

SHINGLE LINE PRODUCTION

GRITTY PROBLEM

An East Coast-based building materials manufacturer, with revenues over \$3 billion, was looking to improve common issues with belts used in their shingle production facility. Roofing plants commonly struggle with losing belts due to failure of the mechanical fasteners. In most cases, the belt carcasses remain intact, and the failure results from shingle grit wearing out the bottom of the mechanical fastener plate that runs across the slider bed.

HOMOGENEOUS SOLUTION

Apache worked with the manufacturer to install the Volta FEZ Homogeneous Green TPE Smooth x Embossed belt to multiple applications within different production stages throughout their facility. This belt completely eliminates the need for a mechanical fastener, and instead uses a butt weld – where the ends of the belt are fused together.

SEEING IS BELIEVING

The picture above shows a belt that started at 4 mm. Four weeks later, the belt was still 4 mm thick! One belt showed wear, including a large puncture from something getting caught in the machine during the fourth week of use. The customer chose not to change the belt to see how long it would run, and seven months later the belt still had not failed. Throughout the seven month timetable, there was no need to retension or reweld any belts. Previously the manufacturer had tried a 3-ply blue rouhtop and 4-ply transmission belt, but each typically lasted about a week. When using the Volta FEZ belt on another application, the customer achieved eight months of use.

LONGER LIFE & MORE PROFIT

Having to change belting weekly forced the customer to make large investments in belt replacements for the machine, as well as requiring at least four man-hours per week to change out the belt. The customer completed a cost savings analysis on this one line and calculated a total annual materials cost savings of \$80,000.

Due to the success with this one location, the president of the shingle division decided to put these high abrasion resistant Volta belts into additional shingle production facilities.

KEY POINTS:

- ▶ Eliminate lacing by using a tool that fuses belts together with a butt weld
- ▶ Applications requiring guides have been found to have a stronger bond, due to welding directly to the urethane
- ▶ Can be ordered in specific lengths, or bulk rolls that can be cut to required length
- ▶ Available in various styles and thicknesses
- ▶ Belts can be welded and ready for use in less than 10 minutes
- ▶ Highly recommend cleaning shingle grit from the system to ensure longer life

\$80,000
ANNUAL
MATERIAL COST
SAVINGS PER
MACHINE



I stood with the mechanics as they went through this process and got a feel for how the process worked. I was extremely pleased and excited to see what a win this was.

**- Shingle Division
President**



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