

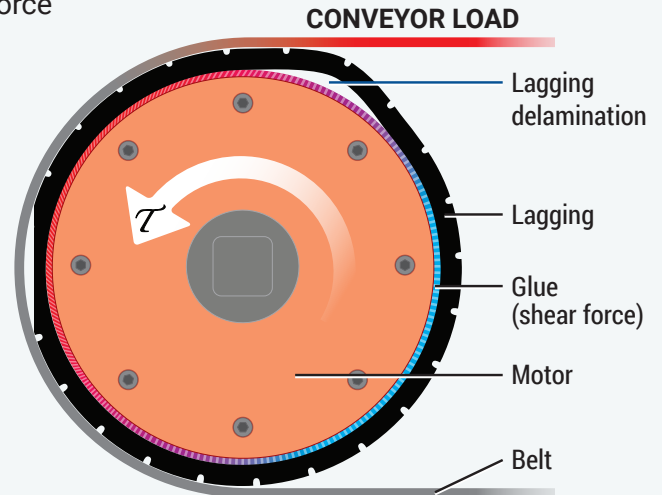
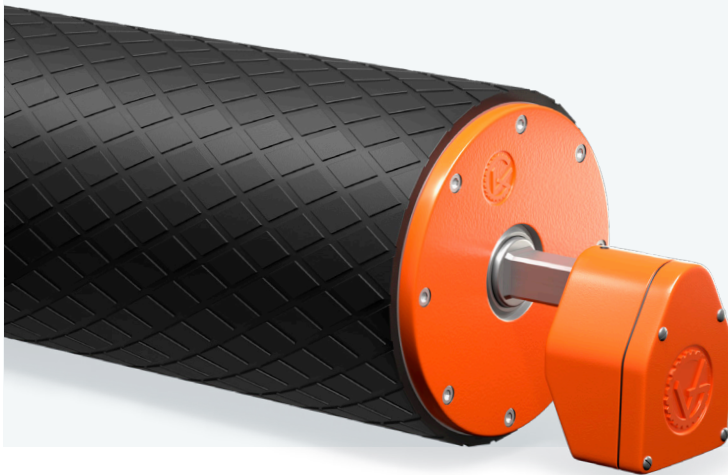
# IronGrip™ Lagging System



Lagging delamination and excessive lagging wear have been an ongoing concern for users of conveyor drives in all industries. Lagging failure can lead to significant downtime and substantial costs. VDG is leading the industry in eliminating these concerns with the new patented **IronGrip™** lagging system.

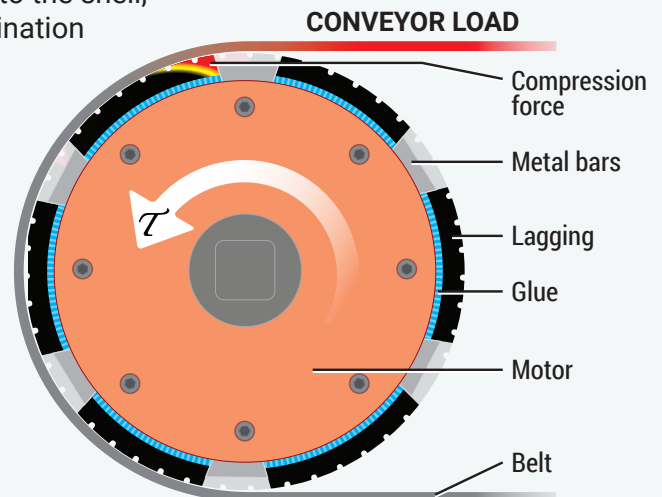
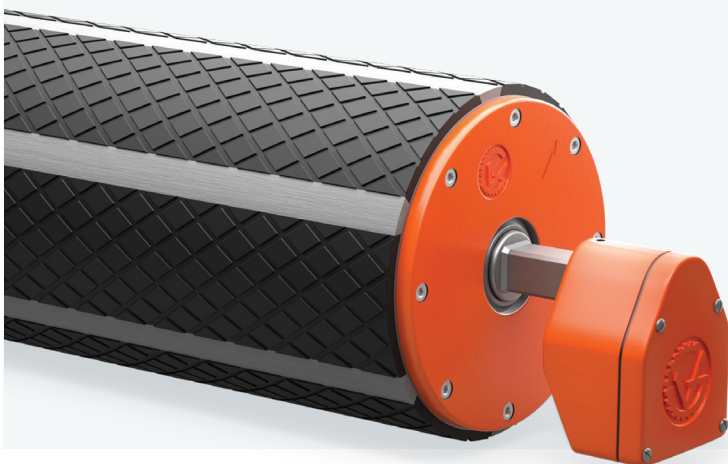
## CONVENTIONAL LAGGING:

Relies solely on the adhesive bond between the lagging and the shell to transmit power to the belt. This results in a shear force on the adhesive, resulting in lagging delamination.



## NEW VDG PATENTED IRONGRIP™ LAGGING SYSTEM:

Integrates steel bar reinforcements for sectional lagging panels. This patented design transfers load forces via compression on the steel bars, reducing the lagging's reliance on the adhesive bond to the shell, and eliminating the shear forces that cause lagging delamination on conventional systems.



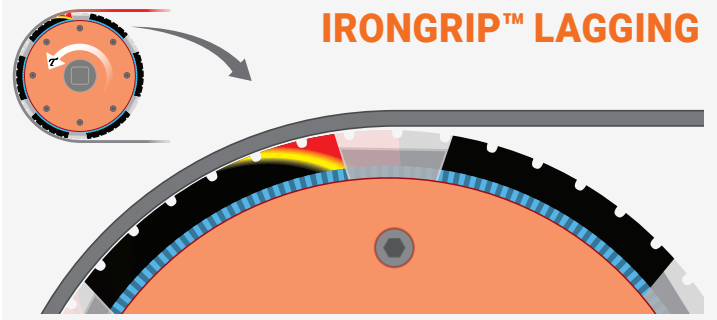
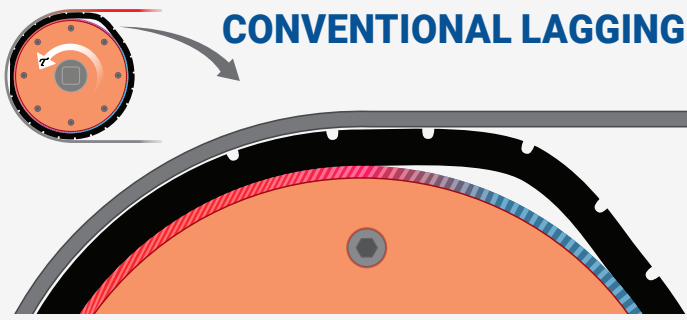
This revolutionary design significantly reduces wear, maximizing conveyor system life and minimizing maintenance.



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**BELT & LAGGING WEAR:**

To achieve desired pulling force on a belt conveyor system, belts are tensioned around the conveyor drive and tail pulley to increase traction. While the belt is under high tension, it is stretched out, and as the conveyor rotates, it transitions to low tension and shrinks to its original size. This shrinking occurs on the face of the lagging, causing belt and lagging wear. This belt tension on conventional lagging is a shear force which is transferred to the adhesive bonding the lagging to the shell, leading to lagging delamination.

**BELT TRACTION:**

To maintain traction (**fig. pulling force**), excessive belt tension is applied, which leads to increased belt and lagging wear, and additional wear on external components as the conveyor system is now over-tensioned (**fig. bearing load**).

**BELT MISTRACKING:**

Additionally, due to inherently uneven belts and uneven belt tensioning, the lagging will not only wear faster, but will wear unevenly, causing belt mistracking. At this point the conveyor system needs to be disassembled and the conveyor drive re-lagged.

**BELT & LAGGING WEAR:**

VDG's **IronGrip™** lagging system eliminates lagging delamination by utilizing steel bar reinforcements between sectional lagging panels, transferring the shear force of the belt tension to a compression force on the steel bars and alleviating all force on the adhesive.

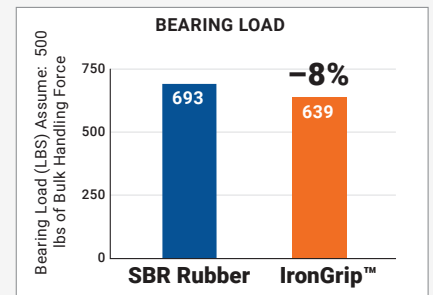
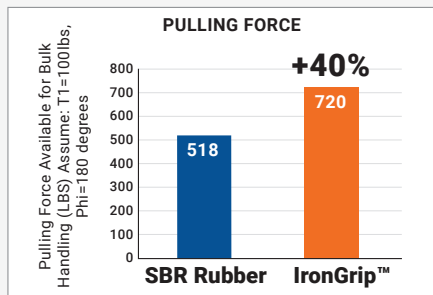
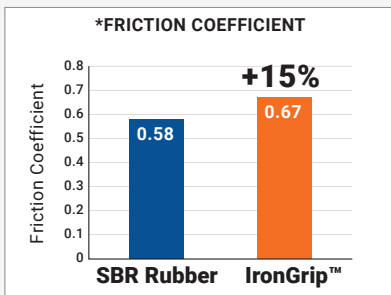
**BELT TRACTION:**

With a higher **friction coefficient\***, IronGrip™ lagging offers a significant increase in traction (**fig. pulling force**) which allows for less belt tensioning, resulting in decreased wear on the belt and lagging, and a longer lifespan of the external components of the conveyor system (**fig. bearing load**).

**BELT TRACKING:**

Throughout the life of the conveyor drive, the steel bars of the IronGrip™ prevent the lagging from wearing lower than the bars, providing continued traction similar to the level of traction provided by unworn standard rubber lagging. As the steel bars are an even height and are resistant to wear, uneven belt and lagging wear is eliminated and therefore belt tracking is improved.

**NEW LAGGING**



**WORN LAGGING**

