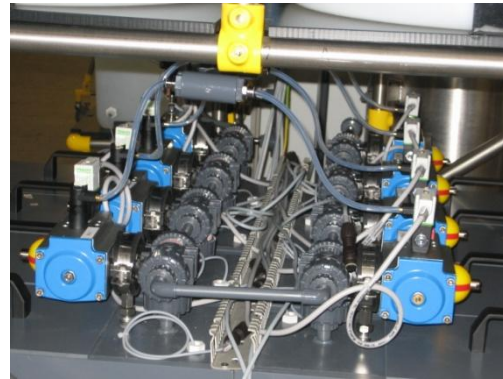


Membrane-Adsorption-Chromatography (MAC)



DIMENSIONS

Dimension	approx. 2400 x 1000 x 2000 mm (L x B x H)
Weight	approx. 200 kg
Material (wetted parts)	Stainless steel (group V4a) / PVC / PVDF / PE / EPDM / FEP and PTFE
IP protection class	IP 54

ELEKTRICAL DATA

Connection for power supply	32 A-CEE / 400 V / 50 Hz / 3-phases / N / PE
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DATA

Tanks	<ul style="list-style-type: none"> 1 intermediate container (approx. 50 l, V4a) 1 substrate tank (approx. 50 l, V4a) 2 batching tanks (approx. 50 l, V4a, heatable with double jacket) 2 acid / lye tanks (approx. 20 l, PE) 8 elution tanks (approx. 50 l, PVC) 2 buffer tanks (approx. 110 l, PE) 1 NaCl tank (approx. 30 l, PE)
Membrane-Adsorption-Chromatography Modules	2 (separate or in line)
Temperature range	up to 50 °C
Pressure range	up to 3,5 bar
Volume flow (feed)	up to 300 l/h

Pumps

1 feed pump
3 dosing pumps (acid / lye / NaCl)

(The specified technical data are maximum values. They do not coincide all at the same time!)

SENSORS	MEASURING RANGE	QUANTITY
Pressure	0 - 4 bar	(2 pieces)
pH-measurement (batching tank)	pH-glas electrode	(1 piece)
Conductivity measurement (batching tank)	1 μ S/cm – 2 S/cm incl. temperature compensation	(1 piece)
Volume flow (feed) (magnetic-inductive flow meter)	0 – 2700 l/h	(1 piece)
Level sensor (batching tank)	0 – 0,1 bar	(1 piece)
Level measurement (max. or min.) (toggle switch)		(14 pieces)
Temperature (PT 100, batching tank)	0 – 100 °C	(1 piece)
Optek-sensor (concentrate) UV-measurement Conductivity measurement pH-measurement	280 nm 0 - 10 μ S/cm bis 0 – 850 mS/cm pH-glas electrode	(1 piece)

FIELD OF USE

Experiments to fractionate whey proteins from native whey

Experiments to selectively separate proteins from whey or other aqueous solutions

Optimization of process parameters for fractionation and selective separation

Piloting trials for industrial plants

Schematic view of the Membrane-Adsorption-Chromatography (MAC)

