

PRESENTATION ABSTRACT**Presentation topic: Roller compactors for dry granulation from POWTEC****Speaker:**

Johannes Schmidt, managing director

Company:

JENTEC Trading, Germany

Presentation abstract:**Roller Compactors for dry granulation (agglomeration) from POWTEC**

to process:

- Batches of a few gram's up to Production models with a throughput capacity of approx. 2000 kg/h
- Partials in a range from **0,1 up to 5 mm**

Why dry granulation?

- **Adjust flow properties**
Granules flow more easily and resist bridging and caking, thus preventing problems of feed, dosage or packaging. Higher flow rates and more even fill can be achieved in most cases (e.g. feed tablet presses).
- **Increase bulk density**
An increase of bulk density can be achieved and controlled for further process reasons. Packing, storage and transportation costs can be reduced thanks to a volume reduction and higher bulk density.
- **Produce uniform blends or mixtures**
Mixtures of powders with various particle characteristics have a tendency of separation during handling and transport. The problem of segregation will be eliminated.
- **Replace wet granulation systems**
The process of dry granulation is more fast and economically because the intermediate processes as wetting, mixing, and drying are not necessary. The wet granulation process is not applicable where no liquids could be add.
- **Produce a uniform particle size range**
The particle size of a product can be adjusted to specified and constant grain size distribution.
- **Control dust**
Granules eliminate the problems of dust generation during handling and avoid loss of product in form of dust.
- **Control desperation rate**
The hardness of granules can be adjusted and therefore the solubility.
- **Recycle powder**
Powder can be recycled as granules or back into the production process.