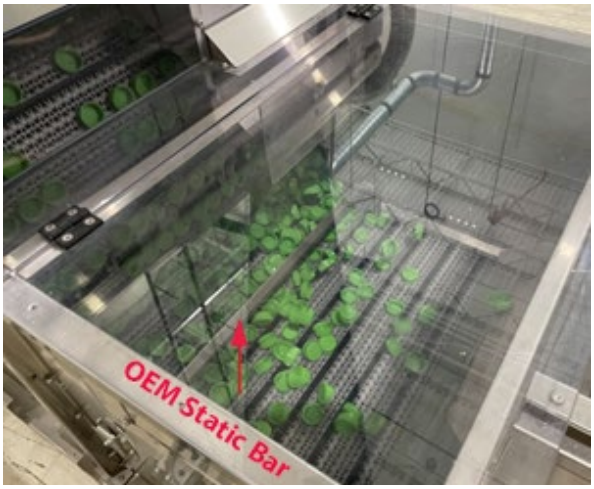
EXAIR

CASE STUDY

1595

APPLICATION GOAL

Improve feed of bottle caps, especially during winter months, when low humidity exacerbates static charge issues, causing the caps to remain in the wrong position on the machinery elevator belt.

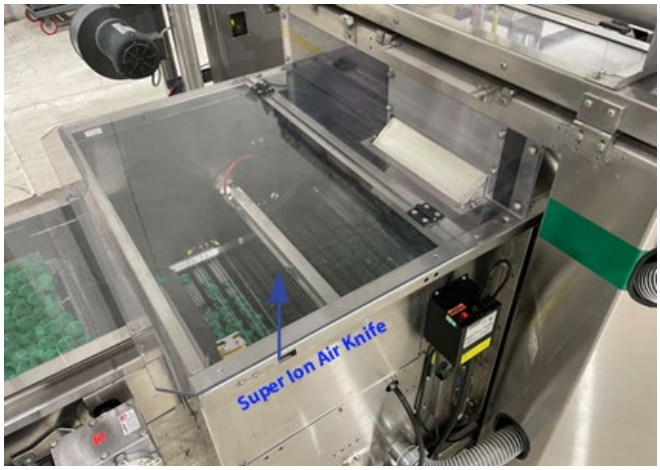


BEFORE EXAIR

A manufacturer of bottle closures experienced problems with static charge while feeding plastic caps through their machinery. The caps are supposed to fall freely from the vertical belt when incorrectly oriented. Static charge causes them to sort improperly, pile up, and become disoriented. The problems get worse in the lower humidity winter months. An OEM static removal device was unable to adequately dissipate the higher static charges during this time to keep up with their required bottle closure production rates.

AFTER EXAIR

A **Model 112230 30" Gen4 Super Ion Air Knife Kit** was ordered to replace the OEM static removal device in November 2022, during which static issues reduced the rate of production to 1.5 million caps a day. With the Super Ion Air Knife operating with a supply pressure of 40 psig, they were able to increase production rate to 2 million caps a day.



SUMMARY:

Use of the Super Ion Air Knife resulted in a 33% increase in bottle closure feed rate, which not only increased efficiency but drastically reduced line downtime as well as maintenance work order requests and maintenance team involvement. Due to the success of this installation, they subsequently outfitted their other three machines with **Model 112230 30" Gen4 Super Ion Air Knife Kits**.

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