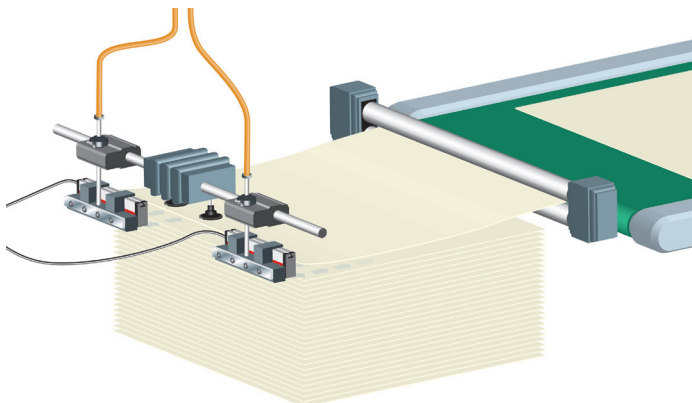


# SOLUTIONS TO STATIC PROBLEMS PACKAGING SHEET SEPARATING APPLICATIONS

Where some coated cardboard and paper sheets are processed and especially plastic sheets, the action of intimate contact and separation between the underside of the top sheet and the top of the stack generates substantial static charges.

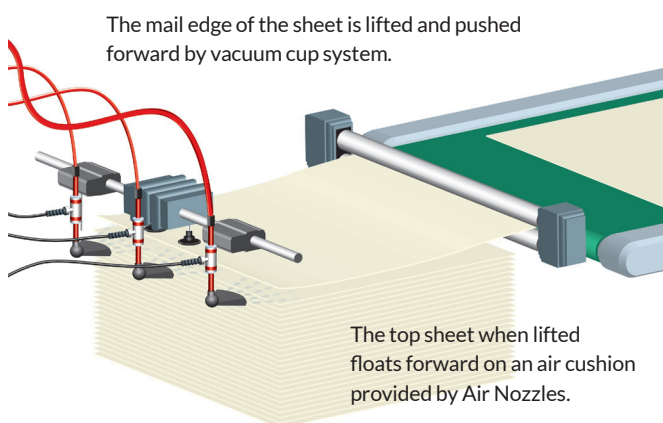
As the stack reduces in height as the sheets are continuously removed the voltage of the static charge continually increases from one sheet being removed to the next.

## Solution 1



There are two solutions available one of which is to attach a pair of Fraser model 5000 ionised airknives - inverted and mounted in an adjustable fixing block which is attached to the rear cross bar of the sheet feeding deck. For smaller sheet feeders a similar system is fabricated from our model 4400 compact ionised airknife.

## Solution 2



Our second solution is to use a 4300 Inline Nozzle as shown in the sketch to convert the existing air nozzles into ionised air nozzles.

The inline nozzles should be fitted as close to the existing airknives as possible and not a distance down the air line.

Eventually the static voltage reaches a level at which attraction between the sheets occurs resulting in adhesion between sheets and potential multiple sheet pick up or issues of sheet clinging to the feeder board on the converting machine.

Even the conventional airknives are unable to overcome the forces of attraction caused by the static charge, in fact the contact and separation of the airflow will undoubtedly contribute to the overall increase in voltage.



The blades of ionised air from the airknives should be directed between the top sheet of the deck and the underside of the lifted sheet and should work in support of the factory fitted standard deck airknives.. The air can be pulsed so only as to blow during the lift separation and pull forward cycle.



They should be fitted at one per airknife.

Where possible the airknives should not be made from metal, if they are replacing with plastic alternatives will enhance significantly the performance of the Fraser 4300's.