

TWINLIP Skirt Board Sealing

Project: TATA STEEL, Joda Iron Ore Mines

Tata Steel is among the top ten steel manufacturers in the world. It operates in more than 20 countries and has a commercial presence in over 50 countries. Tata's Iron Ore mines in India, are located at Noamundi (Jharkhand) and Joda (Odisha).

THE PROBLEM

In the Screening Plant of the Joda mine, they had severe spillage problems in the iron ore fines handling conveyors. The plant used segmented type skirt sealing system along with proper belt support systems, however they could not control the spillage through skirt area. The segmented skirt had to be adjusted individually and often could not form a proper sealing between belt and skirt plate leading to heavy spillage of material.

THEJO'S SOLUTION

When Thejo was given the opportunity to resolve the issue, our technical expert analysed the problem. A detailed site study was done. Operating parameters were collected and probable installation issues were identified and communicated to the design and engineering team.

Based on the findings, it was decided to install Heavy Duty TwinLip skirt sealing system on one of the conveyors. The client accepted the proposal and a trial order was placed on Thejo



Spillage from conveyor DPC3 skirt area



Segmented skirt sealing previously used



Thejo's technician installing TWINLIP seal

TWINLIP Skirt Board Sealing

The skirt sealing was supplied promptly and were installed on the conveyor by our expert technicians. The TWINLIP skirt sealing showed excellent spillage control immediately on running the conveyor after installation.

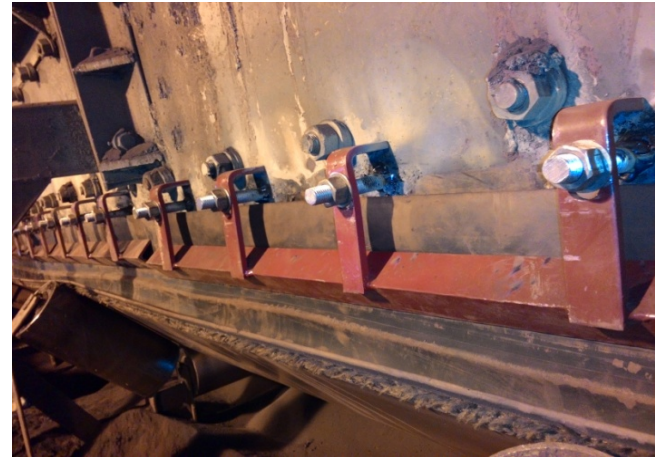
To validate the performance of TWINLIP seal, The existing spillages were cleaned it was decided to observe the performance for a weeks time.

Conveyor ID	DPC 3 Tail End
Belt Width	1000 mm
Belt Speed	2.1 m/s
Material	Iron Ore Fine

Even after a weeks time, there was negligible spillage only from the skirt area of the conveyor. No adjustment or maintenance was required on the skirt seal till now, from the date of installation.

CONCLUSION

TWINLIP seal was able to solve one of the long standing problems faced by the plant. The engineers from Tata Steel congratulated Thejo for the good results of the skirt sealing. Thejo has been asked to make a proposal for all the belts in the plant facing similar problems. The TWINLIP seal has been solved yet another spillage problem the user is happy.



TWINLIP seal installed on the conveyor



Transfer Point area on the date of installation, after cleaning



Transfer Point area after a week from the date of installation