



# PROBLEM SOLVED™ PAPER

**SOLUTION:** Martin® QB1™ Cleaner HD, Pin Latch Secondary Cleaner

**INDUSTRY:** Sugar , Food Processing

**LOCATION:** Athani Sugars Ltd, Karnataka, India




Bagasse generally consists of sugar cane husks and is often used as a biofuel.



Spring tensioners ensure that the blade remains in firm contact with the belt, without damaging the splice.



More material is discharged into the chute with less carryback, reducing the amount of spillage. 

## PROBLEM

Athani Sugars Ltd in Karnataka, Southwest India was experiencing severe amounts of carryback from sticky material on 4 conveyors transporting bagasse, clay and other viscous material. Conveyor widths range from 500 to 2000 mm (19.6 to 78.7 in.), and the systems transport 2500 tonnes (2755 tons) per day of material. Operators believed spillage along the entire belt path from material clinging to the return side of the belt was due to inadequate cleaning at the discharge zone. Workers would be pulled from other tasks and assigned to clean up around the area, as well as hose down the belt with water. This increased labor costs and created a burden on plant efficiency.

## SOLUTION

Technicians from Martin Engineering India, located just outside of the nearby city of Pune, inspected the problem and recommended a Martin® QB1™ Cleaner HD for the primary cleaner, followed by a Martin® Pin Latch Secondary Cleaner. Manufactured with the strongest mainframe in the industry and a powerful spring tensioner, the QB1 HD uses Martin's patented Constant Angle Radial Pressure (CARP) technology to keep a tight seal on the belt throughout its life. These blades are customizable and can be cut to length in-house or delivered pre-cut. The Pin Latch sits behind the QB1 to clear dust and fines, and features individually cushioned tungsten carbide blades for effective cleaning without risk to the belt or splices.

## RESULT

Operators report a significant reduction in spillage and carryback. Maintenance personnel no longer have to spend excessive time cleaning up, allowing them to focus their efforts on more productive activities. "Within just 30 minutes of installation, we could see a definite change, with better cleaning efficiency," said the plant's chief engineer. "We are very happy with the installation and outcome." Athani continues a strong relationship with Martin Engineering and intends to re-engage the company when the time comes for future projects and services.

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