ZozGmbH

Simoloyer® CM400
HKP for making Nanostructures
__batch operation__, auto-batch, semi-continuous
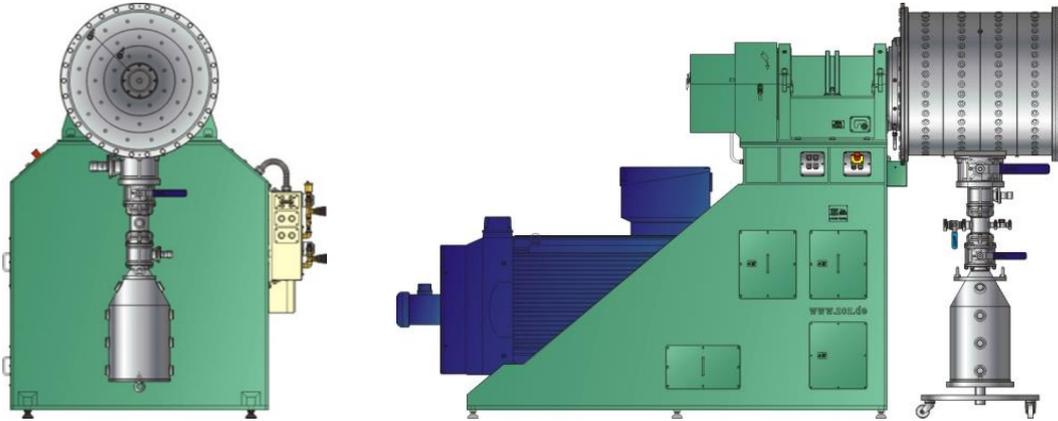
in general

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® CM400b
standard grinding unit	**W400-400l** (batch)
max. relative velocity	14 m/sec
rotational-speed, direct	75 - 375rpm
auxiliary inverter drive	turning W400
grinding units	quick replacement
operation mode, load. rates	select grinding unit
materials, cooling/heating	
operation temp. (standard)	-20 – 80°C
airlock system	DN100
gas-supply (atmosphere)	DN25/40, ≤ 0.5 bar
operation vacuum/pressure	10^{-4}mbar up to 0,5bar
atmosphere	vacuum, var. gas, air
main inverter drive	400 kW
power-supply	6kV / 55A, 3-phase
cooling/heating supply	G1½, up to 75 l/min
noise emission	90 dB(A)
net weight base unit/total	6.500/7.900 kg
L x B x H, space required	3.525x1.500x2.410mm, 35m²
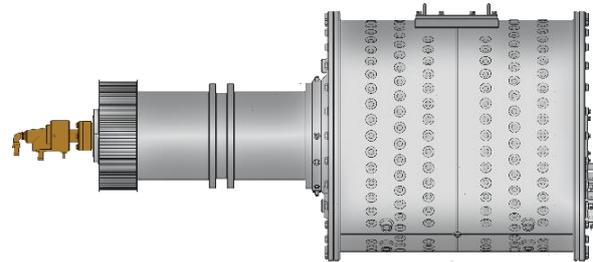
application

Large-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	equipment / accessories
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.	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 • container manipulators • storage and loading systems.

technical data subject to alterations

www.zoz.de