Martin® Primary Cleaner Selection Guide

Information You'll Need:

- *Belt Width*
- *Head Pulley Diameter*
- *Belt Speed*
- *Material Characteristics*
- *Application Temperature*

IDENTIFY THE SPECIFICATION FOR YOUR CONVEYOR, AND THEN FOLLOW THIS PROCESS.

1. Use your conveyor's specifications for **Belt Width** and **Pulley Diameter** to select Primary Cleaner type.
2. Check selection against **Maximum Belt Speeds** as recommended in Primary Cleaner Scale chart.
3. Use **Material Characteristics** and **Application Temperature** to identify urethane for Primary Cleaner Blade.

URETHANE SELECTION GUIDE

Urethane Color	Application Description	Typical Materials	Continuous Temperature
Orange (blank or OR)	**Standard Martin® Urethane** Suitable for 80% or more of all belt cleaner applications, including abrasive conditions. Best choice for exposure to solvents or oil.	Bauxite, Coke, Coal, Overburden Refuse, Steel/Ore, All Other	-20° to 160°F (-30° to 70°C)
Brown (BR)	**Chemical-Resistant Urethane** Improved resistance to chemicals; reduced absorption of water in high moisture environments.	Limestone	-40° to 160°F (-40° to 70°C)
Green (GR)	**High-Temperature Urethane** For exposure to intermittent temperatures up to 350°F (177°C).	Clinker	-40° to 300°F (-40° to 150°C)
Tan (CL)	**Low-Rigidity Urethane** For dry products such as sand and gravel.	Gravel, Dry Sand	-20° to 160°F (-30° to 70°C)
Navy Blue (NB)	**Low-Adhesion Urethane** For sticky or tacky materials.	Cement, Glass, Wood Chip	20° to 160°F (-30° to 70°C)

For information on urethanes and cleaners approved by MHSA for use underground, contact Martin Engineering.

Form No. L3634-09/13

PRIMARY CLEANER SIZING CHART

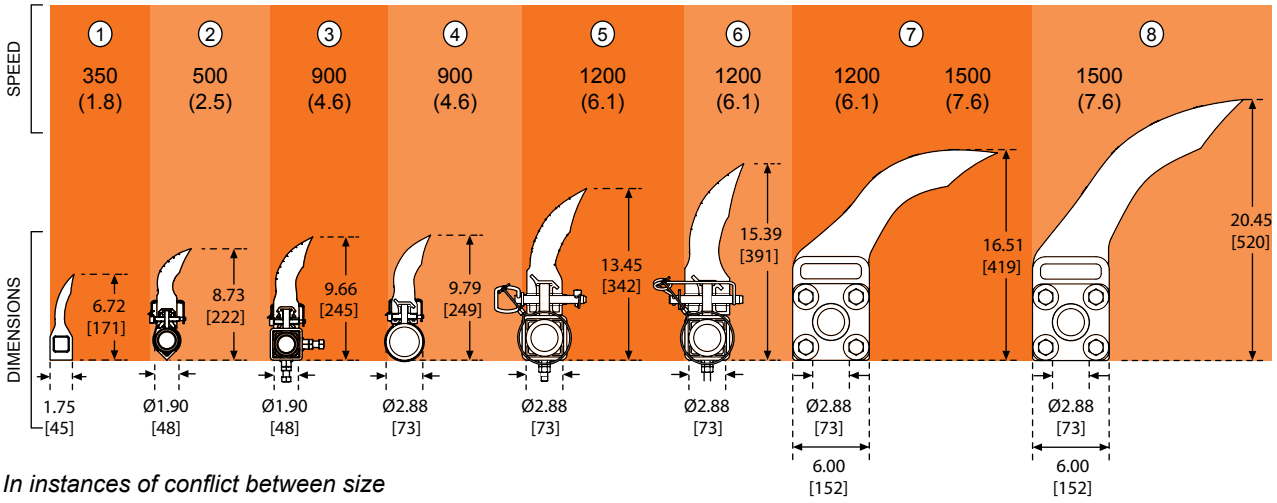
Belt Width in. (mm)	Head Pulley Diameter—in. (mm)						
	7-10 (180-250)	12-16 (300-400)	18-22 (450-560)	24-30 (600-760)	32-38 (810-970)	40-46 (1010-1170)	48+ (1220+)
12 (300-400)	1	2	N/A	N/A	N/A	N/A	N/A
18 (400-500)	1	2	3 or 4	5 or 6	N/A	N/A	N/A
24 (500-650)	1	2	3 or 4	5 or 6	N/A	N/A	N/A
30 (650-800)	1	2	3 or 4	5 or 6	N/A	N/A	N/A
36 (800-1000)	1	2	3 or 4	5 or 6	N/A	N/A	N/A
42 (1000-1200)	2	2	3 or 4	5 or 6	7	N/A	N/A
48 (1200-1400)	2	2	3 or 4	5 or 6	7	7	8
54 (1400-1600)	2	2	3 or 4	5 or 6	7	7	8
60 (1600-1800)	2	2	3 or 4	5 or 6	7	7	8
72 (1800-2000)	2	2	3 or 4	5 or 6	7	7	8
84 (2000-2200)	N/A	3 or 4	3 or 4	5 or 6	7	7	8
96 (2200-2400)	N/A	3 or 4	3 or 4	5 or 6	7	7	8
108 (2600-2800)	N/A	N/A	N/A	N/A	7	7	8
120 (2800-3000)	N/A	N/A	N/A	N/A	7	7	8

1 = Compact Cleaner
2 = PV Cleaner
3 = QC1™ Cleaner HD
4 = QC1™ Cleaner PD
5 = QC1™ Cleaner HD Max
6 = QC1™ Cleaner XHD
7 = SHD 600 Series Cleaner
8 = SHD 1200 Series Cleaner

Please note: *Stainless steel mainframes and tensioners are available for corrosive environments.*

PRIMARY CLEANER SCALE & BELT SPEEDS

Maximum Belt Speed by Categories: fpm (m/sec)
Blade Dimensions given in inches (mm)



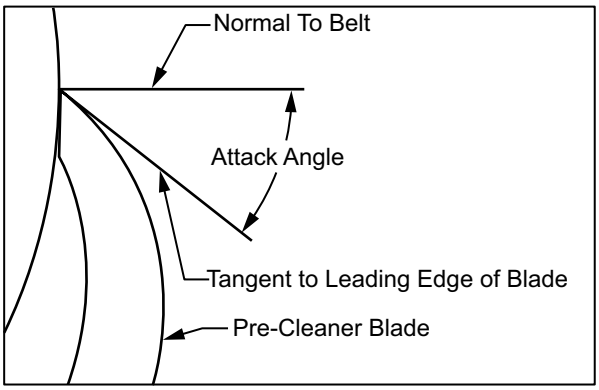
In instances of conflict between size and speed, choose the next larger size.

Form No. L3634-09/13

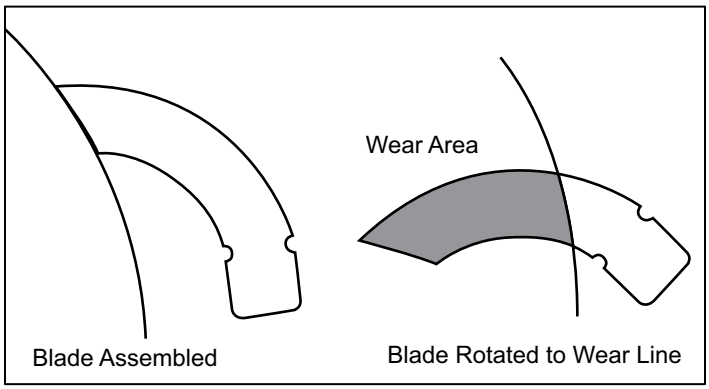
PRIMARY CLEANER SPECIFICATIONS

Cleaner	Attack Angle (°)	Wear Area (in²)	Mounting Location (in)	CEMA 576 Rating	CEMA Load per Blade Width (lb/in)
PV	30.1	4.13	3	Class 4	4.38
QC1™ HD	37.6	6.53	3½ to 4	Class 4	5.28
QC1™ PD	37.6	6.53	3½ to 4	Class 4	5.28
QC1™ HD Max	42.5	11.8	4¾	Class 5	7.70
QC1™ XHD	44.1	15.7	4¾ to 5¾	Class 5	8.98
SHD 600	42.5	29.26	6	Class 5	9.63
SHD 1200	45.1	42.10	6	Class 5	11.74

Attack Angle
The attack angle is the angle formed between the normal of the belt, and the tangent of the leading edge of the blade.



Wear Area
This is the wearable area of the blade.



Mounting Location
This is the distance between the surface of the belt and the center of rotation of the precleaner mainframe.

CEMA 576 Rating
Value assigned to the cleaner per CEMA Standard No. 576.

CEMA Load per Blade Width
This is the amount of force that the individual belt cleaner exerts on the head pulley. This value is used to calculate power consumption and properly size the conveyor drive motor.

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COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV = ISO 9001:2008 =

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