

TECHNICAL DATA SHEET

NANOUS® apparatus (custom-built)

Closed device for continuous aseptic processing of nanoparticle products in large volumes.



TECHNICAL DATA

Scope	Large scale manufacturing of pharmaceutical nanoparticle formulations
Dimensions	W 240 cm × D 100 cm × H 220 cm (approx.)
Weight	1950 kg (approx.)
Features	<ul style="list-style-type: none">• FR-JET reactor for mixing included (combination of pinholes, cores and outlets)• Flow-controlled feed of starting material streams using micro-gear pumps• Controlled temperature of starting materials (5-25°C)• Seamless process scaleup from NANOLab® (1x-3x)• Custom protocols for automated production runs• Fully closed design to facilitate aseptic processing• Integrated surveillance of critical process parameters (flow, pressure, temperature etc.)• Integrated CIP/SIP (cleaning and sterilization in place) routines• PAT ready (process analytical technology) with optional inline particle measurement feature• 21 CFR Part 11 compliant software
Operation parameters	<ul style="list-style-type: none">• Flow rate of single pump: 10-600 mL/min*• Max. total flow rate: 800-1200 mL/min*• Pressure rating ≤ 40 bar• Automated waste and product collection• Compatible with typical oils, some silicones, soft paste, or thin honey-like viscous substances†
Output	<ul style="list-style-type: none">• Continuous manufacturing at 1.2L per minute (>1000 L/day)

*Total flow rate ranges vary with reactor configurations. See [NANOUS® Total Flow Rates Technical Data Sheet](#).

†See [Operating LEON equipment with high-viscous solutions](#). Contact our team for further details.

For more information, contact us:

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