

# SAFER AND COST EFFECTIVE DRYING

## FINE CHEMICALS

### THE PROBLEM

Existing batch process was carried out in batch mode which required 3 steps 15-16 hours to carry out evaporation to drying operation with only 80% yield.

### SOLUTION BY FABEX

The problem was encountered studying the product sensitivity and optimization of the operating conditions by carrying out trials in pilot plant on vertical agitated thin film evaporator. The agitated thin film evaporator creates thin film which improved the heat transfer and reduces the residence time of material at higher temperature. The final product yield improved from 80% to 99.5% with reduction in operation steps, operation time and carry forward material and losses. The improvements resulted in high throughput, lower operating cost with safer operation.

### ACHIEVEMENTS

- 3 steps to 1 step operation.
- Efficiency increased to 99.5%
- Safer handling
- High productivity
- Reduction in time, cost & energy
- Reduced footprint

**AGITATED THIN  
FILM DRYER (ATFD)**

