



DELTA VITA[®] 1- Wet grinding with smallest amounts

Safe, simple, efficient

NETZSCH *DELTA*VITA® 1

Dual centrifugation

Applications:

- Nano grinding: Production of nano-suspensions
- Homogenization - Production of liposomes or emulsions
- Mixing of difficult mixable materials, e.g. high viscous components
- Improving of mixing processes

Characteristics:

- **Small batch sizes:** Batch size with 0,1 -1 g API
- **Flexibility:**
 - Different sizes of grinding chambers available
 - Suitable for grinding media up to 2 mm
- **Screening:** Test up to 40 samples at one time
- **Scale-up:** Similar results on all sizes of the *DELTA*VITA®-series
- **Coolable production room**

Current available adapters for

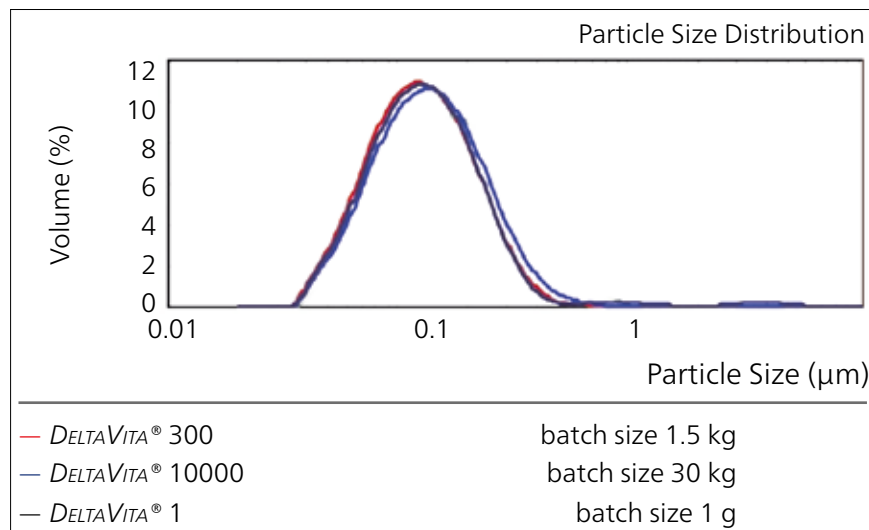
- 2 ml vial
- 10 ml injectable bottle
- 125 ml PP-bottle
- 15 ml PP-tube
- 50 ml PP-tube



Sample holders for 2ml tubes

Guaranteed scale-up possibilities:

Naproxen-suspension with 20% solids content



Source: M. Hagerdorn et al "Rapid development of API nano-formulations from screening to production combining dual centrifugation and wet agitator bead milling" 2019

Functional schematic:



NETZSCH Vakumix GmbH
 Zeppelinstraße 1
 28844 Weyhe-Dreye
 Germany
 Tel.: +49 421 8 49 56 0
 Fax: +49 421 8 49 56 90
 info.nvm@netsch.com

NETZSCH Premier Technologies, LLC.
 125 Pickering Way
 Exton, PA 19341
 USA
 Tel.: +1 484 879 2020
 Fax: +1 610 280 1299
 info.npt@netsch.com

NETZSCH®

www.netsch.com