

Grinding units W100** for Simoloyer® CM100



types of grinding-units W100b**

standard types (100 l)	approx. weight	what for	ports
W100b	600kg	standard (batch-) processing	1x main, 1x side
W100bsu	600kg	standard (batch-) processing, auxiliary ports at side-wall (e. g. flanges for measurement devices)	1x main, 1x side 2x auxiliary side
W100b-s1	630kg	semi-continuous processing	1x main, 1x side 4x tangential
W100b-s2	620kg	auto-batch & batch processing	2x main, 1x side
W100b-s5	630kg	advanced discharging processing	1x main, 1x side 2x discharging (main)
W100b-s12	645kg	project-vessel R&D, combines W100-s1/-s2	3x main, 1x side 4x tangential
W100b-SiN	620kg	standard (batch-) processing	1x main, 1x side
W100b-THM	650kg		



applications / features

applications	HEM, MA, RM, processing under vacuum, inert-gas, air, also Hydrogen, Nitrogen etal.		
operation pressure	1x10 ⁻⁴ mbar...0,5 bar	(overpressure; option: up to 2 bar overpressure)	
net weight	500-650kg	(grinding-media excluded)	
nominal volume/power	100 litres/1.1 kW/l		
operation temperature	process temperature 20-50°C (standard)		
type THM	chamber-lining WC-Co, rotor blades THM, shaft covered with THM-coated bushes for Fe-contamination free processing, particularly carbide-, oxide- nitride- based hard-phased materials		
type SiN	chamber-lining Si3N4 plates, rotor blades Si3N4 , shaft covered with ceramic-coated bushes for Fe-contamination free processing, in particular ceramic and composite materials		
cooling systems	• vessel / side-walls / bearing-flange / bearing support / rotor: G½-G¾ (G3/8); • cooling media water, water/glycol-mixture, oil • separated cooling (a) pre-seal unit and (b) flanges/vessel allow no-cooling (<80°C) or use of hot/cooled medium (HTB/TTB) in double-jackets flanges/vessel at standard grinding-units		
type HTB	Medium - High Temperature Operation, Reactive Milling, Bonding at standard grinding-units		
connections	air-lock DN63-DN100 (tangential ports W100b-s1: DN63)		
material vessel/rotor	stainless steel 1.4301/Stellite®/THM/WC-Co/SiN		
PBR/total load ratio	often 1:10 ... 1:20, max 40 vol.% recommended (PBR = powder to ball ratio)		
grinding media load	100-200kg, ø3,5-5mm, 100Cr6 (standard), stainless-steel, ZrO2, Si3N4, THM		
product loading	most frequently 15-25 kg, starting particle size up to 3mm		

