

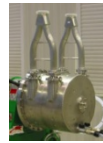


Grinding units W20** for Simoloyer[®] CM20

Types of grinding-units W20**			
standard type (20 l)	smaller unit (10 l)	comments	ports
W20-20lm	W20-10lm	standard (batch-) processing	1x main port 1x side port
W20-20lm-SiN	W20-10lm-SiN		
W20-20lm-THM	W20-10lm-THM		
W20-20lm-s1	---	for semi-continuous processing	1x main port 1x side 4x tangential
W20-20lm-s2	W20-10lm-s2	for auto-batch & batch processing	2x main ports 1x side port
W20-20lm-s2-SiN	---		
W20-20lm-s2-THM	---		
Special types:			
W20-20lm-St1	standard (batch-) processing vessel and rotor coated with CoCr-based wear-resistant coating		1x main port
W20-20lm-Ni ²⁾	standard (batch-) processing vessel and rotor coated with Ni-based wear-resistant coating		²⁾ : scheduled
W20-20lm-d2	standard (batch-) processing additional discharging-ports		1x main ports 1x side ports 2x discharging ports
applications / features			
applications	HEM, MA, RM, processing under vacuum, inert-gas, air		
operation pressure ¹⁾	1x10 ⁻⁴ mbar...0,5 bar (overpressure; option: up to 2 bar overpressure)		
net weight	80-110kg [depending on type of grinding-unit (grinding-media excluded)]		
nominal volume (nominal power)	W20-20lm**: 20 litres (1,1 kW/l)		W20-10lm**: 10 litres (2,2 kW/l)
operation temperature	process temperature usually 20-50°C		
type THM	chamber-lining with WC-Co; rotor blades THM, shaft covered with THM-coated bushes for Fe-contamination free processing, in particular carbide-, oxide-, and nitride- based hard-phased materials		
type SiN	chamber lined with Si3N4 plates, rotor blades Si3N4, shaft covered with ceramic-coated bushes for Fe-contamination free processing, in particular ceramic and composite materials		
cooling system	vessel / bearing-flange / bearing support, connections vessel G½, connection bearing-flange/support: G3/8 cooling media: usually water/glycol-mixture (possible as well: oil) Separated cooling system of pre-seal unit from flange & vessel allows non-cooling (<80°C) or use of hot or cooled medium (HTB/TTB) in the double-jackets of flange & vessel (only for standard grinding-units)		
type TTB / HTB	Medium - High Temperature Operation, Reactive Milling, Bonding as well as Low Temperature Operation (only for standard types of grinding-units; TTB for W20**-THM/SiN upon inquiry)		
connections	air-lock DN50 (tangential ports W20-20lm-s1: DN40)		
material vessel ¹⁾	stainless steel 1.4301 (in case of lining: see above)		
material rotor ¹⁾	stainless steel 1.4301/Stellite [®] /THM/WC-Co/SiN		
product ¹⁾	as-milled usually <150µm, depending on application < 3mm		
PBR ¹⁾	usually 1:10 ... 1:20 [PBR = powder to ball ratio]		
grinding media ¹⁾	100Cr6 (standard) options: stainless-steel, ZrO ₂ , Si ₃ N ₄ , THM [Ø ≤ 3,5-5mm]		
amount of grinding-media ¹⁾	max. 40% of volume, usually: W20-20lm*: 20-30kg [max-values might be higher] W20-10lm*: 10-15kg		
¹⁾ : depending on application			
examples:	 (W20-20lm)	 (W20-20lm-s2)	 (W20-20lm-s1)

technical data subject to alterations