

Grinding units W20** for Simoloyer[®] CM20



types of grinding-units W20**			
standard units (20 l)	smaller units (10 l)	what for	ports
W20-20lm	W20-10lm	standard (batch-) processing	1x main, 1x side
W20-20lm-s1	20 liter only	semi-continuous processing	1x main, 1x side 4x tangential
W20-20lm-s2	W20-10lm-s2	auto-batch & batch processing	2x main, 1x side
W20-20lm-s5	20 liter only	standard (batch-) processing, advanced discharging processing	1x main, 1x side 2x discharging (main)
W20-20lm-SiN	W20-10lm-SiN	standard (batch-) processing, Si ₃ N ₄ (SiN) or WC-Co (THM) interior	1x main, 1x side
W20-20lm-THM	W20-10lm-THM		
W20-20lm-s1-SiN	20 liter only	semi-continuous processing, Si ₃ N ₄ (SiN) or WC-Co (THM) interior	1x main, 1x side 4x tangential
W20-20lm-s1-THM			
W20-20lm-s2-SiN	W20-10lm-s2-SiN	auto-batch & batch processing, Si ₃ N ₄ (SiN) or WC-Co (THM) interior	2x main, 1x side
W20-20lm-s2-THM	W20-10lm-s2-THM		



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	80-110kg (grinding-media excluded)
nominal volume/power	20 litres/1.1 kW/l 10 litres/2.2 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 Si ₃ N ₄ plates, rotor blades Si ₃ N ₄ , shaft covered with ceramic-coated bushes for Fe-contamination free processing, in particular ceramic and composite materials
cooling / heating	<ul style="list-style-type: none"> vessel / bearing-flange G1/2, bearing support G3/8; cooling media water, water/glycol-mix, 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 TTB / HTB	Low (TTB) - Medium - High Temperature Operation (HTB) during High Kinetic Processing
connections	air-lock DN50, DN63 optional (tangential ports W20-20lm-s1: DN40)
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	20-30kg (20l) / 10-15kg (10l), ø3,5-5mm, 100Cr6 (standard), stainless-steel, ZrO ₂ , Si ₃ N ₄ , THM
product loading	most frequently 3-5 kg (20l) / 1.5-2.5kg (10l), starting particle size up to 3mm

