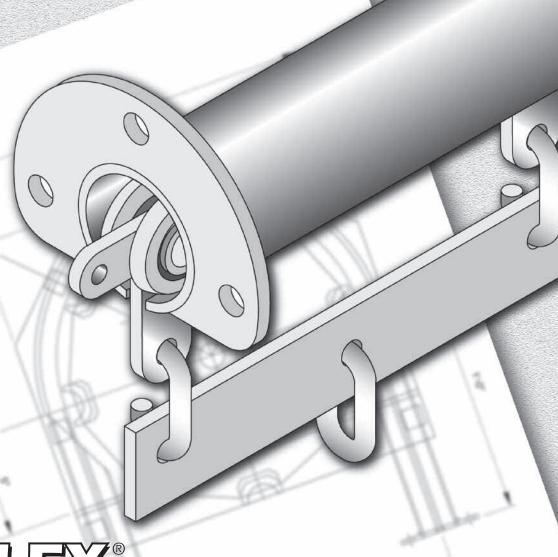
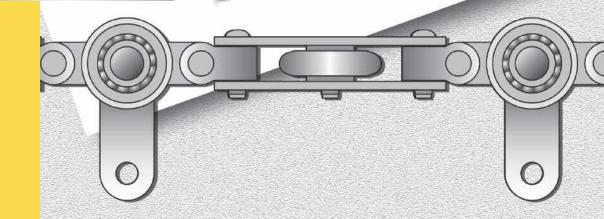


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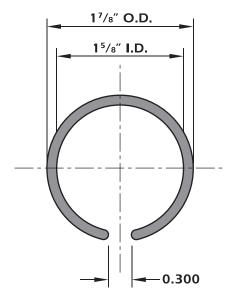
CONVEYORS



#### **ENCLOSED TRACK:**

The track is a rolled tubular section of SAE 1035 high carbon manganese steel, stocked in 10'-0" & 20'-0" lengths.

Available in #316 Stainless Steel on special order.

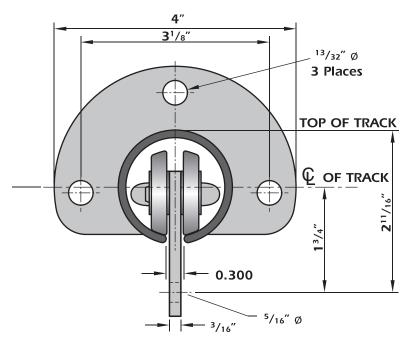


AF 60104 STRAIGHT TRACK SECTION Weight: 2.20 lbs per ft.

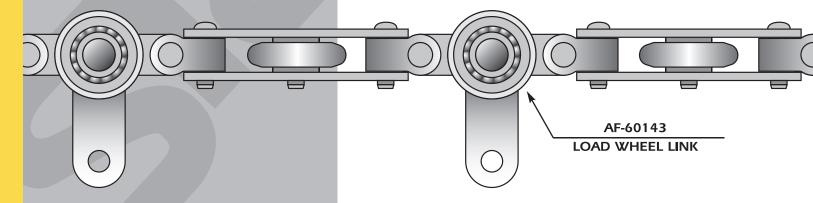
#### **CHAIN PULL:**

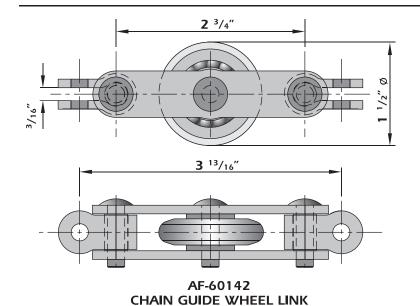
The maximum recommended chain pull should be limited to 600 pounds using a single drive unit, providing a safety factor of 8.25:1 to obtain maximum chain life.

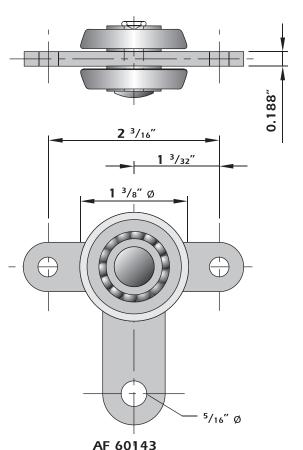
Ultimate tensile strength is 4,950 pounds.



TRACK CROSS SECTION
C/W END PLATE







#### CHAIN LOAD WHEEL LINK

AF-60142

**GUIDE WHEEL LINK** 

**6" NOMINAL PITCH** 

#### **GUIDE WHEEL LINK**

1-1/2" diameter machined steel wheel heat treated to Rockwell 58 - 62 on the "C" scale C/W 14 Grade 500 balls .187" dia. riveted to double chain side bars of C-1045 high carbon steel hardened to Rockwell 37 - 41 "C" scale.

#### LOAD LINK:

Load Link to consist of two 1-3/8" dia. wheels heat treated to Rockwell 58 - 62 on the "C" scale. Each wheel C/W 14 Grade 500 balls .187" dia. riveted to a single chain link .188" thick C-1045 high carbon steel hardened to Rockwell 37 - 41 "C" scale.

#### **CHAIN ASSEMBLY:**

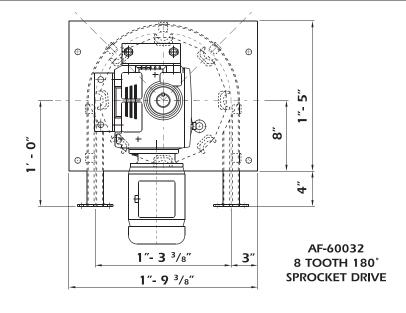
6" Nominal Pitch 50 lb. Loading Per Trolley Weight 1.6 lb/ft.

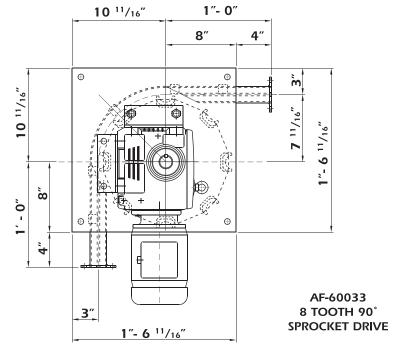


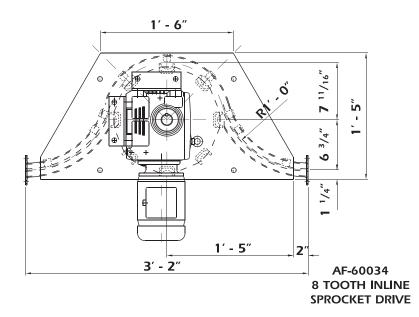
The sprocket drive is the simplest, most economical drive available, consisting of the minimum number of components, resulting in a lower maintenance cost.

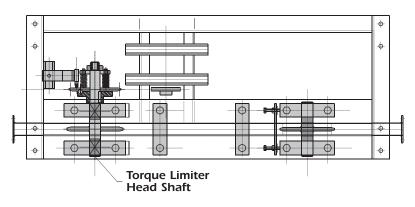
All-Flex offers a 90 & 180 degree sprocket drive & an in-line sprocket drive to suit most system layout requirements. A conventional caterpillar drive is available to suit any unusual requirements. All drive units have overload protection as required by the safety regulator.

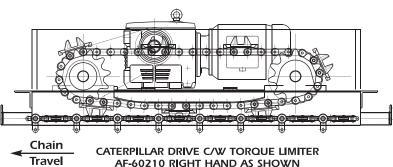
Safety guards on the drive units comply with applicable OSHA & ANSI B20.1 Standards.



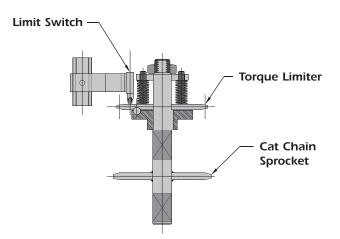




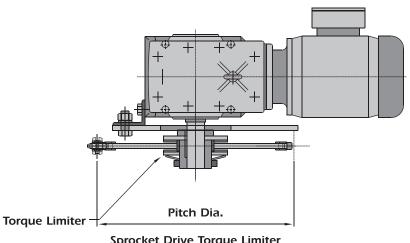




AF-60211 LEFT HAND OPP. TO SHOWN



**Caterpillar Drive Overload Protection** 



**Sprocket Drive Torque Limiter** 

#### CATERPILLAR DRIVE

- Max. chain pull capacity: 600 lbs.
- Combination right angle (helical worm) gear motor.
- Forged heat-treated caterpillar driving dogs.
- Chain guard supplied with each drive.
- Multiple drives are required when chain pull exceeds 600 lbs.
- Variable frequency drive controller available on request.
- Maximum conveyor speed should not exceed 60 F.P.M. with standard drive sprockets.

#### **CATERPILLAR DRIVE** OVERLOAD PROTECTION

Overload protection supplied by SRS torque limiter used with limit switch to cut off power.

#### SPROCKET DRIVE **OVERLOAD PROTECTION**

Each sprocket drive has a friction type torque limiter built into the sprocket hub.

#### **TAKE-UP:**

Take-ups are required on every system to compensate for chain wear and expansion of system if operating in dry-off and bake ovens.

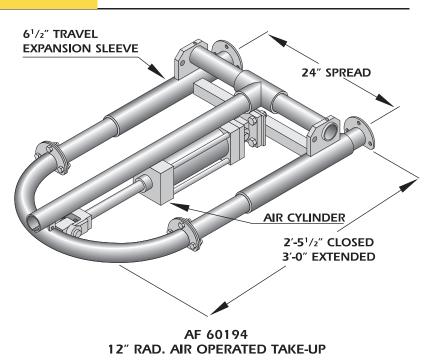
The two most common operating styles are air cylinder and automatic spring.

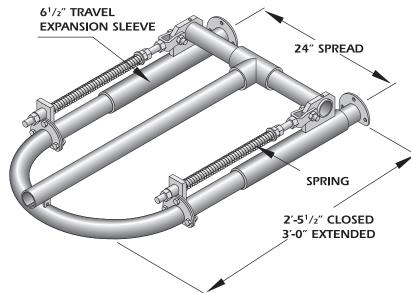
Standard 12" radius x 6 1/2" travel units are stocked.

Available in other radii & travel on special order.

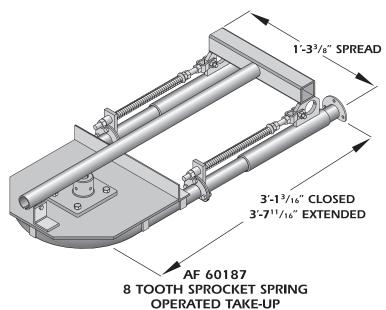
#### **SPROCKET TAKE-UPS:**

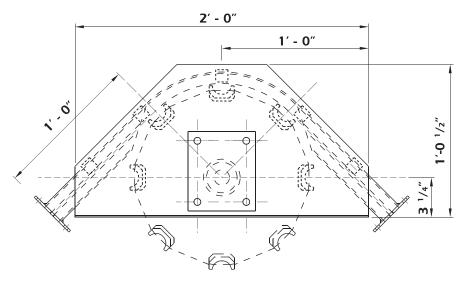
8 tooth & 6 tooth idler sprocket take-ups are available in air & spring styles.



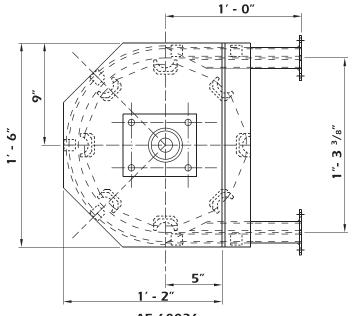


AF 60193 12" RAD. SPRING OPERATED TAKE-UP

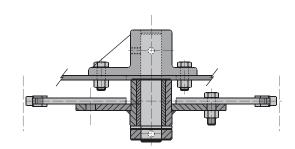




AF 60037 8 TOOTH 90° SPROCKET TURN



AF 60036 8 TOOTH 180° SPROCKET TURN



SPROCKET C/W HUB & MOUNTING BRK'T.

#### **HORIZONTAL SPROCKET TURNS:**

When the conveyor layout requires track horizontal turns less than 12" radius (24" diameter) sprocket turns should be considered to reduce the resultant chain pull and wear on the track radius and the side guide rollers on the chain.

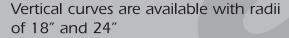
Sprocket hubs can be supplied using conventional needle bearing or carbon bushing for oven applications of up to 500° F.

#### **HORIZONTAL TRACK TURNS:**

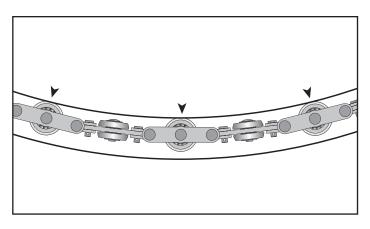
Horizontal curves are available with radii of 12" & 24".

Available in other radii on special order.

\*Note: All horizontal & vertical curves are heat treated to Rockwell 35 to 40 "C" scale for long life.

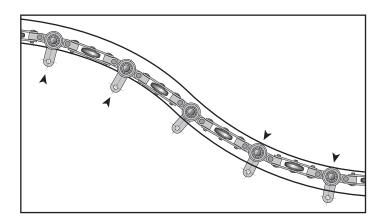


Available in other radii on special order.



#### **HORIZONTAL TURNS**

Horizontal turn with the top removed illustrates how the chain passes around the curve. The lateral wheels ride on the side of the track, which guides the chain smoothly around a horizontal turn without the use of special guides, traction wheels or roller turns.



#### **VERTICAL CURVES**

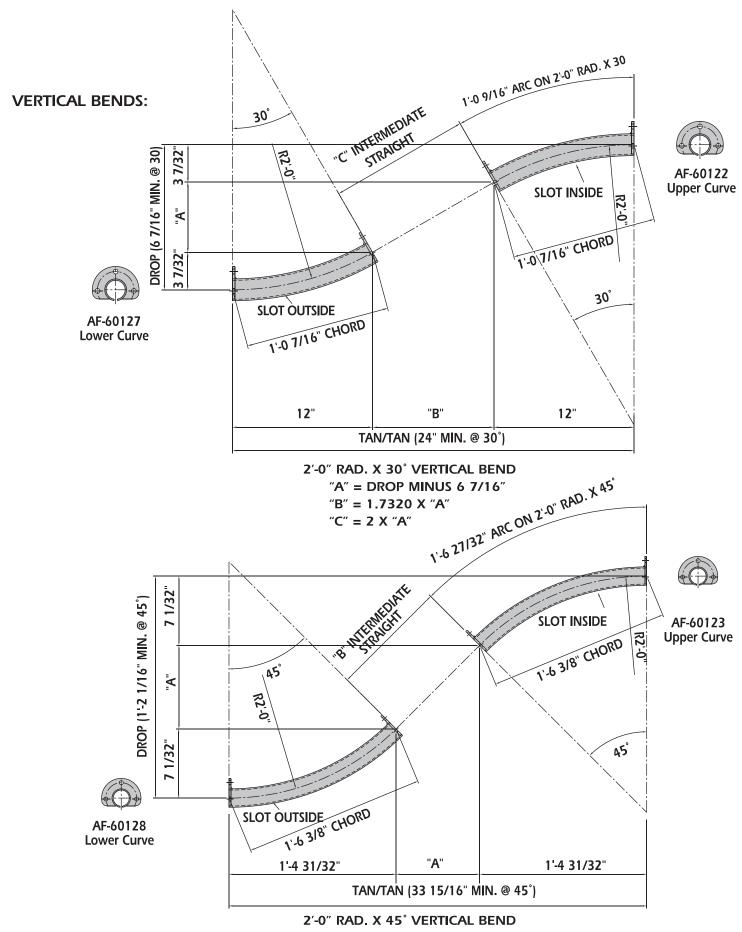
Compound vertical curve with one side removed illustrates how the chain passes around the curve. The vertical chain wheels contact the top of the lower curve and the bottom of the upper curve.

#### **UPPER VERTICAL CURVES LOWER VERTICAL CURVES HORIZONTAL CURVES** 1'-07/16" Chord Arc 1'-0%/16" Slot Side AF-60072 **HORIZONTAL TURN** 1'-0'/16" Chord 2'-0" RAD. X 30° Arc 1'-0%/16 Slot Side **AF-60122 UPPER VERTICAL AF-60127 LOWER VERTICAL** CURVE 2'-0" RAD, X 30° CURVE 2'-0" RAD, X 30° AF-60073 **HORIZONTAL TURN** Slot Side 2'-0" RAD. X 45° .63/8" Chora Slot Side **AF-60123 UPPER VERTICAL AF-60128 LOWER VERTICAL CURVE 2'-0" RAD. X 45°** CURVE 2'-0" RAD. X 45° Ŏ AF-60075 **HORIZONTAL TURN** 2'-0" RAD. X 90° Slot Side Slot Side **AF-60124 UPPER VERTICAL AF-60129 LOWER VERTICAL CURVE 2'-0" RAD. X 90° CURVE 2'-0" RAD. X 90°** 4'-0" C/C Tracks **AF-60076 HORIZONTAL TURN**

Horizontal and vertical curves as illustrated above, are carried in stock. However, special radius or degree curves can be fabricated on order. See reference vertical bend drawings on page 9.

**NOTE:** All horizontal and vertical turns are heat treated on the contact surface to Rockwell 35-40 on the "C" Scale.

2'-0" RAD. X 180°



2'-0" RAD. X 45° VERTICAL BEND "A" = DROP MINUS 1'-2 1/16" "B" = 1.414 X "A"

# 111/2 AF 60102

**INSTALLATION & INSPECTION GATE** 

## **FIXED END SLIDING JOINT** 1'-6" CLOSED 1'-9" OPEN AF 60173 **EXPANSION JOINT**

AF 60144 & AF 60158 **BRUSH CLEANER C/W DRIP PAN** 

#### HINGED CHAIN INSTALLATION & INSPECTION GATE:

The track section with hinged panel is designed for chain installation, removal, inspection and maintenance.

#### TRACK EXPANSION JOINTS: (BUILDING AND OVENS)

Formed steel sliding expansion joints are available for oven conveyors and are usually required where temperatures exceed 200° F.

Rate of expansion of track in ovens: .0078" per foot of length per 100° F of temperature rise.

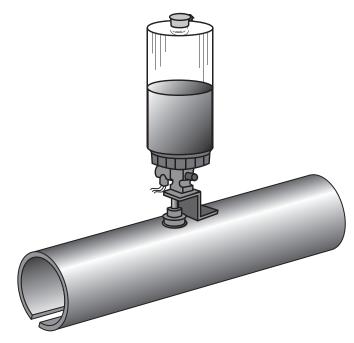
#### TRACK CLEANER:

For conveyors having to operate in severe conditions a cylindrical coil brush cleaner is availble to become a temporary part of the conveyor chain complete with the required clean out container

#### **BRUSH TYPE CHAIN LUBRICATOR:**

There are two models available, auto shut-off solenoid or manual on-off control. Due to the small quantities of oil required for enclosed track conveyors, timer controlled units are recommended for precise application of oil. Manually controlled lubricators are available but not recommended unless continuous lubrication is desired.

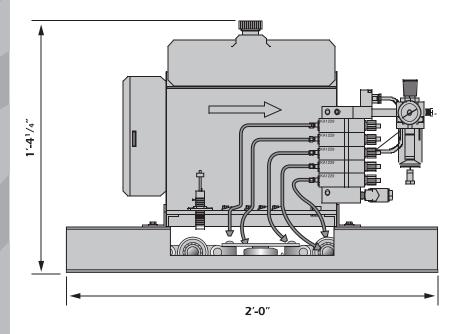
Pre-mounted to standard track section.



BRUSH TYPE CHAIN OILERS AF-60105 (AUTOMATIC SHUT-OFF) AF-60106 (MANUAL SHUT-OFF)

#### **AUTOMATIC LUBRICATOR:**

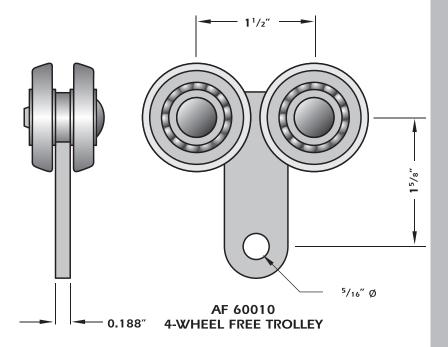
The automatic lubricator is designed to deliver precise oil to the chain pins and wheels. It is pneumatically operated and electrically controlled for complete automatic operation. The unit comes completely equipped with an oil reservoir, air line regulator and guage and PLC controller which is used to program lubrication cycles. Pre-mounted to standard track section.



AF-60107 AUTOMATIC 5 POINT LUBRICATOR

## AF 60150 **LOAD BAR ASSEMBLY** 15/8" <sup>5</sup>/16″ Ø AF 60009

### **2-WHEEL FREE TROLLEY**



#### **LOAD BAR:**

#### (Capacity 100 lbs)

To increase the capacity of the trolleys, load bars are recommended, suspended from 2 special attachments.

#### 2-WHEEL FREE TROLLEY:

Two ball bearing load wheels with hardened races. Hand push only.

#### **4-WHEEL FREE TROLLEY:**

Four ball bearing load wheels with hardened races. Hand push only.

#### **AF 60146 TROLLEY CLEVIS:**

Formed clevis bolted to the chain pendant, provides an easy method to attach a single pendant carrier.

#### 90° INDEXER c/w 4 POINT STAR:

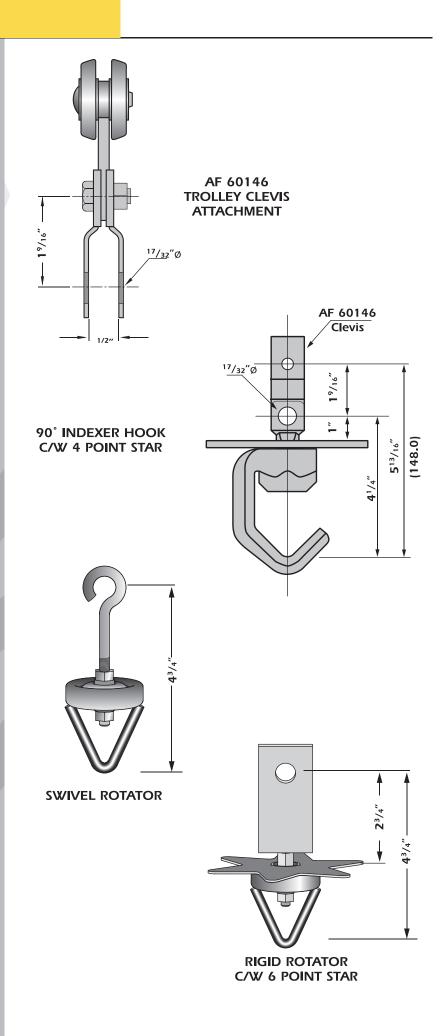
Cast two piece cam construction provides 90° indexing. The addition of the 4 point star allows for automatic indexing.

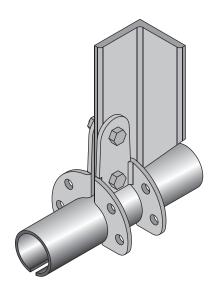
#### **SWIVEL ROTATORS:**

Free spinning ball bearing swivel allows the operator to rotate the load only by hand.

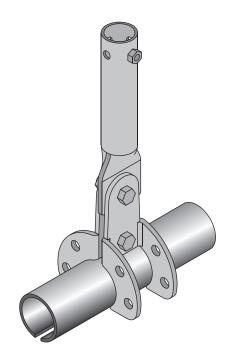
### RIGID ROTATOR C/W 6 POINT STAR:

A rigid pendant and 6 point star provides positive rotation suitable for powered operation.

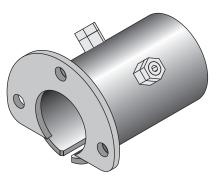




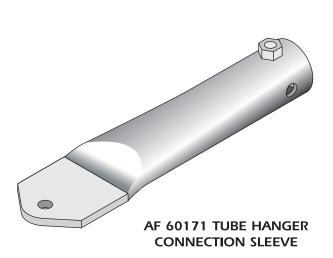
AF 60169 TRACK HANGER C/W STEEL ANGLE

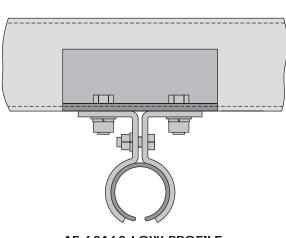


AF 60169 TRACK HANGER C/W AF 60171 TUBE CONNECTOR



AF 60170 STRAIGHT TRACK BOLTED END COUPLING





AF 60160 LOW PROFILE TRACK HANGER CLAMP

#### **All-Flex Box Conveyor**

The SRS All-Flex Overhead Conveyor transfers and sorts boxes, cartons and totes at a rate of 1,500 units per hour to the desired work stations or recycling bins. With our vast experience, SRS can custom design and fabricate special carriers that will enhance your conveyor operation.

#### **All-Flex S-200 Sort Conveyor**

The All-Flex S-200 Sort Conveyor is used in organizations that require an automated garment/product sorting, storage and retrieval system. The S-200 fully automated garment/product induction station has the capacity to sort 10,000 garments/products per hour and capable of unlimited drops. The methods of identifying includes bar code, RF chips, dedicated or visual creating minimal to no human garment/product interventions in the sorting process. Each garment/product is then monitored until it reaches it final designated drop line.

#### **All-Flex Power and Free**

SRS All-Flex Power and Free Conveyor System allows individual trolleys to divert and accumulate on free rail systems. With SRS traffic logic controllers \$300/400 coupled with a gravity/free rail system allows you to maximize your overhead storage, reduce your footprint, minimize power requirement and conveyor costs. We also offer a complete range of standard components designed exclusively for free rail that includes a range of transfer conveyors, rails, suspending components, trolleys, switches and curves.

#### **All-Flex Overhead Safety Netting**

Overhead safety netting is recommended for personnel safety in all conveyors runs that are over work areas or aisles. The size of the carrier of load will determine the proper height and width of the netting opening. Additional clearance may be required for parts on horizontal or vertical curves. SRS netting frames are generally bolted and braced allowing for flexibility and easy installation.











#### S-100 Storage & Retrieval Controller

Significantly minimize your retrieval time by entering multiple desired locations on the S-100 Controller which in turn will prioritize the queue and take the shortest path. The S-100 has all the advanced features that you require and can also be fully integrated with software systems.

#### **S-200 Sorting Controller**

The All-Flex S-200 Sorting Controller has the capacity to sort 10,000 garments/products per hour and sorting capabilities of unlimited drops. The method of identifying includes bar code, RF chips, dedicated or visual creating minimal to no human garment/product interventions in the sorting process. Each garment/product is then monitored until it reaches it final designated drop line.

#### S-300/400 Power and Free Controller

SRS All-Flex S-300/400 Power and Free Controller allow individual trolleys to divert and accumulate on free rail systems. The S-400 will reload the selected rail along with the number of trolleys for that particular line back onto the All-Flex power conveyor. With SRS traffic logic controllers S300/400 coupled with a gravity/free rail system allows you to maximize your overhead storage, reduce your footprint, minimize power requirement and conveyor costs.

#### **S-500 Production Counting Controller**

No longer do you have to calculate the totals at the end of the day to see if your operator is working at peak efficiency. With the interactive menus you can see if your operator is accomplishing your targets. The S-500 is fully expandable and each station on the conveyor line counts as if it was the only unit there. The operator is provided with real time data so they can gauge their own performance. A data lock is provided so that critical information can be controlled.

#### S-600 Assembly/Kitting Controller

The S-600 Auto Assembly/Kitting Controller automatically sorts for the purpose of picking or assembling product orders in an effortless manner. Using only one operator, products can be assembled at a rate of 500 per hour by having the conveyor move via the S-600 instead of the operator. Designed with a micro-processor the S-600 Auto Assembly/Kitting Controller integrates with most inventory/POS software systems and makes operating and installation a breeze.

#### **TRACK**

**AF-60102** Inspection Gate **AF-60104** Standard 10'-0" Long c/w End Flanges **AF-60015** Track End Flange AF-60170 Track Coupling AF-60173 Expansion Joint

#### **CHAIN**

**AF-60004** Conveyor Chain 10'-0" Length AF-60141 Connecting Pin Assembly AF-60144 Track Brush Cleaner Link

#### **CHAIN ATTACHMENTS**

**AF-60145** 90° Indexer c/w 4-Point Star AF-60146 "H" Attachment **AF-60147** Sprocket Swivel Rotator AF-60149 Swivel Rotator **AF-60150** 100 lb Capacity Load Bar AF-60151 "S" Hook Hanger **AF-60153** "J" Hook (Inline) **AF-60154** "J" Hook (90° Offsets) AF-60155 200 lb Capacity Load Bar AF-60157 Swivel Clevis Attachment **AF-60158** Drip Pan for Track Brush Cleaner

#### **DRIVES**

AF-60210 Right-Hand Caterpillar Drive Assemblyc/w Guard AF-60211 Left-Hand Caterpillar Drive Assembly c/w Guard AF-60217 Caterpillar Drive Chain c/w dogs x 7'-0" Length **AF-60219** 6 Tooth x 180° Sprocket Drive **AF-60220** 6 Tooth x 90° Sprocket Drive AF-60032 8 Tooth x 180° Sprocket Drive **AF-60033** 8 Tooth x 90° Sprocket Drive AF-60034 8 Tooth Inline Sprocket Drive

#### **TAKE-UPS**

**AF-60187** 8 Tooth Sprocket 1'- 3 3/8" Spread Spring Operated **AF-60188** 6 Tooth Sprocket 11 3/8" Spread Spring Operated AF-60193 12" Radius Spring Operated AF-60196 18" Radius Spring Operated AF-60199 24" Radius Spring Operated AF-60202 30" Radius Spring Operated AF-60205 36" Radius Spring Operated AF-60194 12" Radius Air Operated AF-60197 18" Radius Air Operated AF-60200 24" Radius Air Operated AF-60203 30" Radius Air Operated AF-60206 36" Radius Air Operated

#### **CHAIN LUBRICATORS**

AF-60105 Manual Shut-off Brush Type Lubricator AF-60106 Automatic Shut-off Brush Type Lubricator AF-60107 Automatic 5-Point Chain & Wheel Lubricator c/w Programmable Logic Controller

#### **INSTALLATION CLAMPS**

AF-60160 Low Profile Hanger Clamp AF-60161 Adjustable Threaded Rod Hanger AF-60164 Scissor Type Track Hanger Clamp AF-60169 Track Hanger Clamp AF-60171 Tube hanger Connector Sleeve

#### **HORIZONTAL CURVE SIZES**

AF-60036	8 Tooth x 180° Horz.
	Sprocket Turn
AF-60037	8 Tooth x 90° Horz.
	Sprocket Turn
AF-60038	6 Tooth x 180° Horz.
	Sprocket Turn
AF-60039	6 Tooth x 90° Horz.
, ii 0005 /	Sprocket Turn
AF-60049	9" Radius x 90°
AF-60051	12" Radius x 15°
AF-60052	12" Radius x 30°
AF-60053	12" Radius x 45°
AF-60054	12" Radius x 60°
AF-60055	12" Radius x 90°
AF-60056	12" Radius x 180°
AF-60061	18" Radius x 15°
AF-60062	18" Radius x 30°
AF-60063	18" Radius x 45°
AF-60064	18" Radius x 60°
AF-60065	18" Radius x 90°
AF-60066	18" Radius x 180°
AF-60071	24" Radius x 15°
AF-60072	24" Radius x 30°
AF-60073	24" Radius x 45°
AF-60074	24" Radius x 60°
AF-60075	24" Radius x 90°
AF-60076	24" Radius x 180°
AF-60081	30" Radius x 15°
AF-60082	30" Radius x 30°
AF-60083	30" Radius x 45°
AF-60084	30" Radius x 60°
AF-60085	30" Radius x 90°
AF-60086	30" Radius x 180°
AF-60091	36" Radius x 15°
AF-60092	36" Radius x 30°
AF-60093	36" Radius x 45°
AF-60094	36" Radius x 60°
AF-60095	36" Radius x 90°
AF-60096	36" Radius x 180°
AF-60097	48" Radius x 45°

#### **VERTICAL BENDS**

AF-60111	18" Radius x 15° Upper
	Vertical Bend
AF-60112	18" Radius x 30° Upper
	Vertical Bend
AF-60113	18" Radius x 45° Upper
	Vertical Bend
AF-60114	18" Radius x 90° Upper
	Vertical Bend
AF-60116	18" Radius x 15° Lower
	Vertical Bend
AF-60117	18" Radius x 30° Lower
	Vertical Bend
AF-60118	18" Radius x 45° Lower
	Vertical Bend
AF-60119	18" Radius x 90° Lower
	Vertical Bend
AF-60121	24" Radius x 15° Upper
	Vertical Bend
AF-60122	
	Vertical Bend
AF-60123	24" Radius x 45° Upper
	Vertical Bend
AF-60124	24" Radius x 90° Upper
	Vertical Bend
AF-60126	24" Radius x 15° Lower
	Vertical Bend
AF-60127	
	Vertical Bend
AF-60128	24" Radius x 45° Lower
	Vertical Bend
AF-60129	24" Radius x 90° Lower
	Vertical Bend

The technical information on the conveyor equipment in this catalog is obtained from laboratory tests. (eg. chain strength, chain link wheel capacity, track material, etc.) Copies of the individual test reports are available upon request.

This catalogue illustrates the various All-Flex Series Components available for use in making up a conveyor system. SRS Conveyors Limited disclaims all responsibility for any equipment or system malfunction, violation of law, property - damage, personal injury or any damages resulting from the equipment selection, design installation or operation carried out by a contractor.

## Other Products designed, fabricated and installed by SRS are as follows:

- Power & Free Overhead Conveyors
- Garment Conveyors
- Automated Sort Conveyors
- Automated Uniform Conveyors
- Inmate Property Storage Conveyors
- Garment Monorail
- Garment V-Rail
- Soil Monorail
- Horizontal Carousels
- Steam Tunnel Conveyors
- 1-1/2", 2", 3", 4" & 6" Pitch Overhead Conveyors
- 6" & 8" Pitch Enclosed Track Conveyors
- Floor Line Drag Conveyors
- Belt Conveyors
- Spindle Type Conveyors
- Monorail Systems
- Mezzanines
- Pallet Racking
- Overhead Safety Netting

SRS Conveyors offers fully automated traffic logic PLC / panel controls

All-Flex is a registered trademark of SRS Conveyors

#### **SRS CONVEYORS**

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**E-mail:** sales@srsconveyors.com **Web Site:** www.srsconveyors.com

Data given in this publication is intended only to aid the engineer in preliminary evaluations and is subject to change without notice.