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用喷雾干燥方法制造具有指定特性的颗粒

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摘要 Spray drying is an important continuous industrial process for drying pumpable liquid formulations irrespective of their heat sensitivity, rheology, solids content and processing rate. Furthermore spray drying has the capability through drying chamber design, plant layout and mode of operation to produce dried products of specific particulate size and morphology. These are important aspects when spray drying technology is applied to the needs of customized powder manufacture. There are many examples in industry where spray dried powders have to meet stringent specifications set by such factors as end-product powder quality standards dictated by global competition,dry raw material characteristics required for optimum downstream processing, and dry materials handling to comply with environmental, health and safety issues. Spray drying is no longer regarded just as a convective industrial drying concept, but also as an integral part of modern manufacturing practices applying powder technology. This paper reviews the aspects of spray dryer design and operation for consideration when customized powder manufacture is involved.

关键词 喷雾干燥; 制粒方法; 颗粒; 工程量;
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Applying Spray Drying to Customized Powder Manufacture

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Key words industrial plant design and selection; particle morphology; powder properties; spray drying;

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