

AUTOMATION PLATFORM FOR SALT PRESCREENING AND POLYMORPH SCREENING STUDIES

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Polymorphism has become a concern in today's pharmaceutical research labs as it affects a number of issues in pharmaceutical systems varying from processing characteristics to bioavailability. During the pre-formulation stage of drug development, polymorph screening is a tedious and time-consuming but essential process.

Zinsser Analytic has developed Crissy®, an automated liquid and powder handling platform for salt pre-screening and polymorph screening studies. This platform automates the necessary steps for extensive crystallisation using different solvents, temperatures, concentrations, agitation and pH-measurement.

A special Crissy® reactor block has been designed to directly present the crystals to the XRPD system without any additional sampling steps. The top of the reactor bottoms is ideal for XRPD-detection. Cross contamination caused by electrostatic forces from moving the powders, is minimized as the detector block itself is grounded and the individual reactor cavities are separated from each other the "up"-position.

Crissy® makes tedious polymorph screening easier. Automating the crystallisation is not only time-saving but it increases the amount of salts being crystallised and minimizes the risk of destroying the crystal structure when presenting it to the x-ray.