Laboratory Homogenizer - High-Shear Disperser - 4000-30000 rpm - 0.2 to 10000 ml Capacity

Model **MSHMG-25SWISS, MSHMG-25DSWISS** | Brand **Master Science**







The Master Science High-Shear Laboratory Homogenizer is a rotor-stator system for rapid dispersion, homogenization, emulsification, suspension and mixing. It is used for animal and plant tissue disruption, pharmaceutical formulation, cosmetic emulsions, food technology and chemical synthesis.

KEY HIGHLIGHTS

- Wide volume range
- Powerful shear
- Safe set-up
- Temperature protection
- See also our homogenizer range.

AT A GLANCE

Basic: 7500 to 30000 rpm; digital: 4000 to 26000 rpm
SPEED RANGE

Basic: 7500 to 26000 rpm; digital: 4000 to 21000 rpm
SPEED RANGE IN WATER

Digital: ±100 rpm
SPEED ACCURACY

Interchangeable heads cover microlitres to litres.
DIFFERENT SAMPLE VOLUMES

Request a Quotation
Contact us for pricing, configuration options and delivery details.

support@themsci.com
www.themsci.com

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Overview

Interchangeable working heads cover volumes from 0.2 ml to 10,000 ml, and the standard 25G head reaches a linear speed of 27 m/s. Two versions are offered: a basic model with stepless speed up to 30,000 rpm and six preset speeds, and a digital model with 4,000 to 26,000 rpm, LCD and a 0 to 999 minute timer. Both versions of the Master Science High-Shear Laboratory Homogenizer come with a stand and clamp for safe operation.

Manual grinding and stirring can’t match the consistency of high-shear homogenization. The Master Science High-Shear Laboratory Homogenizer helps with:

Key Benefits

Wide volume range
Interchangeable heads handle 0.2 ml up to 10 litres.

Powerful shear
27 m/s linear speed for fast homogenization.

Safe set-up
Vertical adjustment with dual support rod and clamp.

Temperature protection
Optional probe on the digital model stops at a preset temperature.

See also our homogenizer range.

Technical Specifications

GENERAL

General	Technical data of the Master Science High-Shear Laboratory Homogenizer:
Brand	Master Science
Model Number	MSHMG-25SWISS, MSHMG-25DSWISS
SKU	MSHMG-25SWISS, MSHMG-25DSWISS
Brand	Master Science
Models	MSHMG-25SWISS (basic), MSHMG-25DSWISS (digital)
SKU	MSHMG-25SWISS, MSHMG-25DSWISS
Speed Range	**Basic: 7500 to 30000 rpm; digital: 4000 to 26000 rpm**
Speed Range in Water	**Basic: 7500 to 26000 rpm; digital: 4000 to 21000 rpm**
Speed Accuracy	**Digital: ±100 rpm**
Speed Control	Basic: gear adjustment; digital: knob adjustment
Capacity	**0.2 to 10000 ml (with optional heads)**
Standard Working Head	25 mm stator head (100-5000 ml, 27 m/s, 316 stainless steel)
Motor	DC brushless
Standard Configuration	Main unit, working head, stand
Time Display	Digital: LCD, timer 0 to 999 min
Power Supply	200-240 V (110 V optional), 50/60 Hz

DIMENSIONS & WEIGHT

Dimensions	Basic: 410 × Ø90 mm; digital: 365 × Ø90 mm
Net Weight	Basic: 2.6 kg; digital: 2.5 kg

DRIVE

Drive	DC brushless motor
Basic model	stepless speed up to 30,000 rpm, 6 preset speeds
Digital model	4,000 to 26,000 rpm with LCD and timer

PROBLEMS THE MASTER SCIENCE HIGH-SHEAR LABORATORY HOMOGENIZER SOLVES	
Slow tissue disruption	High-speed rotor-stator shear breaks down tissue in seconds.
Unstable emulsions	Fine dispersion produces uniform droplet size.
Different sample volumes	Interchangeable heads cover microlitres to litres.
Sample overheating	The digital model's timer and optional temperature probe limit heat build-up.

Applications

The Master Science High-Shear Laboratory Homogenizer is used for: Animal and plant tissue disruption Pharmaceutical formulation and emulsions Cosmetic creams and lotions Food technology and sample preparation Chemical synthesis and dispersion

Working Heads

- Standard 25 mm head, 316 stainless steel
- Optional heads from 6 mm to 25 mm stators
- Heads for tissue disruption, emulsification, wet grinding and high-viscosity dispersion

Stand

- Vertical adjustment system
- Dual-axis support rod and clamp

Digital Model Extras

- Programmable timer 0 to 999 min with auto stop
- Optional thermocouple probe with temperature cut-off

Standard Accessories Included

- Homogenizer main unit
- Standard 25 mm working head
- Stand with clamp

Optional Accessories

- Working heads with 6 to 25 mm stators for 0.2 ml to 5000 ml
- Special heads for vacuum/pressurised vessels, wet grinding and high-viscosity dispersion
- Thermocouple temperature probe (digital model)