

# Martin® Impact Cradle HD



Installed under a belt conveyor's loading zone, [Martin® Impact Cradles](#) will absorb the force of falling material to prevent damage to the belt and structure. They also stabilize the belt line to prevent material escape.

Martin® Impact Cradles HD are engineered to withstand impact forces from 12,000 to 17,000 pounds of force (53.4 to 75.6 kN). This complies with the Heavy-Duty (H) Classification as specified in CEMA Standard 575-2000 Bulk Material Belt Conveyor Impact Bed/Cradle Selection and Dimensions.

## BENEFITS

- Rugged Impact Bar**  
 Bars feature a top layer of slick UHMW molded to a base of impact-absorbing SBR Rubber.
- Steel Backbone for Bars**  
 Each impact bar is reinforced with a steel support structure.
- Meets CEMA Design Standards**  
 Martin® Impact Cradle HD is classified as Heavy-Duty (H) as specified in CEMA Standard 575-2000.
- Engineered To Fit Your Conveyor**  
 Martin® Impact Cradle HD fits CEMA E6 or E7 configurations.
- Structure Built For Abuse**  
 Sturdy cradle is specially designed to withstand the high-impact forces.
- Slide-In/Slide-Out Maintenance**  
 Cradle incorporates Martin® Trac-Mount™ concept for ease of bar replacement.

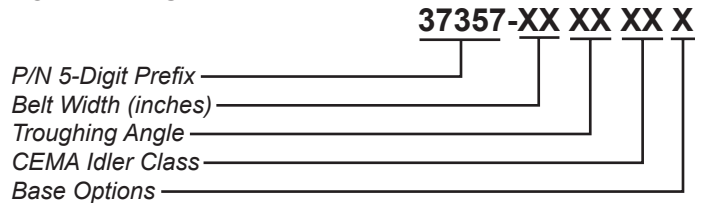
## NOTES

Standard base stringer width is belt width plus 12 in. (305 mm). The width of mounting centers on cradle for standard base stringers is belt width plus 9 in. (229 mm). Wide base stringer width is the belt width plus 18 in. (457 mm). Mounting centers on cradle for wide base stringer is belt width plus 15 in. (381 mm).

Martin® Impact Cradles are installed so that bars in the center of the cradle are set slightly--3/4 in. (19 mm)--below the line of travel of the unloaded belt. This allows the belt to absorb some impact while avoiding continuous friction and wear when the belt is running empty. The wing bars on the sides of the cradle are installed in line with the adjacent idlers to allow effective sealing at the transfer point.

When installing one or more Martin® Impact Cradles, it is necessary to verify that there is adequate power in the conveyor drive to compensate for the additional tension. Consult Martin Engineering for additional information.

## NOMENCLATURE



## TROUGHING ANGLE

PI: Picking Idlers  
**00, 20, 35, or 45**

## BASE OPTIONS

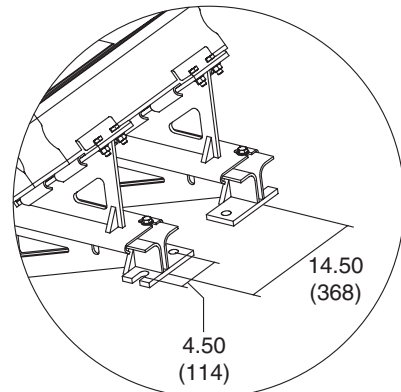
**S:** Standard CEMA Base  
**W:** Wide CEMA Base

## CEMA IDLER CLASS

**E6 or E7**

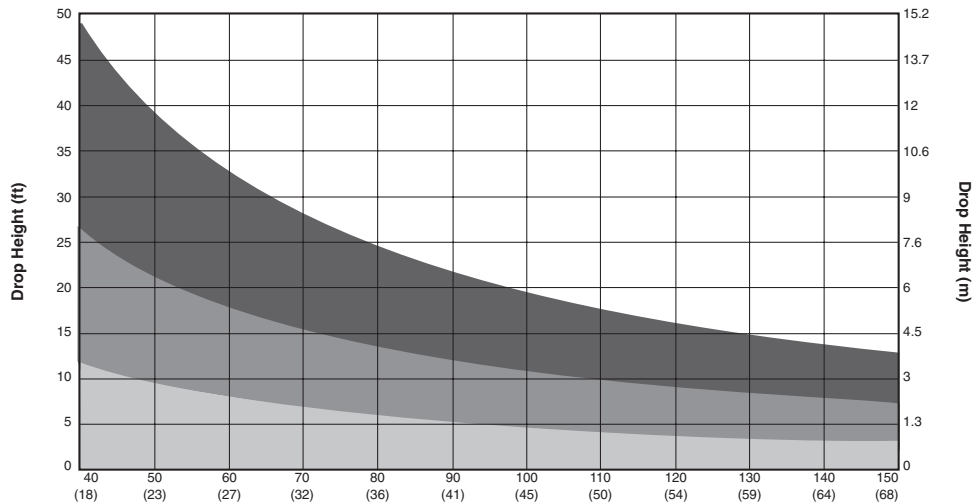
## SPECIFICATIONS AND DIMENSIONS

Belt Width in. (mm)	# of Bars	Shipping Weight - lb (kg)	
		Standard Base	Wide Base
36 (800-1000)	6	671 (305)	696 (316)
42 (1000-1200)	7	711 (323)	741 (337)
48 (1200-1400)	9	896 (407)	926 (420)
54 (1400-1600)	10	994 (451)	1024 (465)
60 (1600-1800)	10	1025 (465)	1055 (479)
72 (1800-2000)	13	1343 (610)	1376 (624)



# TECHNICAL DATA SHEET

## SELECTION GUIDE



Weight Largest Lump Lbs (kg) Determine Weight of Largest Lump. Determine Drop Height.

■ Heavy Duty (Cradle P/N 37357) ■ Medium Duty (Cradle P/N 36318) ■ Light Duty (Cradle P/N 36010)

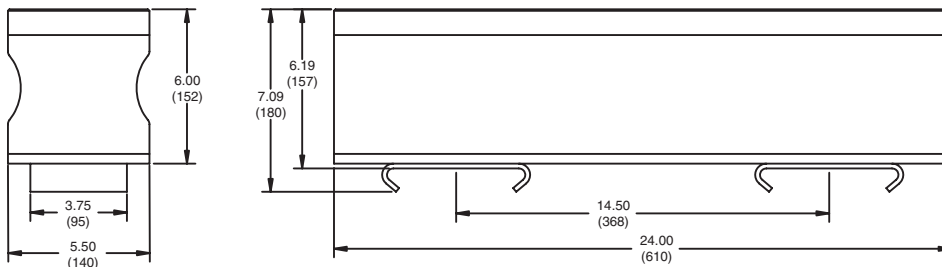
	CEMA Idler Classification					
	C5	C6	D5	D6	E6	E7
Martin® Impact Cradle LD	X	X				
Martin® Impact Cradle MD	X	X	X	X		
Martin® Track-Mount Impact Cradle	X	X	X	X		
Martin® Combination Cradle	X	X	X	X		
Martin® Impact Cradle HD					X	X
Martin® High Speed Impact Cradle	X	X	X	X	X	X

### MARTIN® IMPACT BAR HD

Order Information	P/N 36570
Bar Characteristics	
Coefficient of Friction	0.5
Service Temperature Range	-20° to 140°F (-29° to 60°C)
Bar Construction	
Bearing Layer	UHMW Polyethylene
Absorption Layer	50-Durometer SBR Rubber
Base Weldment	Mild Steel

### UHMW BAR

Sample Chemical Resistance Ratings At 70°F (21°C)	
Anhydrous Ammonia	Good
Benzene	Poor
Borax	Good
Caustic Soda	Good
Chlorine (Wet, 10%)	Fair
Diesel Fuel	Good
Ethyl Alcohol (Ethanol)	Good
Ethylene Glycol	Good
Gasoline (Unleaded)	Good
Methylene Chloride	Fair
Mineral Oil	Good
Nitric Acid (20%)	Good
Nitric Acid (50%)	Poor
Sodium Chloride	Good
Sulfur	Good
Sulfuric Acid (50%)	Good



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