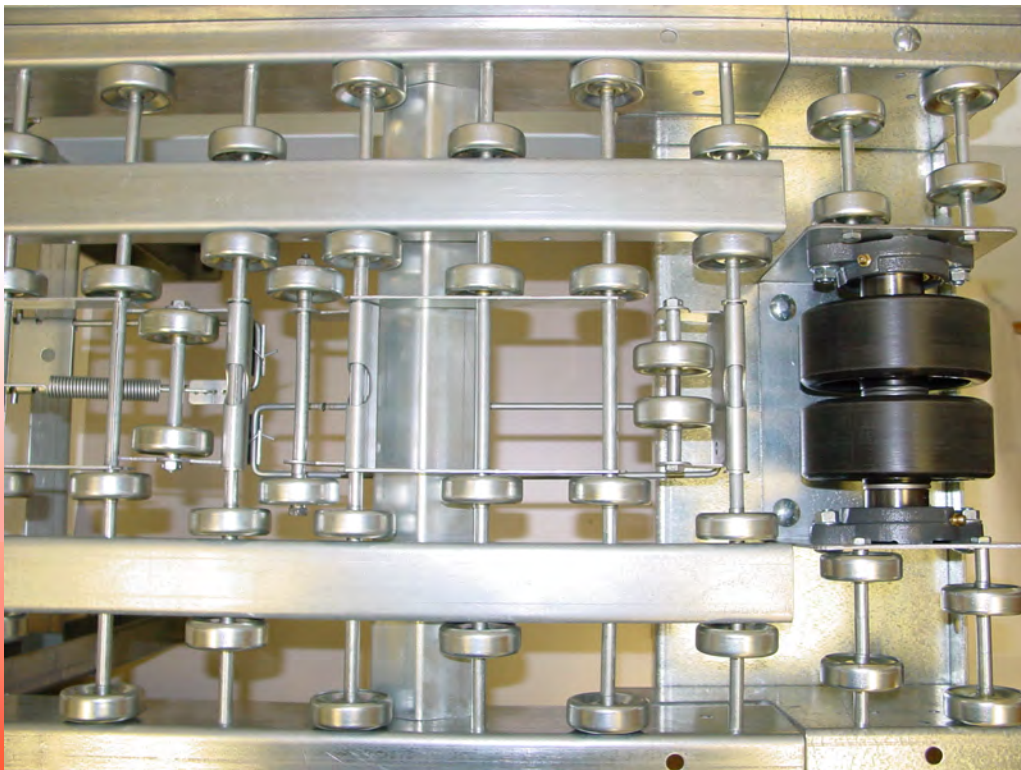


COS / **VEYOR, Inc.**

MECHANICAL ACCUMULATION CONVEYOR

INFORMATION & PRICING

AN ILLUSTRATED GUIDE TO COSVEYOR
COMPONENTS & PARTS



2 0 2 2 C A T A L O G

TABLE OF CONTENTS

<i>COS AW DESCRIPTION</i>	<i>3</i>
<i>COS AW APPLICATIONS</i>	<i>4</i>
<i>COS AW SPECIFICATIONS</i>	<i>5</i>
<i>HORSEPOWER CALCULATION CHARTS</i>	<i>6</i>
<i>COS AW PRICING</i>	<i>7-8</i>
<i>COS AR DESCRIPTION & INFORMATION</i>	<i>9-10</i>
<i>INDIVIDUAL COMPONENTS & PARTS</i>	<i>11-18</i>
<i>MAJOR COS AW COMPONENTS</i>	<i>11</i>
<i>BELT & PRESSURE ASSEMBLIES</i>	<i>12</i>
<i>SPRINGS & LINKAGES</i>	<i>13</i>
<i>PULLEYS & RETURN ROLLERS</i>	<i>14</i>
<i>BEARINGS & POWER COMPONENTS</i>	<i>15</i>
<i>SUPPORTS & ACCESSORIES</i>	<i>16</i>
<i>CASE STOPS</i>	<i>17</i>
<i>RECOMMENDED SPARE PARTS LIST</i>	<i>18</i>

COS AW

(CONVEY OR STORE'S ACCUMULATING WHEEL CONVEYOR)

COSAW combines the simplicity of wheel and belt conveyor designs into a zero pressure accumulator. As one of the very first zero pressure conveyor designs, this former Unex product provides proven reliability and durability for a variety of applications for any product conveyable on skate wheel. Its mechanical linkage makes installation simple and easy to maintain.

The 4" wide V-bottom belt eliminates shortcomings associated with belt tracking and allows lengths up to 200 feet. Product weights up to 75 pounds per foot moving at speeds up to 300 hundred feet per minute are possible. Our standard unit features axle reinforcing channels that prevent axle deflection making it ideally suited for impact loading applications, such as high speed pick lines. In addition, the standard wheel capacity has been upgraded to 100 pounds each. The drive allows for varying power requirements up to 2 horsepower and more belt pull than many competitors.

FRAME	WIDTH	WHEELS/FT.	DRIVE	WEIGHT RANGE	SPEED
3-1/2 x 1-1/8"	18" or 15"	16	1/2 to 2 HP	3-75 lbs./ft.	45 - 250 FPM
x 12 ga.		(100 lb. Capacity)			

HOW THE ACCUMULATION WORKS

The 4" belt is supported by pressure wheels every 12". When the weight of a conveyed item causes the sensing wheels to depress, two sets of pressure wheels are lowered, disengaging the belt from the items in the zone behind it.

When Box A rests on Sensing Wheel #1 (SW1), both sets of Pressure Wheels #1 (PW1) will lower. Box C will then come to a stop, depressing SW2, eliminating drive over PW2 and causing Box D to stop.

When the case stop is lowered, Boxes A and B will resume travel. When Box B clears Sensing Wheel #1, the belt will re-engage Box C which will also resume travel. When Box C clears Sensing Wheel #2, Box D will re-start. This creates a "singularity action" into accumulation and when resuming transportation.

COS AW

TYPICAL APPLICATIONS

BEVERAGE DISTRIBUTION, specifically at the start of the shipping process in the picking areas. COS AW is an ideal pick line conveyor to accept product (usually full cardboard cases) picked from pallets and transported further downstream to additional accumulation or sortation conveyor, and eventually to the shipping docks.

OTHER IDEAL DISTRIBUTION APPLICATIONS

PLASTIC TOTES CONTAINING VARIOUS PICKED PRODUCT

CIGARETTES

GROCERIES

CARDBOARD PACKAGES OF SIMILAR SIZE AND WEIGHT

COS AW

MECHANICAL & GENERAL SPECIFICATIONS

COMPONENT	SPECIFICATIONS
Side Channels	1 1/8" x 3 1/2" x 1 1/8" brake formed 12 ga. galv.
Cross Members	12 ga. galv., 5 per section
Center Bands	1 1/8" x 14 ga. galv.
Center Channels	1 1/8" x 1 13/16" x 12 gauge galvanized (furnished as standard)
Wheels	16 wheels/foot, 100 lb. capacity
Spacers	galvanized steel, approx. .050" thick
Pressure Wheel Assemblies	1/4" bolt and lock nut
Adjustable Connectors	18 ga. galv.
End Assemblies	5" dia. molded plastic casters. Self-aligning, relube type, precision grade bearings, mounted on 1 3/16" dia. shaft.
Drives	Center Mounted, uses 4 " belt, Minimum belt wrap at 6", speeds up to 300 FPM, greater reducer size flexibility (see COSVEYOR center drive specification sheet for more details)
Belt	4" wide, PVC 150, modified "A" section V-Guide centered on PVC side, brush side up

COS AW

DETERMINING MAXIMUM LENGTH & HORSEPOWER PER UNIT

FACTOR BASED ON LENGTH LIMIT DUE TO SPEED & HP				
SPEED	¾ HP	1 HP	1-½ HP	2 HP
60 fpm	x 1.0	X	X	X
75 fpm	x .92	x 1.0	X	X
90 fpm	x .76	x 1.0	X	X
120 fpm	x .57	x .76	x 1.0	X
150 fpm	x .46	x .61	x .92	x 1.0
200 fpm	x .36	x .48	x .76	x .92
240 fpm	x .28	x .38	x .57	x .76
MAXIMUM UNIT LENGTH = LENGTH LIMIT x FACTOR				
AVERAGE PRODUCT WEIGHT PER FOOT		LENGTH LIMITS BASED ON PRODUCT WEIGHTS		
40 lbs.		178 feet		
50 lbs.		142 feet		
60 lbs.		119 feet		
70 lbs.		102 feet		

For different weights and speeds, please consult factory.

COS AW

COMPONENTS PRICE LIST

Effective 3/1/07

PART NUMBER	UNIT COMPONENTS	COMP. WEIGHT	LIST PRICE
WA18	10' REINFORCED ACCUMULATING BED, 18" wide	145 LBS.	\$1146.73
WA15	10' REINFORCED ACCUMULATING BED, 15" wide	140 LBS.	\$1238.90
WT18	10' REINFORCED TRANSPORTATION BED, 18" wide	140 LBS.	\$1146.73
WT15	10' REINFORCED TRANSPORTATION BED, 15" wide	135 LBS.	\$1238.90
WC18	CUT BED SECTION (per foot price + 15%) + CUT CHARGE	14 LBS / FT	\$112.00
WR04	RETURN ROLLER (reinforced)	2 LBS.	\$39.95
WE18	END ASSEMBLY, 18" wide	24 LBS.	\$495.84
WE15	END ASSEMBLY, 15" wide	22 LBS.	\$495.84
DC04-01	CENTER DRIVE INCLUDING 1 HP POWER PACK	215 LBS.	\$3584.59
DC04-15	CENTER DRIVE INCLUDING 1-½ HP POWER PACK	225 LBS.	\$4122.28
DC04-02	CENTER DRIVE INCLUDING 2 HP POWER	235 LBS.	\$4161.74
WB04	BELTING, 4" wide with modified A-section V-guide (per foot)	½ LB / FT	\$6.67/ft.

PART NUMBER	SUPPORTS	LIST PRICE
SH15-1216	SUPPORT, 15" wide, 12"-16" height range	\$112.20
SH15-1420	SUPPORT, 15" wide, 14"-20" height range	\$112.20
SH15-1824	SUPPORT, 15" wide, 18"-24" height range	\$112.20
SH15-2228	SUPPORT, 15" wide, 22"-28" height range	\$112.20
SH15-2632	SUPPORT, 15" wide, 26"-32" height range	\$112.20
SH15-3042	SUPPORT, 15" wide, 30"-42" height range	\$112.20
SH18-1216	SUPPORT, 18" wide, 12"-16" height range	\$112.20
SH18-1420	SUPPORT, 18" wide, 14"-20" height range	\$112.20
SH18-1824	SUPPORT, 18" wide, 18"-24" height range	\$112.20
SH18-2228	SUPPORT, 18" wide, 22"-28" height range	\$112.20
SH18-2632	SUPPORT, 18" wide, 26"-32" height range	\$112.20
SH18-3042	SUPPORT, 18" wide, 30"-42" height range	\$112.20

COS AW

SPARE PARTS & ACCESSORIES PRICE LIST

Effective 3/1/07

PART NUMBER	SPARE PARTS	LIST PRICE
PW03	PRESSURE WHEEL ASSEMBLY	\$14.44
PW04	SPRING PRESSURE WHEEL ASSEMBLY	\$18.38
SW04	SENSING WHEEL ASSEMBLY	\$16.12
HS03	HOLD DOWN SPRING (retaining clip for assemblies)	\$80.22
PS05	PRESSURE SPRING (tension for pressure assembly)	\$114.08
PR21	ADJUSTABLE PRESSURE ROD ASSEMBLY	\$12.23
CR12	CONNECTING ROD (links pressure wheel assemblies)	\$4.85
DP08	DRIVE PULLEY (for center drive, with 1 3/16" shaft)	\$436.99
DP06	TAKE-UP PULLEY (for center drive, with 1 3/16" shaft)	\$212.41
DP05	END PULLEY (for end assembly, with 1 3/16" shaft)	\$207.14
DB03	3-HOLE BEARING (for drive pulley)	\$34.99
DB02	2-HOLE BEARING (for take-up, guide, & end pulleys)	\$32.74
DM03	MOTOR, Weg 3/4 HP, tefc, tri-voltage, footless, 56c	\$642.62
DM04	MOTOR, Weg 1 HP, tefc, tri-voltage, footless, 56c	\$642.62
DM06	MOTOR, Weg 1 1/2 HP, tefc, tri-voltage, footless, 56c	\$642.62
DM08	MOTOR, Weg 2 HP, tefc, tri-voltage, footless, 56c	\$642.62
DR20	GEAR REDUCER, Cone Drive, 1.75" C.D.	\$430.95
DR24	GEAR REDUCER, Cone Drive, 2.00" C.D.	\$430.95
DR26	GEAR REDUCER, Cone Drive, 2.38" C.D.	\$430.95
HA32	DYNABOLT SLEEVE ANCHOR, 3/8" x 1-7/8"	
HA33	DYNABOLT SLEEVE ANCHOR, 3/8" x 3	
HB37	HEX CAP BOLT, 3/8" x 7/8", zinc plated	
HFN3	FLANGE NUT, 3/8", zinc plated	
HFW3	FLAT WASHER, SAE 3/8", zinc plated	
PART NUMBER	ACCESSORIES	LIST PRICE
GR11	GUARD RAIL, 1" x 1" Hemmed (per foot, one side)	\$80.21/ft.
GR12	GUARD RAIL, 1" x 2" Hemmed (per foot, one side)	
SG18	COS AW / SKATEWHEEL SPRING GATE, 18" wide	
CS18	COS AW AIR-OPERATED CASE STOP, 18" wide	
EG01	EDGE GUARD, half-round (mounts to side frames of COS AW)	

COS AR

CONVEY OR STORE'S ACCUMULATING ROLLER CONVEYOR

BELT DRIVEN LIVE ROLLER WITH AIR ACCUMULATION



10' BED SECTION WITH CENTER DRIVE, END ASSEMBLIES, & SUPPORTS

COS AR

(CONVEY OR STORE'S ACCUMULATING ROLLER CONVEYOR)

COS AR combines the accuracy of air technology with the high capacity of belt drive to produce a durable and reliable accumulator capable of neatly handling a broad range of product from 1 to 100 pounds per foot.

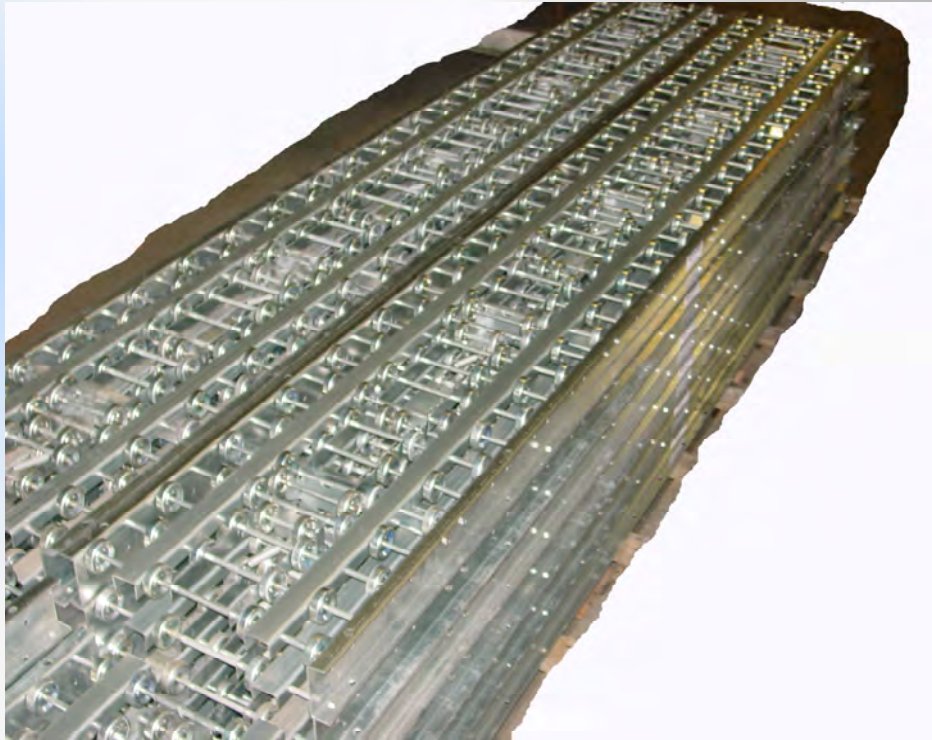
A 4" wide V-belt is held in contact with the underside of the carrying rollers by a series of pressure wheel assemblies.

COS AR accumulates product in 2'-6" zone segments. The conveyor will accumulate product in "dense pack" form when reaching speeds of 90 FPM or greater. Zones in the 3" roller center beds consist of a photo eye sensor and (5) pressure assemblies. When the photo eye sensor detects stopped product in front of it, a pressurized air diaphragm is de-activated disengaging the drive belt from the carrier rollers. Pressure assemblies consist of a pair of 2" diameter, 100 pound capacity wheels attached to a pivot bracket.

FRAME	WIDTH	ROLLERS	DRIVE	WEIGHT RANGE	SPEED
9" deep x 1-1/8" x 11 ga. Galv. steel	18" or 24"	1.9" dia. Galv. Steel, 7/16" hex axle, 2" or 3" roller centers	1/2 to 2 HP	1-100 lbs./ft.	45-250 FPM

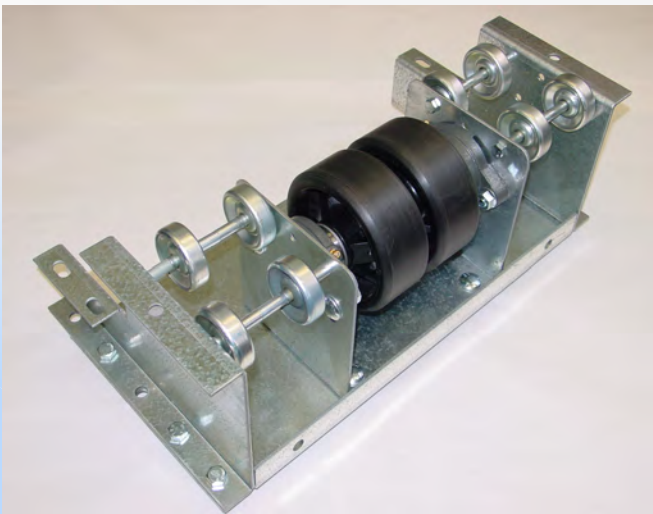
This former Unex U-67 product has been redesigned to better the overall conveyance of product. Improvements include a deeper side frame and pop-out rollers. This eliminates the need for a shroud and sustains easier maintenance of the belt. COS AR replaced the 1.8" with the industry standard 1.9" diameter rollers and set pressure wheel assemblies on 6" centers creating better pressure uniformity and more positive drive. Air diaphragms are used now for a more positive accumulation because air is used to drive instead of cancel and less parts are required to create the accumulation. As a result, a lower (15 PSI) operating air pressure is required to maintain drive. Sensor rollers have been replaced by electronic photo eyes for much more responsive, zero pressure accumulation.

WA18 COS AW BED, 18" OAW



10' long reinforced mechanical accumulating conveyor bed, available in 18" or 15" overall widths. Product is driven by a 4" wide belt down the center with 100 lb. capacity skatewheels to support the product, 12 gauge galvanized formed steel, 1/4" axles at 3" centers.

WE18 END ASSEMBLY



Mounts to end of COS AW bed to complete each end of unit, 18" or 15" conveyor widths. Includes 5" dia. end pulley and skatewheels mounted on either side. 12 gauge galvanized steel construction.

DC04 CENTER DRIVE



Mounts directly underneath COS AW Bed, available in 3/4, 1, 1-1/2, and 2 HP along with speeds from 60 FPM to 250 FPM. Mounts available for 18" or 15" conveyor widths, 8" dia. drive pulley, take-up and snubber both contained within the drive, jack-bolt motor mount design for easy tightening of drive chain, heavy 10 ga. galvanized steel.

WB04 COS AW BELT



4" wide PVC belt, approx. 3/16" thick, rated at 150 lbs./ft., with modified A-section V-Guide typically centered on the cover side of belt, uses Clipper #2 lacing for joining.

PW03 PRESSURE WHEEL ASSEMBLY



Second of two pressure wheel assemblies per zone which puts upward pressure on belt to keep belt in contact with product in transportation mode. Uses (2) 2" dia. skatewheels.

PW04 SPRING PRESSURE WHEEL ASSEMBLY



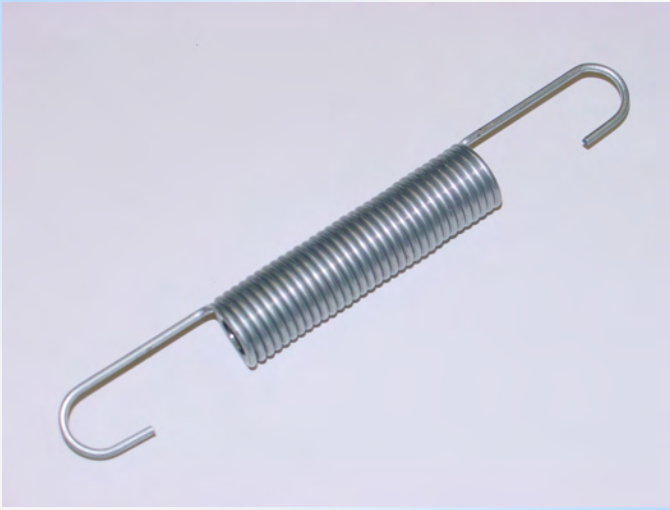
First of two pressure wheel assemblies per zone which puts upward pressure on belt to keep belt in contact with product in transportation mode. The bracket on this assembly has provisions for a spring attachment to the frame to provide the required pressure at adjustable settings.

SW04 SENSING WHEEL ASSEMBLY



Actuator for accumulation sets higher than frame wheels so that when product comes across, the assembly is pressed down and actuates the pressure assemblies downstream, disengaging them from the belt. It is connected to the first pressure wheel assembly via the adjustable pressure rod assembly. Uses (2) 2" dia. skatewheels which set on either side of the belt.

PS05 PRESSURE SPRING



Attaches to Spring Pressure Wheel Assembly and axle 6" downstream. Supplies upward pressure to the 4" belt via the pressure wheel assemblies

HS03 HOLD DOWN SPRING



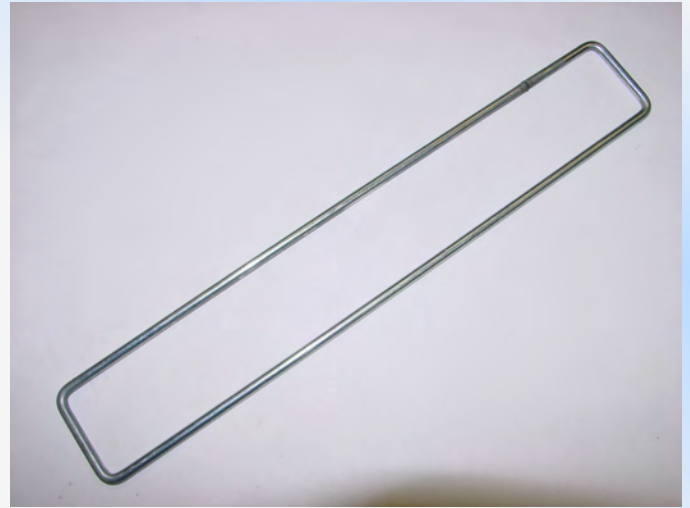
Wire form attaches into pressure and sensing wheel assemblies for retention onto the axles.

PR21 ADJUSTABLE PRESSURE ROD ASSEMBLY



Linkage that connects sensing wheel assembly to first pressure wheel assembly (PW04) within the zone. Adjustable to four different setting to vary the height of the

CR12 CONNECTING ROD



Linkage that connects the first pressure wheel assembly (PW04) to the second pressure wheel assembly (PW03) in the same zone.

DP08 DRIVE PULLEY



(2) 8" dia. x 2" wide mold-on rubber aluminum core wheels, 1-3/16" dia. x 12" long solid steel keyed shaft secured with keystock, setscrews, and locking collars. Mounts into COSVEYOR center drive via flange bearings and is driven by the motor/reducer assembly via chain and sprockets.

DP06 TAKE-UP PULLEY



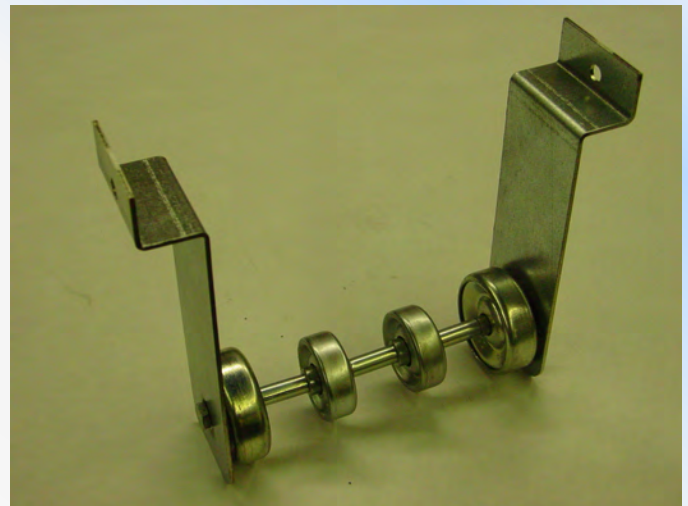
(2) 6" dia. x 2" wide polyolifin wheels, 1-3/16" dia. x 9" long solid steel shaft, wheels pressed fit onto shaft and secured with locking collars. Mounts into the take-up portion of the COSVEYOR center drive via flange bearings.

DP05 END PULLEY



(2) 5" dia. x 2" wide polyolifin wheels, 1-3/16" dia. x 7" long solid steel shaft, wheels pressed fit onto shaft. Mounts into the COS AW end assembly via flange bearings.

WR04 RETURN ROLLER



(2) 2" dia. 100 lb. capacity skatewheels, (2) 1-1/2" dia. skatewheels, connected to brackets via 1/4" dia. bolt with spacers. Mounts underneath each conveyor bed section for the 4" belt to ride on for return.

DB03 3-HOLE FLANGE BEARING



Bearing used to mount drive pulley within the COSVEYOR center drive. Supplied with zirc fitting for lubrication and double setscrews to lock in shaft of drive pulley.

DB02 2-HOLE FLANGE BEARING



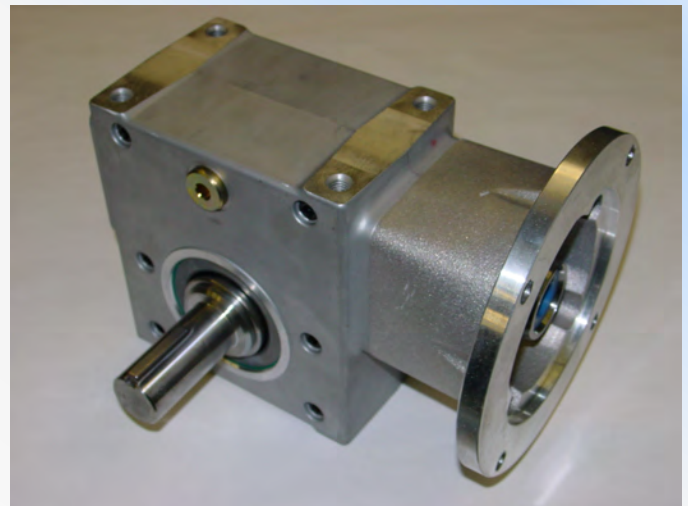
Bearing used to mount the end pulley within a COS AW end assembly as well as the take-up and guide pulleys within the COSVEYOR center drive. Supplied with zirc fitting for lubrication and double setscrews to lock in shaft of pulleys.

DM03 / DM04 / DM06 / DM08 ELECTRIC MOTOR



Available as a $\frac{3}{4}$, 1, 1-1/2, or 2 HP Motor for COSVEYOR drives. Mounts to flange of gear reducer with (4) bolts. Output shaft supplied with keystick. Three-phase, 208- 230/460 V 60 Hz, 1730 RPM, TEFC, footless,

DR20 / DR24 / DR26 GEAR REDUCER



Available in (3) unit sizes (DR24 is standard). Mounts to motor mount plate of COSVEYOR center drive with (4) bolts threading into the bottom of the box. Right-angle single reduction, helicoidal gear, sealed. Available in several gear ratios, left or right-hand.

SH15 / SH18 SUPPORT



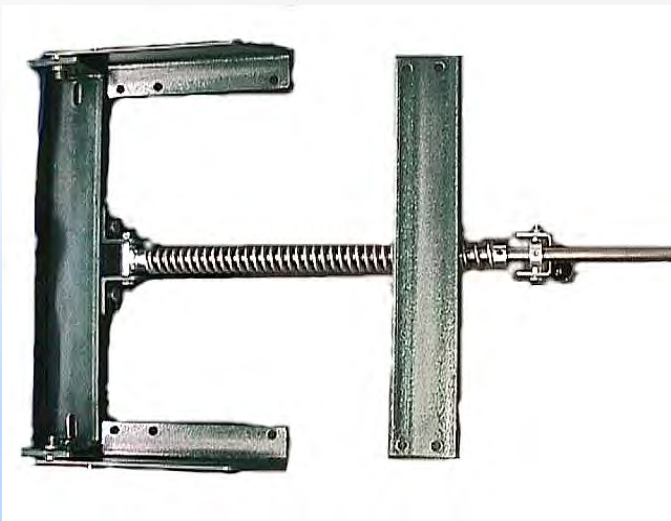
Medium duty H-stand Leg Support, galvanized steel, pivoting support heads, 15" or 18" conveyor widths, supplied in several different heights, each with an adjustable range of 6".

GR11 / GR12 GUARD RAIL



Hemmed Angle Guard Rail, galvanized, supplied in 1" x 1" or 1" x 2" sizes, 10' long sections. Pre-punched slots at 6" centers for bolt-on installation to conveyor beds.

SG18 COS AW SPRING GATE, 18" wide



Heavy-duty structural steel spring gate assembly for 18" OAW gravity roller or wheel conveyor. Requires 3' wide opening. Gravity section sold separately. Includes locking bracket for open position.

EG01 EDGE GUARD



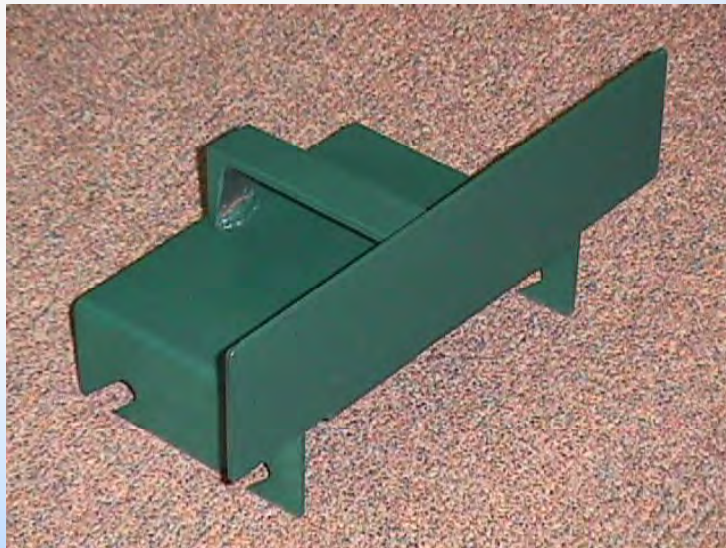
3-1/2" half round plastic guard easily attaches directly to the conveyor side frame by pushing the "hook" section onto the top flange of the side frame and snapping the bottom lip of the guard inside the bottom of the frame. Standard color is gray. Other colors are available. Provided in 10' long

CS18 COS AW AIR-OPERATED CASE STOP, 18" WIDE



Case stop operates with mechanical arms with small wheels attached on the ends. A pneumatic cylinder, which moves the mechanical arm assembly up or down, is connected to an electronic solenoid via air. Control of this solenoid is at the discretion of the customer. 110 volts is typical. Recommended input air pressure is 25-40 PSI depending upon line pressure. Mounts to COS AW intermediate conveyor bed. Mounting hardware is included.

CS01 COS AW MANUAL HAND CASE STOP



Hand-held manual case stop easily locks down into two adjacent axles in between the center channels of a COS AW conveyor bed at one-foot intervals anywhere down the length of the bed. The stop will stay locked in place to hold product back until stop is removed.

COS AW

RECOMMENDED SPARE PARTS LIST

Effective 3/1/07

QUANT	P/N	DESCRIPTION	LIST PRICE
1	X	Motor (general purpose, tri-voltage, 56C, TEFC, footless) (see specification sheet for more details)	Consult Factory
1	X	Reducer (see specification sheet for details)	"
1	X	Reducer Sprocket (see specification sheet for details)	"
1	X	Pulley Sprocket (see specification sheet for details)	"
1	DP08	Drive Pulley	436.99
1	DP06	Take-up Pulley	212.41
1	DP05	End-Pulley	207.14
1	WR04	Return Roller Assembly	39.95
1	PR21	Adjustable Pressure Rod Assembly	12.23
1	PW03	Pressure Wheel Assembly	14.44
1	PW04	Spring Pressure Wheel Assembly	18.38
1	SW04	Sensing Wheel Assembly	16.12
50	PS05	Pressure Spring	114.08
50	HS03	Hold Down Spring	80.22
2	DB03	3-hole bearing	34.99
2	DB02	2-hole bearing	32.74

COS / **VEYOR, Inc.**

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