PROBLEM SOLVED™ PAPER

SOLUTION: Martin® QC1™ Cleaner HD, Martin® DT2 Inline Secondary Cleaner

INDUSTRY: Kaolin paste

LOCATION: Imerys RCC (Rio Capim Caulim), Barcarena, Para, Brazil

Kaolin paste spillage was getting into rolling components and causing them to seize.

Guards protect workers in the immediate vicinity from potential injury caused by the running conveyor.

Dramatically reducing spillage improved safety and reduced maintenance time.

PROBLEM

Imerys, the worlds largest producer of talc, experienced carryback and spillage issues of kaolin paste on a conveyor at the RCC Brazil facility. A 60-inch (1,524 mm) wide belt transporting 330 TPH (300 MTPH) at a speed of 688 FPM (3.5 MPS) was spilling approx. 3.3 TPD (3 MTPD) along the length of the system. Inadequate belt cleaning allowed pasty material to stick to the belt and spread across the floor, creating a potentially dangerous work area. Material fouled pulley faces and gummed up idler bearings, requiring 3-4 workers to regularly replace rollers and clean around the system, which operators found to be potentially hazardous.

SOLUTION

Martin Engineering was invited to offer solutions and consult on the installation of a new cleaning system with conveyor guards. Featuring a sturdy one-piece curved urethane blade, the Martin® QC1™ Cleaner HD (Heavy Duty) uses the patented CARP™ Constant Angle Radial Pressure blade design to maintain a tight seal on the belt through all stages of blade life. The special polyurethane blend and tungsten carbide tip deliver service life 2-3 times longer than conventional urethane blades. The DT2 Inline Secondary Cleaner features tungsten tipped urethane blades suited for heavy-duty applications, installed on a track that slides into position on a rigid steel mandrel for quick blade replacement.

RESULT

Operators describe the carryback and spillage problem as "completely solved," improving safety and reducing cleanup costs. Equipment costs for idlers and pulleys have been reduced, and service can be performed during scheduled downtime. Product loss has been reduced dramatically. Martin Engineering Brazil has been retained to periodically perform maintenance on the system to extend the operational life. Operators are currently in the planning process for the installation of similar solutions on other conveyors throughout the facility.

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