ASGCO® Tru-Trainer® Eliminates Chronic Belt Damage at Cement Processing Facility

Industry Cement Plant

Application: Raw Mill Feed Belt - 30” incline carrying aggregate material

Product: ASGCO® Flat Return Tru-Trainer®

Objective: Solve belt mis-tracking and off center load issues

Challenge:

A major cement processing facility in was experiencing severe belt tracking and alignment problems leading to regular costly repairs and maintenance. This plant was using traditional training idlers in an attempt to control the mis-tracking, however the nature of the aggregate material on the belt lead to continual build up around the pivot point, yielding it ineffective. In addition, the rubber disk return idlers were preventing the belt from re-centering, defeating their purpose.

On several occasions, the belt became so severely mis-aligned, that it came in contact with the tail section of the support structure, leading to catastrophic damage to the belt, and causing extended downtime for the plant's operations. The problem persisted upon installation of a new belt, and within 12 months, it needed to be completely replaced a second time.

Fig 1a - Conventional training idlers with material build-up around the pivot.

Fig 1b - Rubber disk return idlers preventing conveyor alignment.

Recommendations:

After ASGCO®'s technicians performed a complete survey of the conveyor system, the problem issues were identified. It was recommended that ASGCO® Tru-Trainer® was to be installed on the return side of the conveyor, 30 feet before the tail pulley. This position would allow the belt to run straight around the tail pulley and also be centered on the conveyor in the load point, reducing spillage and costly material loss. In addition, the rubber disk return idlers were replaced with flat return idlers, eliminating resistance to centering.

Results:

After installing the ASGCO® Tru-Trainer® on return side of the conveyor, the belt is continually running straight in the frame of the conveyor. Due to the sealed design, interference from material buildup has been eliminated. The plant's output has greatly increased due to the greatly reduced maintenance and repair issues and productivity is at an all time high.and reacts immediately if the belt begins to steer off center. Because it does not rely on contact with the belt edge in order to guide the belt, belt edge damage which frequently occurs with conventional tracking systems, is avoided.

Fig 2a - Belt centered on tail pulley

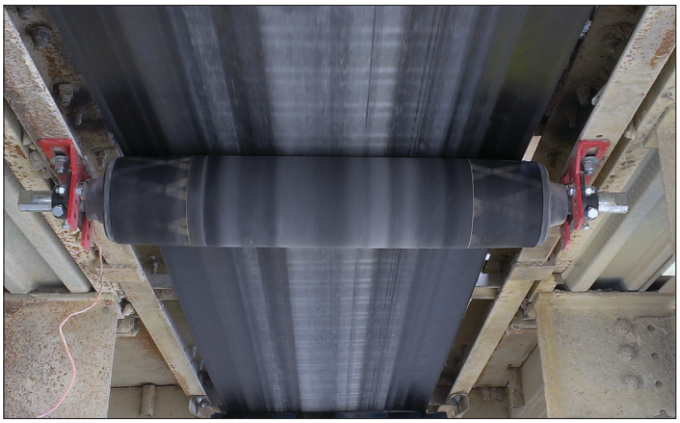
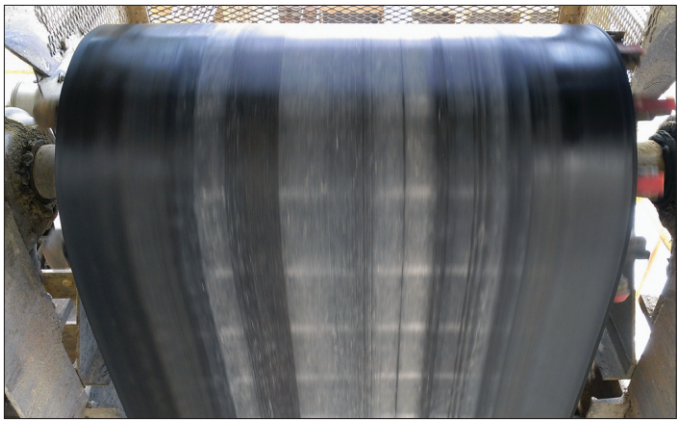


Fig 2b - Tru-Trainer® installed on return side of belt, actively and continually centering



Tru-Trainer® Flat Return Idler

- Patented design does not rely on the conveyor belt to activate
- Heavy Duty Rolls use abrasive resistant hot-vulcanized rubber covers.
- Central Pivot with Two Individual Rollers
- Enhanced Sealing/Bearing System

*The **Tru-Trainer**® series of conveyor belt tracking idlers are a patented design that offers the most reliable and re-active belt tracking idlers available today.*