

ONTARIO
**KNOW-HOW
IN ACTION**

BELZONA[®]
GREAT LAKES

012/2021

**MANUFACTURING
DRIVE PULLEY
GRIP SYSTEM**


BELZONA[®]
Repair • Protect • Improve
AUTHORIZED DISTRIBUTOR

THE PROJECT

DRIVE ROLLER GRIP
DECEMBER, 2012

Slippage is one of the common faults of belt conveyors. Once a slipping fault occurs, it is easy to cause material spillage, blockage of the feed pipe, wear of the conveyor belt, and broken belts, which may cause the belt conveyor to fail to operate normally.

After the belt conveyor runs for a long time, the surface of the driving drum and its groove will be seriously worn, resulting in a decrease in the friction coefficient of the driving drum surface and a decrease in the frictional force, causing the conveyor belt to slip. Conventional repairs would require complete dismantling and replacement of the rollers, which often lead to unacceptable downtime to the plant.

DURABLE GRIP SYSTEM

Belzona positive grip systems consisting of high strength metallic polymer composites and extreme durable aggregates, provide superior non-skid surfaces with outstanding and long-lasting adhesion.

A customer in Brechin, Ontario had a drive roller which steel lagging failed to create traction. This created exposed edges problem which could possibly tear the belt.



THE SOLUTION

Belzona 1821 (Fluid Metal) was specified for this repair. This fluid grade material is used in conjunction with Belzona 9211 (Supergrip) to create a durable, non-slip surface with excellent adhesion and wear resistance.

The surface was prepared by initially grinding the steel to create a clean surface and then abraded with the MBX Bristle Blaster to create the correct surface profile. After surface preparation, duct tape was then applied to chevron pattern. Belzona 1821 (Fluid Metal) was applied to the steel and Belzona 9211 (Supergrip) was applied over the Belzona 1821 (Fluid Metal).

HARD WEARING



The whole application was completed in one working day for a fraction of the cost of conventional repairs or replacement. The durable positive grip system eliminated belt slippage and protected the drive roller from abrasion and corrosion.

Belzona 1821 (Fluid Metal) can be easily mixed and brush applied to metallic surfaces and does not require any hot work to cure. The product provides outstanding adhesion and ensures a highly effective grip with Belzona 9211 (Supergrip). Over time, Belzona 1821 (Fluid Metal) does not polish, peel or wear away, maintaining the same levels of grip as when first applied