

CASE STUDY

BETTER ENGINEERED POTATO FRYER TAKE OUT BELT

SITUATION:

A major international producer of potato chips experienced a bunching effect on a potato fryer take out belt (a chain driven, wire mesh, incline belt) at their New England facility. The competitor's belt would not lay flat and gathered and compacted belt spirals together shortly after installation. Consequently, the belt indexed and traveled with stops and accelerations. The belt manufacturer claimed the problem was due to poor installation procedure performed by the maintenance department and that the belt was not defective.

FINDINGS:

After the chip producer called and requested our opinion, we inspected the take-out belt drive system on the fryer and the failed belt. We determined that the belt drive system was performing well. We discussed the belt installation procedure and found no errors. After disassembly of a sample of the failed belt, we determined the belt spirals were poorly constructed and the mesh presented three technical flaws that were the root cause of the bunching.

RESULTS:

After the original belt manufacture provided an emergency replacement belt at no charge, the chip producer requested new belts from Wire Mesh Products. The new belts, free from technical flaws, have been performing well since installation.