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## Fine powder with great effect

**POWTECH 2008 in Nuremburg – Industrial gases specialist Messer shows that microfine powders can be produced with cryogenic gases.**

With the help of cryogenic liquid gases such as nitrogen or carbon dioxide, it is also possible to crush materials that have a tendency to melt, are temperature sensitive or have viscous or elastic characteristics. From 30 September to 2 October, Messer is presenting itself as an international supplier of cryogenic gas applications for the manufacture of powders at Powtech 2008. At the Nuremburg Trade Fair Centre in Hall 7, Stand 418, the largest privately managed industrial gases specialist will provide information on the separation of composite materials and cold grinding with cryogenic gases in its own cold grinding and recycling facility.

### Cryogen Grinding and separation of composites

With Messer's so-called cryogenic process, a wide range of different materials can be finely ground or recycled. These not only include thermoplastics, elastomers, waxes and paint additives, but also spices, which lose their aromatic and flavour components as a result of the high temperatures during grinding. In cold grinding, the substances to be ground are cooled with cryogenic liquid nitrogen or carbon dioxide and made brittle. As a result, particularly small particle sizes can be achieved. In this way, composites can be economically separated into their pure components in an environmentally friendly manner. Messer supplies all the gases and hardware required from a single source. In its own technical facility for cold grinding and recycling in Willich, North Rhineland-Westphalia, special sample batches can be produced, permitting an exact estimate of production costs and grinding conditions. The whole plant setup serves as a reference, as it corresponds with that of a production plant. The results obtained here are also particularly interesting because they are applicable for industrial scale production.

<https://newsroom.messergroup.com/en/fine-powder-with-great-effect/>

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