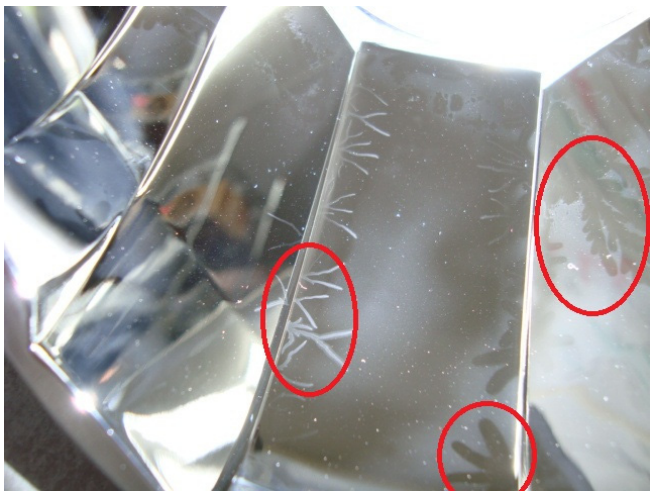
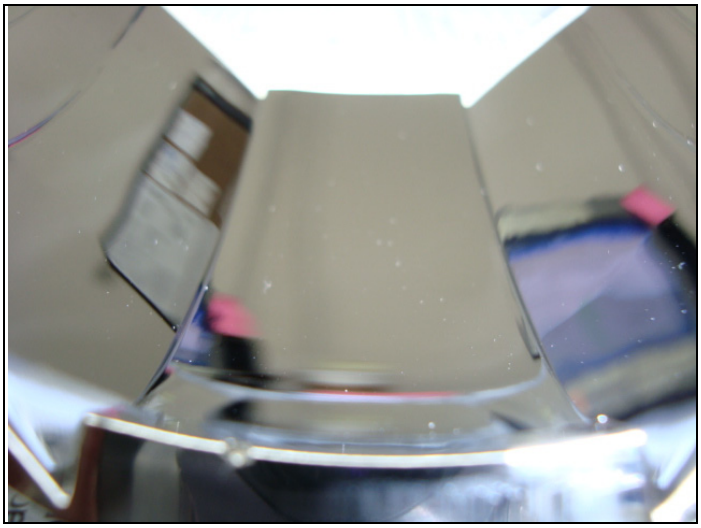
EXAIR® Case Study

1536

APPLICATION GOAL: To eliminate static causing an unacceptable scrap rate from a metalized plastic reflector used in automotive lighting.



BEFORE EXAIR: Injection molded parts from Ultem-PEI material were being direct metalized for use in automotive headlights. Parts were exiting the mold with a static charge and attracting dust prior to metalizing. The static charge and dust on the molded parts resulted in defects within the metalized coating in the form of spider webs and streaks in the coating. Any of these defects caused a rejection of parts and the manufacturer was experiencing close to 100% scrap rates.

AFTER EXAIR: This customer installed two **Model 111012 12" (305mm) Super Ion Air Knives** and a power supply to eliminate the static charge and dust on the parts immediately after removal from the injection mold. The knives also helped cool the parts which could then be moved to metalizing quicker. Another two 12" (305mm) Super Ion Air Knives and a power supply were installed to treat the parts immediately before the metalizing process. The result was a perfect reflective finish on the plastic parts and a reduction of the scrap rate to less than 1%.