



News Release

Combination Cradle Absorbs Impacts In Conveyor Loading Zones



[Neponset, IL] – An innovative impact cradle design is helping bulk material handlers protect conveyor belts and structures from falling material in loading zones, reducing equipment damage and downtime while stabilizing the belt line to prevent dust and spillage. The EVO[®] Combination Cradle from Martin Engineering features steel-reinforced

impact bars and adjustable wing supports to match standard trough angles of 20°, 35° or 45°.

“To minimize drag on drive motors, the cradles can be ordered with center rollers instead of center impact bars,” explained Martin Engineering Global Product Manager Chris Schmelzer. “In either style, eccentrics built into the supports also deliver five degrees of wear adjustment, so the alignment between wings and idlers can be optimized for effective transfer point sealing.”

Combination cradles are typically installed so the bars or rollers in the center are slightly below the unloaded belt’s line of travel. This helps the belt absorb impact, but avoids continuous drag and unnecessary wear if the conveyor is running empty.

Constructed on a base of heavy formed channels to deliver long service life even under severe operating conditions, impact bars are secured with two bolts each, facilitating

easy service and replacement. Combination Cradles are available to fit belts from 24-72 inches (50-200 cm) wide, and may have as few as four impact bars or as many as 16, depending on cradle size and center roll option.

Two bar constructions are available: both have steel or aluminum reinforcement, with an absorption layer and a sliding layer of UHMW polyethylene, which delivers a 0.5 coefficient of friction. The first option is manufactured with a 50 durometer SBR rubber absorption layer, and has a service temperature range of -20 to 140°F (-29 to 60°C). The second option utilizes an 83 durometer urethane absorption layer and has a temperature range of -20 to 160°F (-29 to 70°C).

Combination Cradles employ Martin Engineering's Trac-mount™ technology, allowing the units to slide in and out easily for maintenance or replacement. The modular components are light enough to be removed by one person, without using heavy lifting equipment.

“Conveyor downtime is extremely expensive, especially for high-speed operations,” Schmelzer added. “The longer components last and the easier they are to replace, the lower the cost of ownership.”