

## Grinding units W100\*\* for Simoyer® CM100



### types of grinding-units W100b\*\*

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



### applications / features

applications	HEM, MA, RM, processing under vacuum, inert-gas, air, also Hydrogen, Nitrogen et al.
operation pressure	1x10 <sup>-4</sup> 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)
<b>type THM</b>	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
<b>type SiN</b>	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 / heating	<ul style="list-style-type: none"> <li>vessel / side-walls / bearing-flange / bearing support / rotor: G½-G¾ (G3/8);</li> <li>cooling media water, water/glycol-mixture, oil</li> <li>separated cooling (a) pre-seal unit and (b) flanges/vessel allow no-cooling (&lt;80°C) or use of hot/cooled medium (HTB/TTB) in double-jackets flanges/vessel at standard grinding-units</li> </ul>
<b>type HTB</b>	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, ZrO <sub>2</sub> , Si <sub>3</sub> N <sub>4</sub> , THM
product loading	most frequently 15-25 kg, starting particle size up to 3mm



W100b-s5  
technical data subject to alterations