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APPLICATION GOAL: To improve reliability of inline vision inspection system by incorporating an automated ionized air blow off system.



BEFORE EXAIR:

An eyeglass lens manufacturer receives raw product that is to be processed into their finished product. These incoming parts are placed by hand onto a conveyor, where they are passed through an automated vision inspection system. The presence of any dust and/or flash on these pieces results in a failure-to-read by the automated system. They had no positive means of dust removal in place, and their failure-to-read rate was approximately 20%.

After discussing the application, we recommended that they install an automated ionized air blow off, to be activated when the operator passes the parts through. EXAIR supplied (2) 3" (76mm) Super Ion Air Knives with an EFC Electronic Flow Control. The EFC dramatically reduces compressed air costs by turning off the air when no part is present.





AFTER EXAIR:

The dual Super Ion Air Knife System removes most of the dust and flash from the incoming parts, and has decreased their failure-to-read rate to less than 5%. The EFC conserves a great amount of compressed air, as their need is for a series of short bursts, triggered by the presence of product (as sensed by the EFC's photoelectric sensor), versus a continuous flow. Based on these results, (3) additional Super Ion Air Knife & EFC Systems were purchased and installed on their other receiving lines.