

# Nonwoven Fiberglass Mat Dryer Wire Cleaning with the M-Clean™ PRO

- Challenge** A U.S. manufacturer of nonwoven fiberglass mat used as the underlayment core material for fiberglass asphalt shingles used a thru-air dryer system to cure and dry its product. The plant struggled to keep the conveying wire clean:
- Mechanical cleaning mechanisms contacting the wire were ineffective and led to more frequent wire changes and associated downtime.
  - Previous high-pressure shower systems were ineffective and excessively cooled the wire which further complicated the manufacturing process.
  - Mill personnel had to manually clean the wire during downtime while experiencing both internal and external quality rejects due to dirty and plugged fabric.

**Solution** Kadant installed an M-clean PRO high-pressure traversing shower with integrated vacuum. This system was customized with a hot water heater to minimize any localized cooling of the wire.

**Results** The M-clean PRO effectively cleans the wire during production without any adverse cooling or moisture effects. The plant has the unit scheduled to clean a few times each shift ensuring the wire remains clean. It was elected to integrate a visual defect detection system with the M-clean PRO spot cleaning mode thereby eliminating quality defects caused by contamination build-up on the wire.

## Highlights

- Improved machine runnability
- A safer work environment
- Significant cost-savings due to improved wire life

