

# **Adapting to Your Pressure Points**



# **Customer:**

Purple designs and manufactures "the most comfortable mattress science has to offer". And in 1996 they developed a breakthrough product with their Hyper-Elastic Polymer<sup>tm</sup>



# Sonic Sales Partner:

Acrodyne (Centennial, CO)



http://www.acrodyne.net/home.html

# **Application:**

Blow off excess anti-tack powder from the top and bottom of the Hyper-Elastic Polymer sheet having a max width of 84" traveling at 45 FPM, to prevent the gel from sticking prior to the next process of lamination.

# **Previous Methods:**

The customer was in the process of designing an in-house reciprocating nozzle manifold with a dust collector when they came across Sonic's YouTube video demonstrating a push/pull system.

This project was deemed to be "extremely high priority" so Sonic designed around offthe-shelf products in order to provide quick delivery.

# The Sonic "Engineered" Solution:

Sonic provided a Sonic 150 with a 20HP motor to power (2) Sonic XE air knives producing +27,000 FPM exit velocities at 1,000 CFM using 1.4 PSI, operating at 5,000ft/A.S.L.

#### **Outcome:**

The Units supplied run 24/6 and the performance of the unit exceeded expectations and a duplicate system was immediately ordered. Subsequently Sonic has provided another system for their 18"W product, and they have since order another four systems for their new 84" lines.



# AT-A-GLANCE

#### **CUSTOMER SNAPSHOT**

- America's most comfortable mattress
- Creator of Hyper-Elastic Polmer<sup>TM</sup>
- Started in 1989 by Pearce brothers
- Have over 30 cushioning technology patents

#### **CHALLENGES SNAPSHOT**

- Removal of excess anti-tack powder to prevent gel from sticking
- 84" wide product
- Inconsistent coating and Quality problems

# SOLUTION SNAPSHOT

- Sonic 150 w/ 20HP PE Motor
- +27,000 FPM Exit Velocities

#### **RESULTS SNAPSHOT**

- Reduced rejection rate
- Increased Production capacity
- Eliminated quality issues