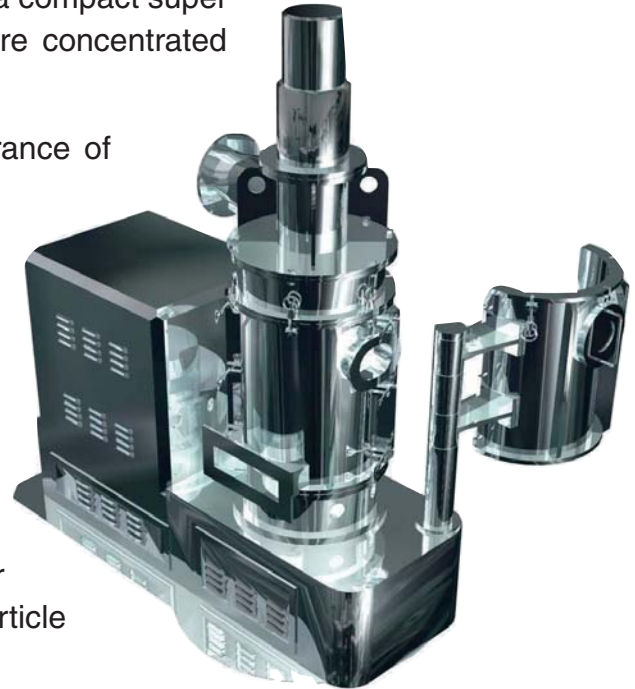




# Drymeister from Hosokawa Micron Ltd Offers an Alternative to Spray Drying

The Drymeister (DMR) from Hosokawa Micron Ltd is a compact super flash dryer capable of efficiently handling sticky more concentrated feed materials therefore saving time and energy.

After dewatering the most common physical appearance of the filter cake is between a highly viscous slurry and a crumbly mass. The spray drier has a long history and the feed, for best results, is usually a slurry of low viscosity where sometimes water has to be added to adjust to the right consistency. Obviously this increases the thermal energy costs. The DMR is capable of accepting the dewatered filter cake straight from the dewatering stage and because it is a flash mill dryer the grinding rotor disperses the material into fine particles and the integral air classifying rotor ensures the product is to correct particle size.



A fluidised bed of product in the drying chamber ensures a low level of adhesion of undried product to the drying chamber's inside wall and the combination of the fluid bed with the grinding/dispersion rotor contributes to the DMR's very compact size compared to conventional flash dryers or spray dryers.

Adjustment of both the classifier rotor and grinding rotor speeds along with the outlet air temperature ensures very close control of final end product particle size and final moisture content all in just one unit. The Hosokawa Drymeister range is available in seven sizes

Small increases in the feed moisture of any product to be dried has a profound effect on the evaporative load and thus thermal energy costs, which are very significant when the solvent is water because of its high latent heat. 100Kgs of dry end product from a feed moisture of 60% means 150kgs of water to be evaporated but this reduces to only 25kgs when the feed moisture is 20%. This is a significant reduction in energy costs and one where the DMR scores very highly.