




# Grinding units W08\*\* for Simoloyer<sup>®</sup> CM08

Types of grinding-units W08**			
standard type (8 l)	smaller unit (5 l)	comments	ports
<b>W08-8lm</b>	W08-5lm	standard (batch-) processing	1x main port 1x side port
<b>W08-8lm-SiN</b>	W08-5lm-SiN		
<b>W08-8lm-THM</b>	W08-5lm-THM		
<b>W08-08lm-s1</b>	---	for semi-continuous processing	1x main port 1x side 4x tangential
<b>W08-8lm-s2</b>	W08-5lm-s2	for auto-batch & batch processing	2x main ports 1x side port
<b>W08-8lm-s2-SiN</b>	---		
<b>W08-8lm-s2-THM</b>	---		
<b>Special types:</b>			
W08-8lh	heatable grinding-unit (heat sheets at vessel, cooling of bearing-flange)		
W08-8lm-Ni <sup>2)</sup>	standard (batch-) processing vessel and rotor coated with Ni-based wear-resistant coating		<sup>2)</sup> : scheduled
<b>applications / features</b>			
applications	HEM, MA, RM, processing under vacuum, inert-gas, air		
operation pressure <sup>1)</sup>	1x10 <sup>-4</sup> mbar...0,5 bar (overpressure; option: up to 2 bar overpressure)		
net weight	40-60kg [depending on type of grinding-unit (grinding-media excluded)]		
nominal volume (nominal power)	W08-8lm**: 8 litres (1,35 kW/l)		W08-5lm**: 5 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 Si <sub>3</sub> N <sub>4</sub> plates, rotor blades Si <sub>3</sub> N <sub>4</sub> , 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 G <sup>1</sup> / <sub>2</sub> , 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 W08-8lm-s1: DN25-40)		
material vessel <sup>1)</sup>	stainless steel 1.4301 (in case of lining: see above)		
material rotor <sup>1)</sup>	stainless steel 1.4301/Stellite <sup>®</sup> /THM/WC-Co/SiN		
product <sup>1)</sup>	as-milled usually <150µm, depending on application < 3mm		
PBR <sup>1)</sup>	usually 1:10 ... 1:20 [PBR = powder to ball ratio]		
grinding media <sup>1)</sup>	100Cr6 (standard) options: stainless-steel, ZrO <sub>2</sub> , Si <sub>3</sub> N <sub>4</sub> , THM [Ø ≤ 3,5-5mm]		
amount of grinding-media <sup>1)</sup>	max. 40% of volume, usually: W08-8lm*: 8-12kg [max-values might be higher] W08-5lm*: 5-7,5kg		
<sup>1)</sup> : depending on application			
examples:			
	(W08-8lm)	(W08-5lm)	(W08-8lm-THM, inside)

technical data subject to alterations