

SPEC SHEET

Lab Multifunctional Top Drive Rapid Mixer Granulator (Single Pot)

THG Series - Lab Scale

INTRODUCTION

Formulation Development: Ideal for testing new granulation methods for high-potency or heat-sensitive compounds.

Process Parameter Optimization: Allows for precise control of impeller/chopper speeds and binder addition rates to define the “Design Space” for complex drug products.

Small-Batch Manufacturing: Bridges the gap between bench-top testing and pilot-scale production, suitable for clinical trial material manufacturing.

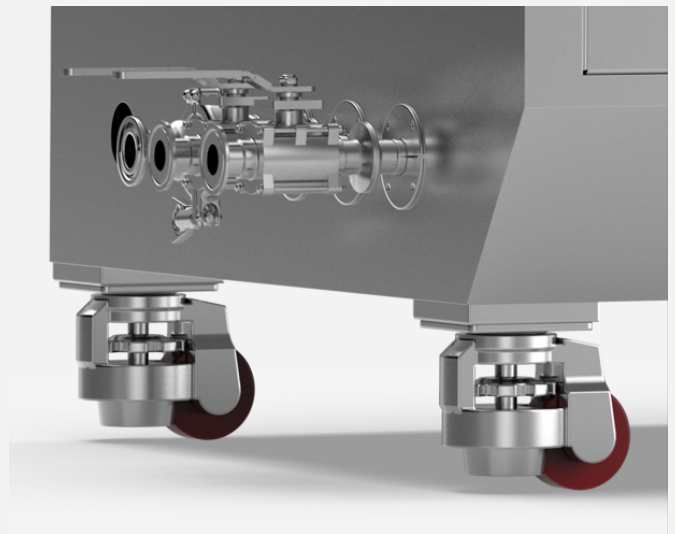
Advanced Granulation Research:
Fully capable of supporting specialized processes, including thermal melt granulation and effervescent tablet development.

KEYWORDS Blending | Powder | Granules
 | Mixing



ATTRIBUTES

- **R&D-Specific Top-Drive Configuration:** Inherits the premium top-drive architecture of the industrial THG series, ensuring that the shaft seal is isolated from the product contact zone. This guarantees a clean, contamination-free environment for small-batch formulation development.
- **High-End Mechanical Components:** Built with industry-leading components, including ABB motors, NSK bearings, and Garlock shaft seals, ensuring the durability and precision required for critical R&D trials.
- **Versatile Process Capabilities:** Integrated Magnetic Stirrer for binder solution conditioning. Advanced Vacuum Filtration & Pneumatic Purging for effective drying within the same vessel.
- **Scale-Up Predictive Design:** The impeller geometry and drive ratios are designed to correlate directly with industrial-scale machines, providing reliable data for seamless process scale-up.
- **Superior Containment & Safety:** Equipped with a dedicated stainless steel 304 explosion-proof cabinet, meeting the stringent safety requirements for handling sensitive or active research compounds.





TECHNICAL PARAMETERS

Specification	Details
Capacity	5 L - 12 L
Batch Capacity	0.5 kg - 5 kg (based on 0.5 g/ml bulk density)
Granulating chopper rotation speed	300 - 2800 RPM
precision peristaltic pump	0-150 RPM
Compressed air pressure	0.6 - 0.8 MPa

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