

Case studies

Printing

Process: Sheet-fed offset printing

Humidity control improves productivity, quality and employee comfort

A series of problems related with static electricity in wintertime

In the wintertime, a printing company using a sheet-fed offset press was suffering from not only production problems such as double sheet feeding, machine malfunctions and thus press shutdowns but also print quality problems including an inaccurate paper registration; all these problems were related with static electricity brought on by low humidity.

In addition, the plant without humidification became quite dry due to the heating system. Dryness became even more irritating because of the ink vapors and paper particles, which became an issue concerning the respiratory health of the operators.



Benefits of humidification

Once installed, Dry Fog Humidification System greatly reduced sudden drops in humidity during the winter, thus curbed the problems caused by static electricity including double feeding, paper curling and misregistration. The printing process was able to run more smoothly and printing jobs could be run properly on schedule, reducing the need for sudden production schedule changes and overtime work. Furthermore flapping and folding caused by static electricity also saw great reductions, and the time it took to load paper into the sheet-fed printer was cut by about 10%.

In addition, Dry Fog Humidification System cut the number of work absences due to illness nearly in half at the plant, which also lent itself to the reduction of sudden schedule changes and overtime work.



Dry Fog Humidification System AirAKI®

Humidification System that sprays Dry Fog, which doesn't wet anything it touches, prevents dryness and static electricity, increases product quality, reduce a defect rate and improves employee comfort.