

# ABC/ALLIED

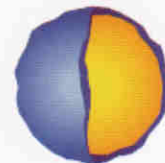
## Spray Powders - function...

The primary function of anti set-off powders (more commonly known as spray powders) is to form a separation between the sheets of stock as they leave the press. This separation provides a cushion of air to assist ink drying. It also breaks the suction effects of wet ink and prevents the ink from 'setting off' onto the sheet above. The powder's ability to perform this function is a result of a combination of factors including the printing process employed, type of spray equipment, particle size, density of ink and further operations such as overprinting, varnishing and laminating.

ABC/ALLIED spray powders are blends of non-genetically modified natural starches with drying agents, flowing agents and anti-static agents added. ABC/ALLIED coated powders go through an additional manufacturing process, which microencapsulates the individual particle to enhance the powder's performance.

ABC/ALLIED manufactures one type of spray powders; the Coated series, which covers a wide range of particle sizes. The coated, or treated powders, are quite different in their working properties from the conventional or regular powders, and performs extremely well in electrostatic (electronic) and conventional air pulsating units.

- Non coated particle
- Silicate layer



ABC/ALLIED coated powders are microencapsulated with a slip agent, which enhance the properties of the powder. They repel water and are attracted to the ink's surface, giving better set-off protection and increased mileage. Coated powders perform better in electronic units than conventional powders, and because they resist humidity, they will not clog spray nozzles. For a given micron size, coated powders offer a smoother finish and are ideal for the last pass through multi unit presses.

Coated spray powders represent the vast majority of applications. Coated powders are ideal for large corrugated printers, folding carton manufacturers, multi unit presses (4+) and most large sheet fed printers, where ink coverage is exceptional.

The grade of a powder should be determined by the weight of the substrate, its absorbency, and amount of ink applied and also the type of spray equipment being used. As a rule the grade of powder (and therefore the micron size) increases as, the weight of the substrate or the height of pile increases.

As a rule it is better to use less of a larger particle grade powder than to overcompensate with excessive spraying of a finer grade. Often excessive build up of spray powder in the delivery and surrounding pressroom can be due to this reason.

A rough sandpaper effect can often occur if too much powder is being applied or too large a micron size is being used.

Finished printed piles should periodically be checked during the run for any signs of set-off. If set-off is discovered, adjustments should be made to the spray unit settings, height of the pile, grade or micron size of the powder.