

# Simoloyer® CM08

## HKP for making Nanostructures

batch operation, auto-batch, semi-continuous

### in general

High Kinetic Processing (HKP) in the Simoloyer® represents the most advanced technique for Mechanical Alloying (MA), High Energy (HEM) and Reactive Milling (RM) for making Nanostructures. Simoloyer® base unit remains the same in batch-, auto-batch and semi-continuous operation while different grinding units are equipped with corresponding ports. Standard for batch operation, type -s2 with 2nd mainport for auto-batch and type -s1 with semi-continuous ports for insitu separation/classification at carrier-gas/multiphase flow. All types cover batch operation, multiple mainports available up to type -s5 and exceeding. Grinding units from steel to ceramic Si3N4 to WC-Co.

technical data	Simoloyer® CM08	
standard grinding units	W08-5lm	W08-8lm
max. relative velocity	14 m/sec	
rotational-speed, direct	150 – 1000rpm	
auxiliary inverter drive	no	
grinding units	quick replacement	
nominal volume	5 liter	8 liter
nominal power	2.2 kW/l	1.4 kW/l
operation mode, load. rates	select grinding unit	
materials, cooling/heating		
operation temperature (standard)	-20 – 80°C	
airlock system	DN40/DN50	
gas-supply (atmosphere)	DN16, ≤ 0.5 bar	
operation vacuum/pressure	10 <sup>-4</sup> mbar up to 0.5bar	
atmosphere	vacuum, var. gas, air	
main inverter drive	11 kW	
power-supply	400 V, 3 phase, 25A	
cooling/heating supply	G½, up to 15 l/min	
noise emission	92 dB(A)	
net weight base unit/total	500/600 kg	
L x B x H, space required	1.300x700x1.000mm, 10m²	



### application

Medium-scale batch processing, fine grinding, mixing, dispersing, homogenizing, primarily in dry operation under at maximum controlled condition. Nanostructured, nanocrystalline & amorphous materials, composites MMC, CMC, MMC, CCC such as battery materials, ODS/NFA, solid-state hydrogen storage, hard-metal applications, rapid particle size reduction and ductile metal flakes and multiple more.



### Maltoz®-Simoloyer® Operating Program

Multimedia & functional software, allows Cycle Operation, controls and records different device- and process temperatures, records power & torque, provides complete process history on log files, a tool for the protection of human and hardware.

### equipment / accessories

Airlock systems with dead-zone free drain- and charge-gratings • sample units & containers • vacuum-pump and gas systems • special valves • cooling blocks and heating systems • sound absorption cabinets. Manipulators, storage and loading systems for larger units only.

