

HIGH-THROUGHPUT CRYOGENIC GRINDER

Product Introduction

high-throughput cryogenic grinder / Cryo mill / Tissue Homogenizer
 DHFSTPRP-CL48 High-throughput cryogenic grinder is a special, fast, high-efficiency, multi-tube homogenization system that extracts and purifies raw DNA, RNA, and proteins from any source, including soil, plant and animal tissues/organs, bacteria, yeast, fungi, spores, and paleontological specimens. High-throughput cryogenic grinder adopts a special vertical up-down integrated vibration mode, which achieves rapid grinding of samples through the high-frequency reciprocating vibration, impact, and shear of grinding beads (zirconia, steel, glass, ceramics). This results in more thorough and uniform grinding of samples, better sample reproducibility, and no cross-contamination between samples.

Sample Compatibility:

- ◆ Plant Tissues: Roots, Stems, Leaves, Flowers, Fruits, Seeds, etc.
- ◆ Animal Tissues: Brain, Heart, Lungs, Stomach, Liver, Thymus, Kidneys, Intestines, Lymph Nodes, Muscles, Bones, etc.
- ◆ Fungi and Bacteria: Yeast, Escherichia coli (E. coli), etc.
- ◆ Food and Pharmaceuticals: Various types of foods, Tablets, etc.
- ◆ Volatile Samples: Coal, Oil Shale, Wax Products, etc.
- ◆ Plastics and Polymers: PE (Polyethylene), PS (Polystyrene), Textiles, Resins, etc.

Common Accessories (Adapters/Grinding Beads/Grinding Vessels/Filling Gun, etc.)

Specifications

24*2ml Standard/24*2ml Cooling
 48*2ml Standard/48*2ml Cooling
 64*2ml Standard/64*(0.2~0.5ml) Customized
 12*5ml Standard/12*5ml Cooling
 8*10ml Standard/8*15ml Standard
 4*2ml/8*2ml Grinding Vessel
 4*5ml/10ml/15ml Grinding Vessel
 4*15ml PEEK Vessel
 2*50ml Standard
 2*25ml/50ml Grinding Vessel/PEEK

*Note: Comes with 24/48/64*2ml adapters, 3mm & 5mm stainless steel or zirconium oxide grinding beads.



Zirconia



Stainless steel



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Technical Parameters	
Model	DHFSTPRP-CL64
Application fields	Organ grinding, homogenization, cell disruption, tissue pulverization, material dispersion, preparation, sample mixing, and oscillation
Processing capacity	Maximum processing capacity of 64 samples in 15 seconds, with integrated compressor cooling
Compatible sample tubes	64*(0.2-0.5ML) /64*2ML /6*(7-15)ML /2*25ML /2*50ML, various specifications of grinding tubes can be custom-made
Display	Touch screen display for convenient and intuitive operation
Data storage	Can store ten sets of experimental data, with animal heart, spleen, lung, kidney, bone, skin, and hair patterns set according to different experimental samples
Cycle mode	According to the set experimental parameters, it can cycle continuously between several pre-set parameters, further reducing interference from human factors
Maximum feeding size	No requirement, adjustable according to the adapter
Cooling function	Yes, adjustable from -30°C to 37°C
Temperature control accuracy	+ 0.5°C
Open lid operation protection	Electromagnetic lock
Final discharge particle size	~5µm
Number of grinding platforms	(acceptance of grinding jars) > 2
Fastening device	with automatic center positioning
Homogenization speed	0~70 Hz/sec, working time: 0 sec~99 min, user-settable
Diameter of grinding balls	0.1~30mm
Material of grinding balls	alloy steel, chrome steel, zirconium oxide, tungsten carbide, quartz sand
Acceleration	reaches maximum speed within 2 seconds
Deceleration	reaches minimum speed within 2 seconds
Noise level	<55db
Grinding mode	wet grinding, dry grinding, and low-temperature grinding are all possible
Safety instructions	with automatic center positioning and safety lock during operation for full protection
Material of grinding kit	hard alloy, polytetrafluoroethylene (Teflon), zirconium oxide
Dimensions	630*300*480mm
Weight	58 kg