

INSIGHTS™

Belt Conveyor Maintenance

TECHNICAL SOLUTIONS FOR BELT CONVEYOR PRODUCTIVITY

Supporting the rest of the transfer area

Sometimes, the area after the load point is ignored or overlooked once impact beds or idlers are installed. But the rest of the load zone is important to consider because the actual transfer area often stretches past the impact area. While the same protection afforded to the belt at the impact area isn't needed in the entire load zone, the areas surrounding it need support, not only for the material, but also to provide a sturdy area so that skirting can keep the load on the belt and control dust as the product settles.

Sealing the load zone

While idlers are often used, belt sag is a common problem. The use of idlers can create air gaps between the belt and the skirting, allowing material to escape. This often makes sealing the load quite difficult and should not be solved by placing the idlers next to each other. The practice of putting idlers in close proximity to prevent sagging is impractical from a maintenance standpoint because access to the rolls for replacement is nearly impossible, especially with a skirt wall above the belt.



One of the most important jobs of the load point is to provide a seal that prevents material spillage and controls dust. In this photo, spillage and dust are likely because a proper seal is not attained.

Because of this, the use of slider beds, with rolls in the center and sealing bars on the top trough, is recommended. Slider beds provide the low-friction surface by using idlers in the center to keep the belt moving along, while providing a hard and consistent surface on the trough for skirting to properly seal the belt by using a slider bar commonly made of wear-resistant UHMW.

One of the most important jobs of the load point is to provide a seal that prevents material spillage and controls dust. The clamping mechanism should be both durable and provide a strong hold that discourages vibration and drag on the skirt rubber. It should also be easy to service the skirt clamp by providing a simple release mechanism on the clamp. A simple process to loosen the clamp allows for quick adjustment when the skirting material wears or skirting needs to be replaced. If the process is more complicated than this, maintenance may take too long or it may not be done at all.



To seal the load zone properly, the clamping mechanism should be both durable and provide a strong hold. Paired with a belt support system that provides an even and consistent surface, a proper seal is achieved.

Slider beds and skirt clamps should be paired with the conveyor system to allow for proper sealing in the area after impact. This total load-point solution is the key to less material spillage, saving money and making the area around the load point less dangerous for workers.

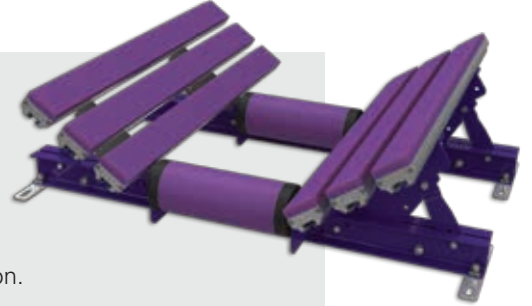
It's important to note, however, that the success of any part of the conveyor is dependent on several different parts of the system. It is for this reason that an evaluation of the entire system can only benefit an operation. A few simple changes to a system can increase efficiency and productivity and decrease the amount of time spent crunching numbers to cut costs, so it's also important to evaluate the area before the load point as well as the impact area.

Load point solutions from Flexco

Flexco has several solutions for issues occurring after the load point, including slider beds and skirt clamps, to suit any application.

Flexco Slider Beds *

Flexco Slider Beds are engineered to provide containment around load zones. With long-lasting UHMW slider bars, combined with the high-performance CoreTech™ roll, the Flexco Slider Bed effectively seals the load zone and minimizes drag on the belt. Simply lowering troughing angles provides easy access to the bars and rollers for quick and safe maintenance. This series features universal components that result in an effective, yet affordable, solution.



RMC1 Skirt Clamp

An affordable way of addressing load zone spillage, RMC1 Skirt Clamps provide effective containment and reduce cleanup costs, material loss, safety hazards, and belt and component wear. RMC1 Skirt Clamps feature simple installation and maintenance, with a versatile design that can be installed on vertical or perpendicular skirt boards and positioned for easy access. The unique anti-vibration clamp pin remains locked even in applications with severe vibration.



Flex-Lok™ Skirt Clamp

The Flex-Lok™ Skirt Clamp is designed with versatility to meet the needs of any conveyor loading site— even severe, heavy loading applications. The exclusive design features a unique clamp pin with a captive wedge that can be locked in any position 360° around the pin. When properly installed, Flex-Lok ensures the skirt rubber will not rub on the belt and cause premature wear or gouging marks.



Flex-Seal™ Skirting System

The Flex-Seal™ Skirting System is a dynamic containment unit that fully seals the loading zone. It stops material spillage leaks, controls dust emissions, and eliminates other resulting problems such as belt damage. The Flex-Seal Skirting System creates a parallel seal with the belt to be effective for your operation.



**Can be paired with Flexco Impact Beds to create a holistic load zone system.*