

## List of technical questions for premex-autoclaves

End user:		
Basic information	Nominal volume ml  Working volume ml  Design pressure bar  Operating pressure bar  Design temperature °C  Operating temperature °C	
Autoclave lock	<ul><li>a) Jaw lock (fast closing system), up to 200 bar max.</li><li>b) Screw lock: bolts and nuts</li></ul>	
Autoclave seal	<ul> <li>a) O-ring, EPDM up to 180°C</li> <li>b) O-ring, Viton up to 240°C</li> <li>c) O-ring, Kalrez up to 300°C</li> <li>d) Flat seal, pure silver, up to 350°C</li> <li>e) Cutting ring, metal on metal</li> <li>f) Others</li> </ul>	0
Material	WNr. 1.4435	
Heating	a) Electrical heating kW in the outer shell	
aug	b) Double shell design for heat transfer medium (oil)	
Cooling	<ul><li>a) Water cooling in the outer shell via cooling spiral (standard)</li><li>b) Water cooling in medium via cooling spiral (for exothermic reactions)</li></ul>	٥
Stirring drive	<ul> <li>a) Planetary roll drive continuously adjustable from 0-1150 rpm.</li> <li>a) Planetary roll drive continuously adjustable from 0-550 rpm.</li> <li>b) Rotary current motor, activated via frequency converter and adjustable by potentiometer</li> <li>Nominal power: □ 120 Watt / □ 250 Watt / □ 370 Watt</li> </ul>	



Magnetic coupling	<ul><li>a) Torque Ncm</li><li>b) Valve connection to clean magnetic coupling or gas supply</li></ul>	
Stirring element	<ul> <li>a) Gas injection stirrer</li> <li>b) Gas injection stirrer with baffle</li> <li>c) Diagonal blade stirrer</li> <li>d) Anchor stirrer</li> <li>e) Disk stirrer</li> <li>f) Others</li> </ul>	0
Fittings on autoclave cover	Temperature measurement a) Temperature sensor, type K c) Temperature sensor, type Pt 100 d) Others	
	Pressure measurement a) Manometer (analogue) b) Pressure transducer (digital) c) Pressure transducer with display	0
	Sampling a) Dip tube to the bottom of the autoclave vessel b) Dip tube with frit	
	<ul> <li>Valve connections</li> <li>1. Product supply</li> <li>2. Gas supply</li> <li>3. Pressure release</li> <li>4. Safety <ul> <li>a) Spring pressure safety valve or</li> <li>b) Bursting disc holder with bursting disc</li> </ul> </li> </ul>	0
Options/specialities	Use of catalyst a) Catalyst rotation cage	
	Inspection glass a) Inspection glass on autoclave lid b) Inspection glass lenghtwise on the autoclave vessel	0
	Medium measurements a) pH measurement up to 60 bar max., 130 °C	



	Level adjustment a) Level measurement (only for continuous reactions) b) Level adjustment (only for continuous reactions)	
Explosion protection	On request, autoclaves can be supplied with a wide variety of types of explosion protection.	
Object subject to mandatory testing	Yes ☐ No ☐ Acceptance to DIN 50049 (EN 10204 - 3.2) by an independent expert (such as TüV, SVTI)	
Construction	<ul> <li>a) with pneumatic device to lift the autoclave vessel towards the the cover:</li> <li>□ "pinto" □ "pollux" □ "prator"</li> <li>□ "pyron" □ "hyper"</li> </ul>	
	b) Table-top autocalve model: ☐ "twister" ☐ "beluga" ☐ "sonar" ☐ "avalon"	
	c) Small autoclave family: 60 ml and 100 ml autoclaves with union Nut: ☐ "andorra" ☐ "vivor" ☐ "apart" ☐ "varioso"	
	d) oil heating <b>or</b>	
	e) electrical heating	
Control device (manual)	<ul> <li>a) Temperature program controller (cascade controller)</li> <li>b) Pressure indicator</li> <li>c) Speed indicator</li> <li>d) Safety switch-off device, heating</li> <li>e) Analogue outputs for recorder connection</li> </ul>	
Control device (PC)	Control unit ordino incl. Delivery of the PC	
Application scope of application		
Option Massflow controller	please fill in the additinal list of questions about MFC	
Further requests		

