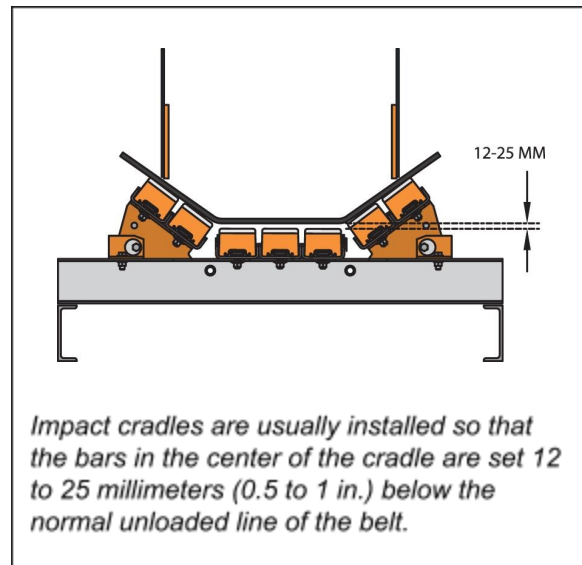




Cradle Alignment

The impact cradle is usually installed so that the bars in the center of the cradle are slightly below the normal unloaded line of the belt.

The impact cradle is usually installed so that the bars in the center of the cradle are set slightly 12 to 25 millimeters (0.5 to 1 inches) below the normal unloaded line of the belt. This allows the belt to absorb some of the force of impact when the material loading deflects it down onto the cradle, while avoiding continuous friction and wear on the bars. The wing bars the bars on the sides of the cradle should be installed in line with the entry, exit and intermediate idlers to prevent belt sag and entrapment points. It is important that the bar directly under the steel chute or skirtboard wall be precisely aligned with the wing idlers.

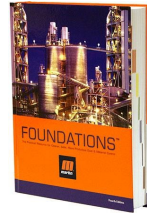


Cradles can be welded or bolted to the stringers; it may be better to bolt the systems in place, as this will allow more efficient maintenance. Some impact cradles are available in a trackmounted design, which simplifies cradle installation or the replacement of bars when required.

Installation of impact cradles is simplified through the use of adjustable wing supports, which allow the cradle to be slid under the belt in a flat form; the sides are then raised to the appropriate trough angle. It is important that the cradle be designed to allow some simple means of adjustment of bar height and angle. This will enable the cradle to work with idlers of varying manufacturers and allow compensation for wear.



More on cradle alignment can be found in Chapter 10 of FOUNDATIONS™ Fourth Edition by Martin Engineering.



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