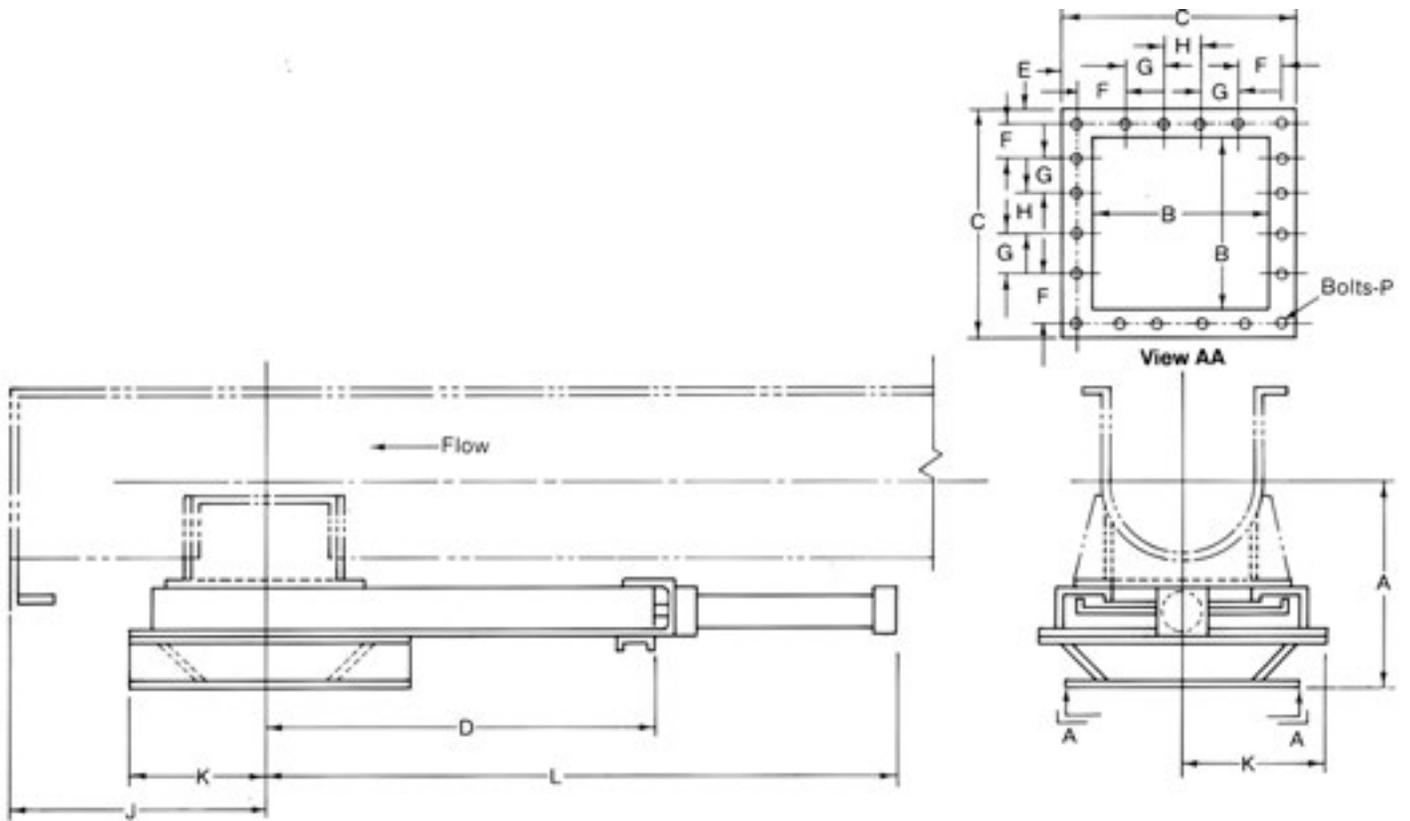
(2) 20 bolt holes

(3) Uses two rack and pinion

component selection

Trough Rack and Pinion Discharge Gates (Part Numbers and Weights)										
Screw Diameter, Inches	Trough Thickness	Flange Thickness (Maximum)	Discharge Gates							
			Flat Side				Curved Side			
			With Hand Wheel		With Chain Wheel		With Hand Wheel		With Chain Wheel	
			Part Number	Weight, Pounds	Part Number	Weight, Pounds	Part Number	Weight, Pounds	Part Number	Weight, Pounds
4	16 & 14 ga. 12 ga.	12 ga. 12 ga.	180-139-B	19	-	-	180-159-B	18	-	-
			180-139-C	20	-	-	180-159-D	20	-	-
6	16, 14, 12 & 10 ga. $\frac{3}{16}$ "	12 ga. 12 ga.	180-140-B	25	-	-	180-160-B	22	-	-
			180-140-C	27	-	-	180-160-D	25	-	-
9	14, 12 & 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	10 ga.	180-141-B	43	180-141-C	48	180-161-B	39	180-161-C	48
		10 ga.	180-141-D	47	180-141-E	52	180-161-D	47	180-161-E	55
10	14, 12 & 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	10 ga.	180-142-B	51	180-142-C	56	180-162-B	45	180-162-C	53
		10 ga.	180-142-D	57	180-142-E	62	180-162-D	54	180-162-E	62
12	12 and 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	$\frac{3}{16}$ "	180-143-B	84	180-143-C	92	180-163-B	69	180-163-C	78
		$\frac{3}{16}$ "	180-143-D	93	180-143-E	101	180-163-D	85	180-163-E	94
14	12 and 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	$\frac{3}{16}$ "	180-144-B	95	180-144-C	103	180-164-B	81	180-164-C	90
		$\frac{3}{16}$ "	180-144-D	108	180-144-E	116	180-164-D	100	180-164-E	109
16	12 and 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	$\frac{3}{16}$ "	180-145-B	100	180-145-C	109	180-165-B	88	180-165-C	97
		$\frac{3}{16}$ "	180-145-D	115	180-145-E	124	180-165-D	111	180-165-E	120
18	12 and 10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	$\frac{3}{16}$ "	180-146-B	138	180-146-C	147	180-166-B	128	180-166-C	137
		$\frac{3}{16}$ "	180-146-D	158	180-146-E	167	180-166-D	158	180-166-E	167
20	10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	$\frac{3}{16}$ "	180-147-B	162	180-147-C	170	180-167-B	143	180-167-C	152
		$\frac{3}{16}$ "	180-147-D	185	180-147-E	194	180-167-D	176	180-167-E	185
24	10 ga. $\frac{3}{16}$ " & $\frac{1}{4}$ "	$\frac{3}{16}$ "	180-148-B	206	180-148-C	214	180-168-B	185	180-168-C	194
		$\frac{3}{16}$ "	180-148-D	243	180-148-E	243	180-168-D	230	180-168-E	235

component selection



Air Operated Gates for remote operation can be furnished with or without air cylinder.

Discharge Gates – Flat Slide, Air Operated

Screw Diameter Inches	Part Number		Weight/Lbs.		Thickness			Air Cylinder		A	B	C	D	E	F	G	H	J		K	L	P
	Air Cylinder Option		Gate Flange	Gate Body	Gate Plate	Bore	Stroke	With Feet	Less Feet													
	W/O	With																W/O	With			
4	180-266-A	180-266-B	73	93	10 ga.	10 ga.	7 ga.	2½	11	12½	5	7½	21½ ₃₂	¾	2¼	—	2¼	6	4	8¾	37½	¾ ⁽¹⁾
6	180-267-A	180-267-B	70	90	10 ga.	10 ga.	7 ga.	2½	11	12¾	7	10	21½ ₃₂	¾	2¼	—	3	7½	6	8¾	37½	¾ ⁽¹⁾
9	180-268-A	180-268-B	54	74	10 ga.	10 ga.	7 ga.	2½	11	12¾	10	13	21½ ₃₂	¾	4	—	4	10	8	8¾	37½	¾ ⁽¹⁾
10	180-269-A	180-269-B	59	80	10 ga.	10 ga.	7 ga.	2½	12	13¾	11	14¾	23½ ₃₂	¾	4½	—	4¾	11	9½	8¾	40	¾ ⁽¹⁾
12	180-270-A	180-270-B	69	91	10 ga.	10 ga.	7 ga.	2½	14	14¾	13	17¾	26½ ₃₂	¾	5	—	5¼	12¾	10½	9¾	45	¾ ⁽¹⁾
14	180-271-A	180-271-B	78	103	10 ga.	10 ga.	7 ga.	2½	16	15½	15	19¾	29½ ₃₂	¾	3½	3½	3½	13¾	11½	10¾	50	¾ ⁽²⁾
16	180-272-A	180-272-B	88	114	10 ga.	10 ga.	7 ga.	2½	18	16½	17	21¾	32½ ₃₂	¾	3¾	4	4	14¾	13¾	11¾	55	¾ ⁽²⁾
18	180-273-A	180-273-B	160	202	7 ga.	7 ga.	¼"	3¾	20	20	19	24¾	36¾	1¾	4½	4¾	4¾	16¾	14¾	13¾	62½	¾ ⁽²⁾
20	180-274-A	180-274-B	176	221	7 ga.	7 ga.	¼"	3¾	22	21	21	26¾	39¾	1¾	4¾	4¾	4¾	17¾	15¾	14¾	67½	¾ ⁽²⁾
24	180-275-A	180-275-B	212	262	7 ga.	7 ga.	¼"	3¾	26	23	25	30¾	45¾	1¾	5¾	5¾	5¾	20	17¾	16¾	77½	¾ ⁽²⁾

⁽¹⁾12 bolt holes

⁽²⁾20 bolt holes

Screw Conveyor Safety Practices



TO AVOID UNSAFE OR HAZARDOUS CONDITIONS, THE FOLLOWING MINI PROVISIONS MUST BE STRICTLY OBSERVED.

1.(A) SCREW CONVEYORS SHALL NEVER BE OPERATED UNLESS THE CONVEYOR HOUSING COMPLETELY ENCLOSES THE CONVEYOR MOVING ELEMENTS.

All necessary housings, covers, safety guards, railings, gratings and power transmission guards must be in place. If the conveyor is to be opened for inspection, cleaning or observation, the motor driving the conveyor is to be locked out electrically in such a manner that it cannot be started by anyone, however remote from the area unless the conveyor housing has been closed and all guards are in place. **THE HOUSINGS, COVERS, AND GUARDS ARE NECESSARY TO PREVENT ANYONE FROM ENTERING, REACHING, OR FALLING INTO THE MACHINERY, WHICH MAY RESULT IN SERIOUS PERSONAL INJURY.**

(B) If the conveyor must have an open housing as a condition of its use, the entire open conveyor is then to be guarded by a railing, fence or rugged safety grating.

(C) Feed openings for shovel, front end loader or other mechanical equipment shall be constructed in such a way that the conveyor is covered by a rugged grating. If the nature of the material is such that a grating can't be used, then the exposed section of the conveyor is to be guarded by a railing and there shall be warning signs posted.

- 2. DO NOT PLACE HANDS OR FEET IN ANY CONVEYOR OPENING, TO AVOID BEING CAUGHT BETWEEN THE ROTATING CONVEYOR SCREW AND THE CONVEYOR HOUSING.**
- 3. DO NOT WALK ON CONVEYOR COVERS OR GRATINGS OR POWER TRANSMISSION GUARDS, TO AVOID FALLING INTO OR AGAINST THE ROTATING CONVEYOR SCREW.**
- 4. DO NOT** poke or prod material in the conveyor with a bar or stick, **to avoid being struck by the bar or stick.**
- 5. DO NOT** overload conveyor or use it for anything but its intended use.
- 6. DO** practice good housekeeping.

Syntron Material Handling SCREW CONVEYERS MUST BE INSTALLED, OPERATED AND MAINTAINED IN ACCORDANCE WITH THE Syntron Material Handling OPERATION MAINTENANCE, INSTALLATION INSTRUCTION MANUAL.

Syntron Material Handling

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