



CHAIN DRIVEN LIVE ROLLER CONVEYOR

SECTION CONTENT

Straight
Curve
Optional Equipment and Devices

CDLR **CHAIN DRIVEN LIVE ROLLER CONVEYOR**



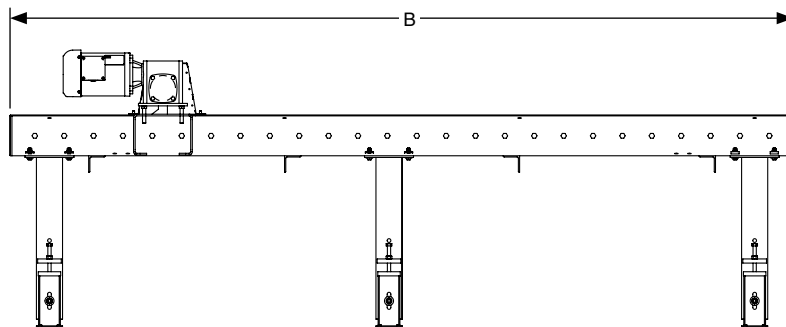
WHY CDLR?

- Roller size and centers optimized to handle nearly any load
- Positive drive using roller to roller chain and sprockets
- Withstands even the toughest environments and abrasive applications
- Robust, welded construction using structural steel with nearly unlimited between frame dimensions, length options and roller diameters
- Available with your standard color, labels and component choices including special brand motors, reducers, chain and bearings
- Roller coatings, heat treat, frame cut outs and modifications, fork loading protection and other specialized provisions are our "standard"
- Common applications include palletizing, filling, load staging, robotic cells, stretch wrapping, strapping and transportation

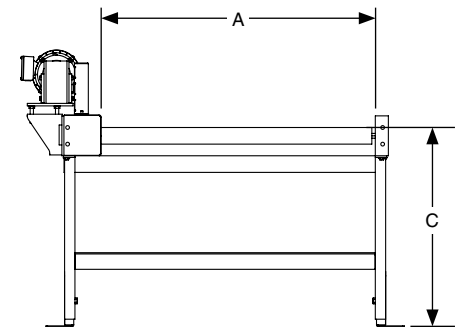
CHAIN DRIVEN LIVE ROLLER CONVEYOR - STRAIGHT

	1.9"	2 1/2"	2 9/16"	3 1/2"	4"
A	12" - 54"	12" - 64"	12" - 96"	12" - 96"	12" - 120"
B	3' - 50'				
C	12" - 60"				

Up to 8" roller diameter available



Shown with jackbolt leg supports



A = Effective Width (Any Increment)
B = Overall Length (OAL) (Any Increment)
C = Top of Roller (TOR)

ROLLER SPACING, CHAIN AND SPROCKET SPECIFICATIONS




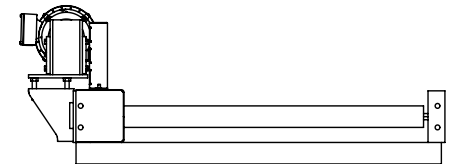
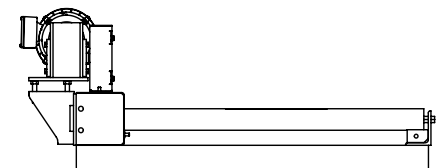
LACING OPTIONS	CHAIN SIZE	MINIMUM ROLLER SPACING (in.)				
		1.9"	2 1/2"	2 9/16"	3 1/2"	4"
STANDARD LACING - CHAIN GUARD ONE SIDE						
	40	3 1/2	3 3/4	4	N/A	N/A
	50	3 3/4	4 1/16	4 3/8	N/A	N/A
	60	4 1/8	4 1/2	4 1/2	5 5/8	6
	80	N/A	N/A	5 1/2	6	6 1/2
SPECIAL LACING - WIDER CHAIN GUARD ONE SIDE						
	40	2 3/4	3 1/8	N/A	N/A	N/A
	50	3 1/8	3 7/16	3 3/4	N/A	N/A
	60	N/A	3 3/4	3 3/4	4 7/8	N/A
	80	N/A	N/A	N/A	5	N/A
POWER BOTH SIDES - CHAIN GUARD BOTH SIDES						
	40	2 1/4	2 3/4	2 3/4	N/A	N/A
	50	2 1/2	2 13/16	2 13/16	N/A	N/A
	60	2 1/4	3	3	3 3/4	N/A
	80	N/A	N/A	3 1/4	3 3/4	N/A

Chart applies to straight CDLR only



ROLLERS LOW



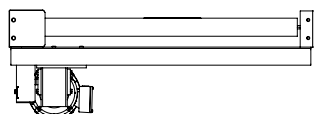
ROLLERS HIGH/LOW

HORSEPOWER AND LOAD SPECIFICATIONS

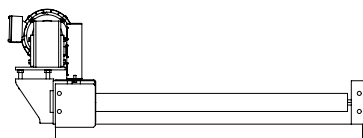
STRAIGHT CDLR GENERAL HORSEPOWER GUIDELINES

ROLLER	PRODUCT WEIGHT	UP TO 10'			UP TO 20'			UP TO 30'			UP TO 40'			UP TO 50'		
		2 Products			4 Products			6 Products			8 Products			10 Products		
		30 FPM	45 FPM	60 FPM	30 FPM	45 FPM	60 FPM	30 FPM	45 FPM	60 FPM	30 FPM	45 FPM	60 FPM	30 FPM	45 FPM	60 FPM
1.9"	500	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	3/4	1/2	3/4	1	3/4	1 1/2
	1000	1/2	1/2	3/4	1/2	3/4	3/4	3/4	1	1 1/2	3/4	1 1/2	1 1/2	1	1 1/2	2
2 1/2"	2000	1/2	3/4	3/4	3/4	1 1/2	1 1/2	1 1/2	2	N/A	1 1/2					
	2500	1/2	3/4	1	1	1 1/2	2	1 1/2	2							
2 9/16"	3000	3/4	1	1 1/2	1 1/2	2	N/A	2								
	3500	3/4	1	1 1/2	1 1/2	2										
3 1/2"	4000	1	1 1/2	1 1/2	2											
	6000	1 1/2	2													
4"	10000	2	3													

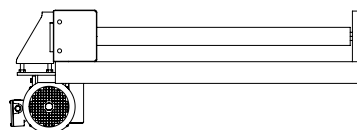
- Multiple drives or conveyor sections may be needed to meet application capacity/speed requirements
- Other roller, speed and horsepower combinations are available
- Greater horsepower available per application
- Chart applies to straight CDLR only



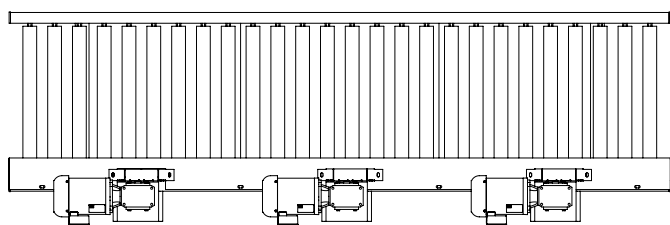
BELOW AND WITHIN



SIDE HIGH



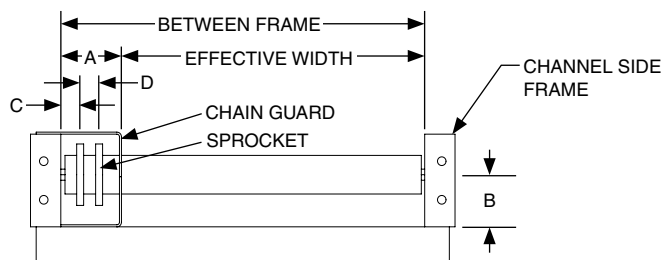
SIDE LOW



LEFT END

CENTER

RIGHT END



STANDARD CONFIGURATIONS

ROLLER DIAMETER (in.)	CHAIN	SPROCKET	TUBE DETAIL		AXLE DETAIL			MAXIMUM LOAD	FRAME	OPTIONAL SIDE FRAME		CHAIN BOX	ROLLER CENTER LINE HEIGHT	SPROCKET LOCATION	
	Series	Type	Wall Thickness (in.)	Material	Size (in.)	Type	Retention*	(lbs.)	Structural Channel	Channel	Angle (in.)	A (in.)	B (in.)	C (in.)	D (in.)
1.9	40	40A18	0.145	Mild Steel or Galvanized	7/16	Hex	Spring or Pin	1500	5 x 6.7#	N/A	3 1/2 x 2 1/2 x 5/16	3 1/4	2 3/4	1 1/8	1 1/8
	50	50A15	0.145	Mild Steel or Galvanized	7/16	Hex	Spring or Pin	1500	5 x 6.7#	N/A	3 1/2 x 2 1/2 x 5/16	3 1/4	2 3/4	1 1/8	1 1/8
	60	60A13	0.145	Mild Steel or Galvanized	7/16	Hex	Spring or Pin	1500	6 x 8.2#	4 x 5.4#	4 x 3 x 5/16	4	3 1/4	1 1/4	1 1/4
2 1/2	40	40A22/40A21	11 ga.	Mild Steel or Galvanized	11/16	Hex	Spring or Pin	3500	5 x 6.7#	N/A	3 1/2 x 2 1/2 x 5/16	3 1/4	2 5/8	1 1/8	1 1/8
	50	50A17	11 ga.	Mild Steel or Galvanized	11/16	Hex	Spring or Pin	3500	5 x 6.7#	N/A	3 1/2 x 2 1/2 x 5/16	3 1/4	2 5/8	1 1/8	1 1/8
	60	60A15	11 ga.	Mild Steel or Galvanized	11/16	Hex	Spring or Pin	3500	6 x 8.2#	4 x 5.4#	4 x 3 x 5/16	4	3	1 1/4	1 1/4
2 9/16	40	40A22	0.180	Mild Steel	11/16	Hex	Spring or Pin	3500	5 x 6.7#	N/A	3 1/2 x 2 1/2 x 5/16	3 1/4	2 5/8	1 1/8	1 1/8
	50	50A18	0.180	Mild Steel	11/16	Hex	Spring or Pin	3500	5 x 6.7#	N/A	3 1/2 x 2 1/2 x 5/16	3 1/4	2 5/8	1 1/8	1 1/8
	60	60A15	0.180	Mild Steel	11/16	Hex	Spring or Pin	3500	6 x 8.2#	4 x 5.4#	4 x 3 x 5/16	4	3	1 1/4	1 1/4
	80	80A13	0.180	Mild Steel	11/16	Hex	Spring or Pin	3500	6 x 8.2#	4 x 5.4#	4 x 3 x 5/16	4 1/4	3 1/4	1 1/4	1 3/4
3 1/2	60	60A20	0.300	Mild Steel	1 1/16	Hex	Pin	6000	7 x 9.8#	5 x 6.7#	5 x 3 x 5/16	4	3 1/2	1 1/4	1 1/4
	80	80A16	0.300	Mild Steel	1 1/16	Hex	Pin	6000	8 x 11.5#	6 x 8.2#	6 x 4 x 3/8	4 1/4	4 1/2	1 1/4	1 3/4
	100	100A13	0.300	Mild Steel	1 1/16	Hex	Pin	6000	8 x 11.5#	6 x 8.2#	6 x 4 x 3/8	5	4 1/2	1 3/8	2
3 1/2	60	60A20	0.300	Mild Steel	1 7/16	Round	Pin	10000	7 x 9.8#	5 x 6.7#	5 x 3 x 5/16	4	3 1/2	1 1/4	1 1/4
	80	80A16	0.300	Mild Steel	1 7/16	Round	Pin	10000	8 x 11.5#	6 x 8.2#	6 x 4 x 3/8	4 1/4	4 1/2	1 1/4	1 3/4
	100	100A13	0.300	Mild Steel	1 7/16	Round	Pin	10000	8 x 11.5#	6 x 8.2#	6 x 4 x 3/8	5	4 1/2	1 3/8	2
4	60	60A22	0.500	Mild Steel	1 7/16	Round	Pin	15000	8 x 11.5#	6 x 8.2#	6 x 4 x 1/2	4	4 1/2	1 1/4	1 1/4
	80	80A17	0.500	Mild Steel	1 7/16	Round	Pin	15000	8 x 11.5#	6 x 8.2#	6 x 4 x 1/2	4 1/4	4 1/2	1 1/4	1 3/4
	100	100A14	0.500	Mild Steel	1 7/16	Round	Pin	15000	8 x 11.5#	6 x 8.2#	6 x 4 x 1/2	5	4 1/2	1 3/8	2

*Dependent upon between frame dimension

STANDARD SPECIFICATIONS

ROLLERS - 1.9" dia. x .145" wall mild steel tube, 7/16" pin or spring retained hex axle. 2 1/2" dia. x 11 ga. mild steel tube, 11/16" pin or spring retained hex axle. 2 9/16" dia. x .180" wall mild steel tube, 11/16" pin or spring retained hex axle. 3 1/2" dia. x .300" wall mild steel tube, 1 1/16" pin retained hex axle. 4" dia. x 1/2" wall mild steel tube, 1 7/16" round axle retained by keeper bar and pin. With ABEC precision or non-precision bearings.

ROLLER CHAIN - #40, #50, #60, #80 and #100 series sprockets

CHAIN GUARD - 10 ga. formed steel upper and lower. Lower portion welded to bottom of frame; upper portion bolted to top of side frame to totally enclosed drive chains. Upper portion powder coated safety yellow.

FRAME - Structural channel for drive side, structural channel or angle for idler side

CONSTRUCTION - Welded frames, spreaders and end couplers

EFFECTIVE WIDTHS - 1.9" roller 12" to 54", 2 1/2" and 2 9/16" roller 12" to 64", 3 1/2" roller 12" to 96" and 4" roller 12" to 120" in any increment

OVERALL LENGTH - 3' to 50' in any increment

Expanded product parameters available. For more information see Tech Handbook.

DRIVE STYLE - Side high, side low or below and within

SPEED - Up to 150 FPM for straights and 80 FPM for curves

MOTOR - 1/4 HP through 5 HP, 1750 RPM, C-face, 208-230-460V/3PH/60Hz, TEFC

REDUCER - Sealed, worm gear, C-face

DRIVE SPROCKETS - RC series sprockets with keyed hub and set screws

MOUNTED BEARINGS - Precision, sealed, pre-lubricated, self-aligning, flange mount ball bearing units with cast iron housing

DRIVE CHAIN - RC Series roller chain

SUPPORTS - Structural channel H-style, welded 12" to 60" from floor to top of roller. Supports are shipped loose.

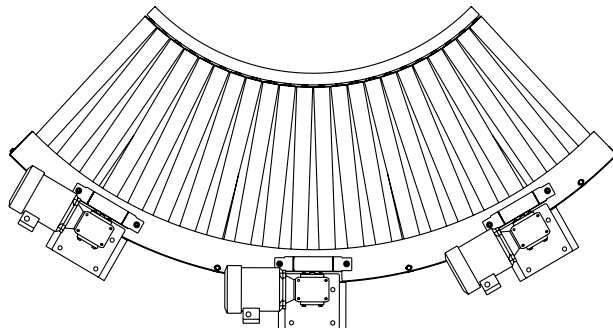
FINISHES - Powder coat finish standard. Wet spray available.

CHAIN DRIVEN LIVE ROLLER CONVEYOR - CURVE



	Straight Rollers			True Tapered Rollers			
	1.9"	2 1/2"	2 9/16"	3 1/2"	1.9" Core	2 1/2" Core	2 9/16" Core
A	12" - 54"	12" - 64"		12" - 94"	12" - 60"	12" - 48"	12" - 45"
B	Up to 116"				Up to 116"		
C	12" - 60"				12" - 60"		
D	36" Minimum				36" Minimum		
E	30°, 45°, 60°, 90°, 180° and Special Degree Curves in 1° Increments						

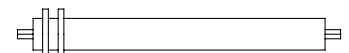
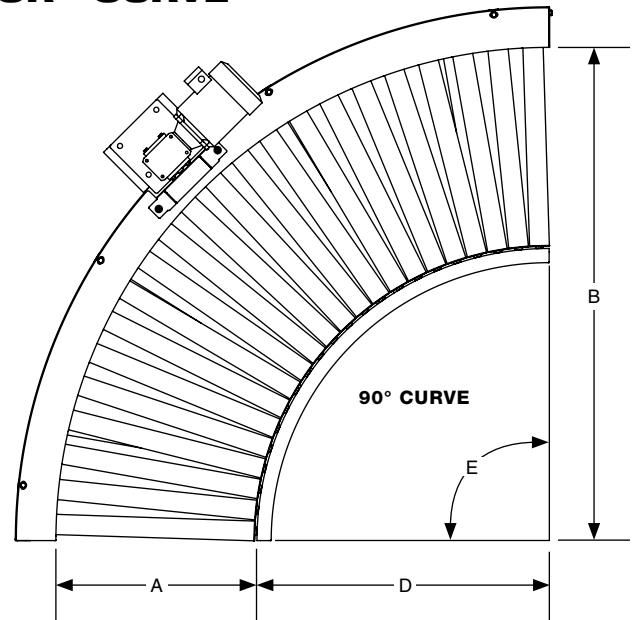
A = Effective Width (Any Increment)
B = Outside Radius (OR)
C = Top of Roller (TOR)
D = Inside Radius (IR)
E = Degree



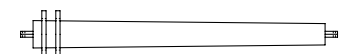
LEFT END

CENTER

RIGHT END



STRAIGHT ROLLER



STANDARD TAPER



CUSTOM "TRUE" TAPER

OPTIONAL EQUIPMENT AND DEVICES

SIDE GUIDES - Available in fixed or adjustable with multiple contact surfaces. Allows product to be guided and kept in place within the conveying surface. Side guides are typically bolted to the conveyor frame.

Fixed Angle Side Guides - Standard 2" high or 6" high, 12 ga. formed angle

Adjustable Angle Side Guides - Replaceable UHMW face provides wear protection for angle guides

UHMW Lined Fixed Angle Side Guides - Angle guides typically formed angle, width adjustable

Skatewheel Guides - Vertically mounted skatewheels

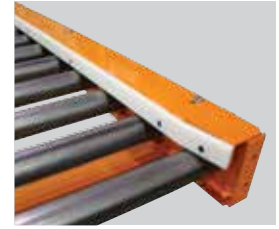
Roller Side Guides - Vertically mounted rollers



FIXED ANGLE SIDE GUIDES



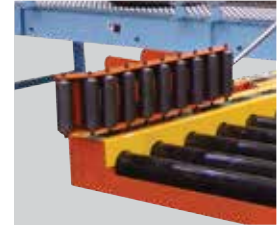
ADJUSTABLE ANGLE SIDE GUIDES



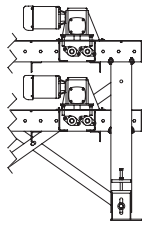
UHMW LINED FIXED ANGLE SIDE GUIDES



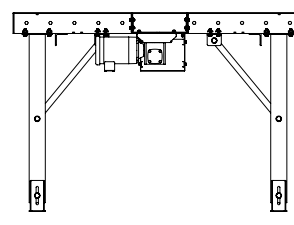
SKATEWHEEL SIDE GUIDES



ROLLER SIDE GUIDES



MULTI-TIER SUPPORTS



KNEE BRACE SUPPORTS



WELDED STRUCTURAL STEEL WITH JACKBOLTS

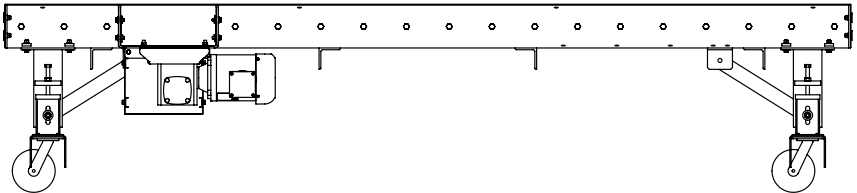
SUPPORTS - Available in single or multi-tier and with caster options for portability. Supports are designed to be bolted or welded to the conveyor frame. Supports are shipped loose.

Multi-Tier Supports

Knee Brace Supports

Welded Structural Steel with Jackbolts

Portable H-Stands



PORTABLE H-STANDS

END STOPS - Allows product to stop at the end of a conveyor line. Fixed and adjustable end stops are available.

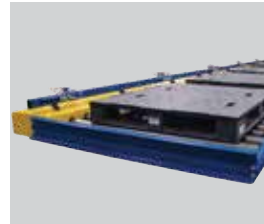
Adjustable End Stop - Formed or structural steel adjustable end stop bolted to conveyor frame with manually adjusted stop position. Height is not adjustable.

Fixed End Stop - Structural channel bolted or welded to end of conveyor with optional structural angle reinforcement. Fixed stops can include fork cut outs for loading and unloading.

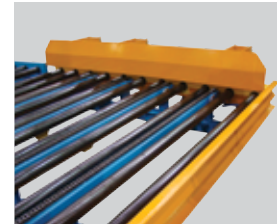
Back Stop - Fixed or adjustable back stop allows for easy product positioning when loading



ADJUSTABLE END STOP

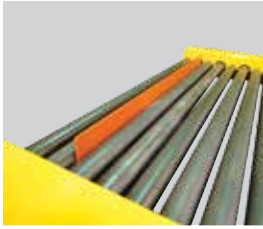


FIXED END STOP



BACK STOP

OPTIONAL EQUIPMENT AND DEVICES



POP-UP BLADE STOP



ROTATING BLADE STOP



PIN STOP

PIN AND BLADE STOPS

PIN AND BLADE STOPS - Pneumatically or manually operated pin or blade that pops up between rollers to accumulate product

Pop-Up Blade Stop - Used to stop products in the conveying line. Mounted to underside of conveyor. Pneumatic cylinder raises blade.

Rotating Blade Stop - Allows product placement within a lower mechanical profile

Pin Stop - Mounted to underside of conveyor. Pneumatic cylinder raises pins. Typically utilized on round product.



SQUARE 90

SQUARE 90 - Allows round product to navigate corners. Bolts in line with CDLR straight sections.



CHAIN TRANSFER



V-BELT TRANSFER

TRANSFER DEVICE

TRANSFER DEVICE - A pneumatic operated lifting device that raises above the roller surface to transfer product off at 90°.

Chain Transfer

V-Belt Transfer



FORK DEFLECTOR



FORK POCKETS



FORK PROTECTION



FUNNELING GUIDES

FORK TRUCK INTERFACE

FORK TRUCK INTERFACE - Fork truck loading and unloading interface can be provided to minimize damage to the conveyor, guide the forks to the correct lifting point on the product load or funnel the load to the correct loading point on the conveyor. Fork pockets, protection, frame cut outs, deflectors and loading funnel guides are provided as options. Heavy gauge formed steel and structural channel/angle are typically used.

Fork Deflector

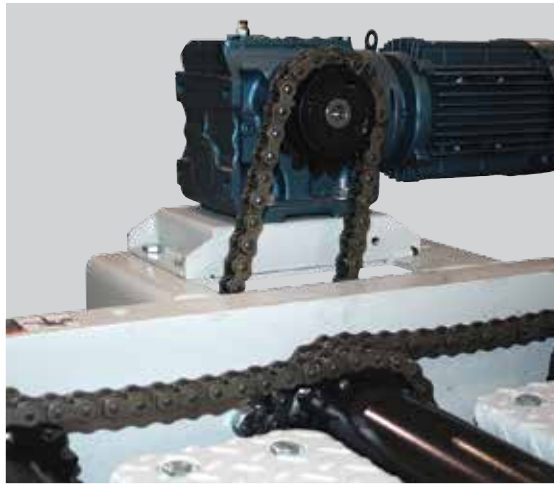
Fork Pockets

Fork Protection

Funneling Guides

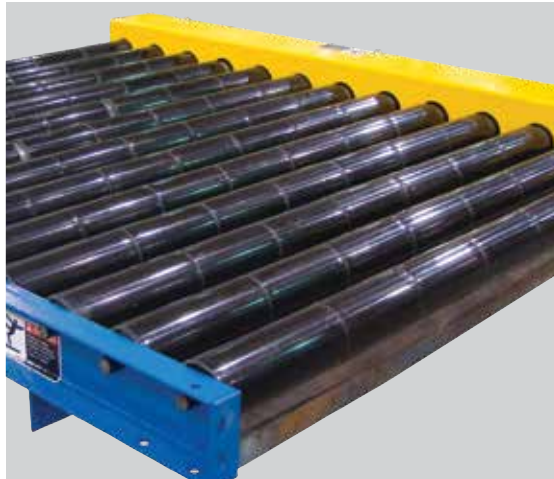
OPTIONAL EQUIPMENT AND DEVICES

SINGLE PRECISION DRIVE ROLLER - Utilizes a single roller mounted to the frame with 2-bolt flange, precision bearings. The easily removable and interchangeable single sprocket allows for close to 180° of chain wrap in every configuration and an added dimension of speed flexibility.



SINGLE PRECISION DRIVE ROLLER

ULTREX SLEEVES - Slip sleeves for minimum pressure accumulation



ULTREX SLEEVES

ROLLER COATINGS OR SLEEVES - Rollers available with urethane and vinyl sleeves. Coatings available in cast urethane, millable urethane, black rubber, food grade and other materials based on the application.



ROLLER COATINGS OR SLEEVES

ROLLER OPTIONS - Non-precision, semi-precision and ABEC precision bearings available. Mild steel, galvanized steel, stainless steel, aluminum and industrial pipe available. Zinc, chrome and nickel plating available.

STAINLESS STEEL - Conveyors are available in stainless steel materials for washdown applications or harsh environments