**TYPICAL SPECIFICATION**

Heavy-Duty GUARDABELT® Impact Cradle

To absorb the shock of loading impact, preventing damage to belt and structure, and to stabilize the line of belt travel for improved belt sealing, one or more impact cradles shall be installed below the belt within the conveyor's loading zone.

The impact cradle(s) shall withstand impact forces from 12,000 to 17,000 pounds of force (53.4 to 75.6 kN). This is in compliance with Heavy Duty (H) Classification as identified in *CEMA Standard 575-2000 Bulk Material Belt Conveyor Impact Bed/Cradle Selection and Dimensions*.

Each cradle should be constructed of two-foot (610 mm)-long, energy-absorbing bars. Each individual bar will be 5.5 inches (140 mm) wide and composed of a two-layer design with an overall height of 5.63 inches (143 mm). The upper layer will be a one-inch (25 mm) layer of ultra high molecular weight (UHMW) Polyethylene to provide a slick surface for the belt to skim over without undue friction. Underneath the UHMW will be an impact absorption layer composed of 4.63 inches (117 mm) of 50-durometer SBR rubber.

Each group of bars (for wing or center installation) shall be attached to a weldment that allows slide-in/slide-out replacement without requiring the raising of the belt or the removal of adjacent idlers or the cradle itself.

The supplier of the impact cradle will be ISO 9001 quality system certified.

The impact cradle shall be a GUARDABELT® Heavy-Duty Impact Cradle as supplied by Martin Engineering, Neponset, Illinois.

##

7-10-02 adm

**TYPICAL SPECIFICATION**

Medium-Duty GUARDABELT® Impact Cradle

To absorb the shock of loading impact, preventing damage to belt and structure, and to stabilize the line of belt travel for improved belt sealing, one or more impact cradles shall be installed below the belt within the conveyor loading zone.

The impact cradle(s) shall withstand impact forces of 8500 to 12,000 pounds of force (37.9 to 53.4 kN). This is in compliance with Medium Duty (M) Classification as identified in *CEMA Standard 575-2000 Bulk Material Belt Conveyor Impact Bed/Cradle Selection and Dimensions*.

This cradle should be constructed of independent, four-foot (1250 mm)-long, energy-absorbing bars. Each bar will be composed of a three-inch (75-mm), two-layer design. The upper layer will be a 0.375 inch (9.5 mm) layer of Ultra High Molecular Weight Polyethylene (UHMW), which provides a slick surface for the belt to skim over without undue friction. Underneath the UHMW will be an impact absorption layer composed of 50-durometer SBR rubber.

The bars shall be held in a form designed to allow easy installation and service. The bars themselves shall be track-mounted, allowing easy removal of individual bars to allow replacement without requiring the raising of the belt or the removal of adjacent idlers or the cradle itself.

The cradle will incorporate a multiple trough angle wing design that allows the unit to field set to match the conveyor's trough angle, and also allows adjustment to compensate for wear in the impact bar.

Depending on the conveyor, material load, and conditions, cradle options such as the use of center rollers may be considered.

The supplier of the impact cradle will be ISO 9001 quality system certified.

The impact cradle shall be a Medium-Duty GUARDABELT® Impact Cradle as supplied by Martin Engineering, Neponset, Illinois.

##

5-10-02 adm

**TYPICAL SPECIFICATION**

Light-Duty GUARDABELT® Impact Cradle

To absorb the shock of loading impact, preventing damage to belt and structure, and to stabilize the line of belt travel for improved belt sealing, one or more impact cradles shall be installed below the belt within the conveyor loading zone.

The impact cradle(s) shall withstand impact forces of less than 8,500 pounds of force (37.8 kN). This is in compliance with Light Duty (L) Classification as identified in *CEMA Standard 575-2000 Bulk Material Belt Conveyor Impact Bed/Cradle Selection and Dimensions*.

This cradle should be constructed of independent, four-foot (1250 mm)-long, energy-absorbing bars. Each bar will be composed of a three-inch (75-mm) two-layer design. The upper layer will be a 0.375 inch (9.5 mm) layer of Ultra High Molecular Weight Polyethylene (UHMW), which provides a slick surface for the belt to skim over without undue friction. Underneath the UHMW will be an impact absorption layer composed of 50-durometer SBR rubber.

The bars shall be held in a form designed to allow easy installation and service. The bars themselves shall be track-mounted, allowing easy removal of individual bars to allow replacement without requiring the raising of the belt or the removal of adjacent idlers or the cradle itself.

The cradle will incorporate a multiple trough angle wing design that allows the unit to field set to match the conveyor's trough angle, and also allows adjustment to compensate for wear in the impact bar.

Depending on the conveyor, material load, and conditions, cradle options such as the use of center rollers may be considered.

The supplier of the impact cradle will be ISO 9001 quality system certified.

The impact cradle shall be a Light-Duty GUARDABELT® Impact Cradle as supplied by Martin Engineering, Neponset, Illinois.

##

5-10-02 adm

**TYPICAL SPECIFICATION**
TRAC-MOUNT® GUARDABELT® Impact Cradle

To absorb the shock of loading impact and stabilize the line of belt travel for improved belt sealing, impact-absorbing cradle(s) shall be installed below the belt within the conveyor-loading zone.

The impact cradle(s) shall withstand impact forces of 8500 to 12,000 pounds of force (37.9 to 53.4 kN). This is in compliance with Medium Duty (M) Classification as identified in *CEMA Standard 575-2000 Bulk Material Belt Conveyor Impact Bed/Cradle Selection and Dimensions*.

This cradle should be constructed of independent, four-foot (1250 mm)-long, energy-absorbing bars. Each bar will be composed of a (75-mm) two-layer design. The upper layer will be a 0.5-inch (13- mm) layer of Ultra High Molecular Weight Polyethylene (UHMW), which provides a slick surface for the belt to skim over without undue friction. Underneath the UHMW will be an impact absorption layer, composed of 50-durometer SBR rubber.

The bars shall be installed in a cradle form designed to allow easy installation and service. The cradle shall be constructed in three sections, to allow ease of access and maintenance. The bars themselves shall also be track-mounted, allowing easy replacement of individual bars without requiring the raising of the belt or the removal of adjacent idlers or the cradle itself.

Depending on the conveyor, material load, and conditions, cradles options such as the use of center rollers may be considered.

The supplier of the impact cradle will be ISO 9001 quality system certified.

The impact cradle shall be a TRAC-MOUNT® GUARDABELT® Impact Cradle as supplied by Martin Engineering, Neponset, Illinois.

##

adm rev 7-18-02