

# Data Sheet Vessel

**3B3520 Media Hold Vessel 5 (Harvest + Filter Train Flush)**

**3 (rVlla-FP) / 3UB35 Media Hold Prod. Bioreactor 1**

**Version 04**

**Status: As Built**

This datasheet does also apply to:

3B4170

3B4140


Total number:


3

History:


Vers. Date

04.0	21.11.2017
03.0	25.10.2017
02.0	19.12.2016
01.0	08.12.2016

Function	Company	Name	Date	Signature
Author	M+W	<i>Alm</i>	21.11.2017	<i>Alm</i>
Review	<i>M+W</i>	<i>SML</i>	<i>27.11.2017</i>	<i>SML</i>
Approval				
<b>CSL Behring</b>			<b>M+W</b>	
<p><b>CSL Behring</b> Biotherapies for Life™</p> <p>CSL Behring Recombinant Facility AG Wankdorfstrasse 10 CH-3000 Bern 22 Switzerland</p>			<p> <b>M+W GROUP</b></p> <p>M+W Central Europe GmbH Lotterbergstr. 30 D-70499 Stuttgart Germany</p>	
Project Number CSL Behring <b>16004</b>			Project Number M+W <b>2304996</b>	
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Project <b>RCF Project Lengnau</b>			Document Type / Description <b>Data Sheet</b>	Page <b>1</b>

Project-No.		2304996		Data Sheet								
Code		NRCFF		Vessel								
Tag-No.		3B3520										
PFD-No.		PVF_B_03_0053		Building-No.		B		Process		3 (rVIIa-FP) / 3UB35 Media Hold Prod. Bioreactor 1		
P&ID -No.		PRI_B_03_0054		Level		20		Name		Media Hold Vessel 5 (Harvest + Filter Train Flush)		
Drawing-No.		115160		Room-No.		B_20_1018		Type		Vessel		
01		<b>General</b>								<b>Design Data</b>		
02	3	<b>Inquiry No. / Date</b>	N/A /		0		<b>Pressure Vessel Code</b>	AD2000; PED				
03	3	<b>Bid No. / Date</b>	401522 / 10.04.2017		0	v	<b>Inside Diameter</b>	2200	mm			
04	3	<b>Order No. / Date</b>	4500971529 / 27.04.2017		3	v	<b>Length w/o Support</b>	2672	mm			
05	3	<b>Standard / Regulation</b>	RS.00035 / RS.00046 / RS.00047		3	v	<b>Bottom Outlet Height</b>	909	mm			
06	3	<b>Inspection</b>	RS.00035 / RS.00046 / RS.00047		0		<b>Nominal volume</b>	7500	l			
07	3	<b>Manufacturer / Supplier</b>	SKRLJ d.o.o. / SKRLJ d.o.o.		3	v	<b>Total volume</b>	8890	l			
08	3	<b>Necessary Certificates</b>	RS.00035 / RS.00046 / RS.00047				<b>Design Temperature</b>					
09	3	<b>Documentation</b>	RS.00035 / RS.00046 / RS.00047		2	v	Inside	-10-150	°C			
10	0				2	v	Jacket (Heating / Cooling)	-10-150	°C			
11	0						<b>Design Pressure<sup>2</sup></b>					
12		<b>Operating Data</b>						0				
13	0	<b>Medium</b>	Process Media		0	v	Inside	-1 / 6	bar			
14	0	Characteristics	aqueous solution		0	v	Jacket (Heating / Cooling)	-1 / 10	bar			
15	3	<b>Working Volume min./max.</b>	680 - 7500	l	0	v	<b>Type of bottom</b>	dished end DIN 28011				
16	3	<b>Operating Temp. Min./max.</b>	19 - 23	°C			<b>Type of top</b>	dished end DIN 28011				
17	3	<b>Op. Pressure min./max.<sup>2</sup></b>	0 - 2,1	bar	3		<b>Wall Thickness</b>					
18	3	<b>Filling Rate min./max.</b>	N/A	m <sup>3</sup> /h	3		Top / Bottom / Cylinder	15 / 10 / 12	mm			
19	3	<b>Draining Rate min./max.</b>	N/A	m <sup>3</sup> /h	3		Heating-/ Cooling Jacket	3	mm			
20	0	<b>Density / Bulk Density at [T]</b>	1200	20 kg/m <sup>3</sup> °C	3		Inliner	N/A	mm			
21	3	<b>Specific Heat Capacity</b>		~4.2 kJ/kg K	0		Insulation / Insulation Jacket	3	mm			
22	0	<b>Dynamic Viscosity at [T]</b>	0.002	20 Pa s °C	3		<b>Corrosion Allowance</b>	0	mm			
23	0	<b>pH-Value min./max.</b>	1 - 14		0	v	<b>Welding Factor</b>	acc. PED				
24	0	<b>Flash Point</b>	N/A	°C	3		<b>Vessel Orientation</b>	vertical				
25	0	<b>Inertisation <sup>2</sup></b>	N/A	mbar	3		<b>Reinforcing Sheet(s)</b>	no				
26	0	<b>Cleaning in Place</b>	Yes		3		<b>Test press. in-/outside<sup>2</sup></b>	8.92 / 14.77	bar			
27	0	Medium	0.5M NaOH, 0.1M HNO <sub>3</sub>		3		<b>Gaskets / Type</b>	acc. pipe class				
28	0	Temperature	<=80 °C				<b>Heat Ex. Surface / Content</b>	N/A	m <sup>2</sup> / l			
29	0	<b>Sterilisation in Place</b>	Yes		3		<b>Weight of Vessel</b>					
30	0	Medium	pyrogen free steam				<b>Empty / Disaster</b>	3036 / 12178	kg			
31	0	Temperature	<135 °C		0		<b>Construction Details</b>					
32	0	<b>Heating-/Cooling Medium</b>	Tempering Media		3		<b>Heating / Cooling</b>	cylinder				
33	0	Inlet Temperature	14 °C				Type	coil				
34	0	Outlet Temperature	20 °C		0		<b>Support</b>					
35	0	Operating Pressure <sup>2</sup>	~3 bar				Type / No. / Norm	tubular legs / 3 /				
36	0	Density at [T]	1000	25 kg/m <sup>3</sup> °C	3		<b>Fixing</b>					
37	0	Specific Heat Capacity	4,182 kJ/kg K		3		Type / No. / Norm	lifting lugs / 3 /				
38	0	Dyn. Viscosity at [T]	0,001	25 Pa s °C	0			name plate / 1 /				
39	3	Thermal Output (max)	N/A kW		0			earthing Connector/ 1 /				
40	3	Thermal Input (max)	N/A kW		0			/ /				
41	3	<b>Heating-/ Cooling Rate</b>	N/A / N/A	°C/min	0		<b>Accessories</b>	/ /				
42	0	<b>Insulation</b>	yes		0		Type / No. / Norm	/ /				
43		<b>Materials</b>										
44	0	<b>Product Contacted Parts</b>	1.4539		0	v	<b>Agitator seal</b>					
45	0	d-Ferrite Content	Fe <3%		0	v	Arrangement	none				
46	3	Gaskets	EPDM peroxid cured		0	v	<b>Aseptic Design</b>	yes				
47	0	Sight Glasses	DIN 7080		0							
48	0	Inliner	N/A				<b>Surface Treatment</b>					
49	3	<b>Non Prod. Contacted Parts / Insulation Jacket</b>	ds/coil:1.4571 rest:1.4301				<b>Outer surface</b>					
50	0	Gaskets	Gylon		3		Surface finish	Scotch bride				
51	3	<b>Supports</b>	1.4301		2		Surface Roughness	RA <=1.2µm				
52	3	<b>Insulation</b>	Fabr. ISOVER, AGI Q 132			v	Welding Seam	polished eg. Scotch bride				
53	3	<b>Screws, Nuts, Bolts</b>	A2-70; A2-70		2	v	<b>Inner surface</b>					
54	3	<b>Exterior coating</b>			0	v	Surface finish	grinded				
55	3	Primer	N/A		0		Surface properties	RA <=0.6µm				
56	3	Final Coating	N/A		0		Welding Seam	grinded				
57	3											
58	0											
59		<b>Remarks</b>										
60		1. Lines marked with "v" contain process information										
61		2. Overpressure. Vacuum is marked with a negative sign.										
62												
63	3											
64	3											
65	3											


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Project-No.	2304996	<b>Data Sheet</b>			
Code	NRCFF				
Tag-No.	3B3520				
<b>Vessel</b>		Building-No.	B	Process	3 (rVIIa-FP) / 3UB35 Media Hold Prod. Bioreactor 1
PFD-No.	PVF_B_03_0053	Level	20	Name	Media Hold Vessel 5 (Harvest + Filter Train Flush)
P&ID -No.	PRI_B_03_0054	Room-No.	B_20_1018	Type	Vessel
Drawing-No.	115160				

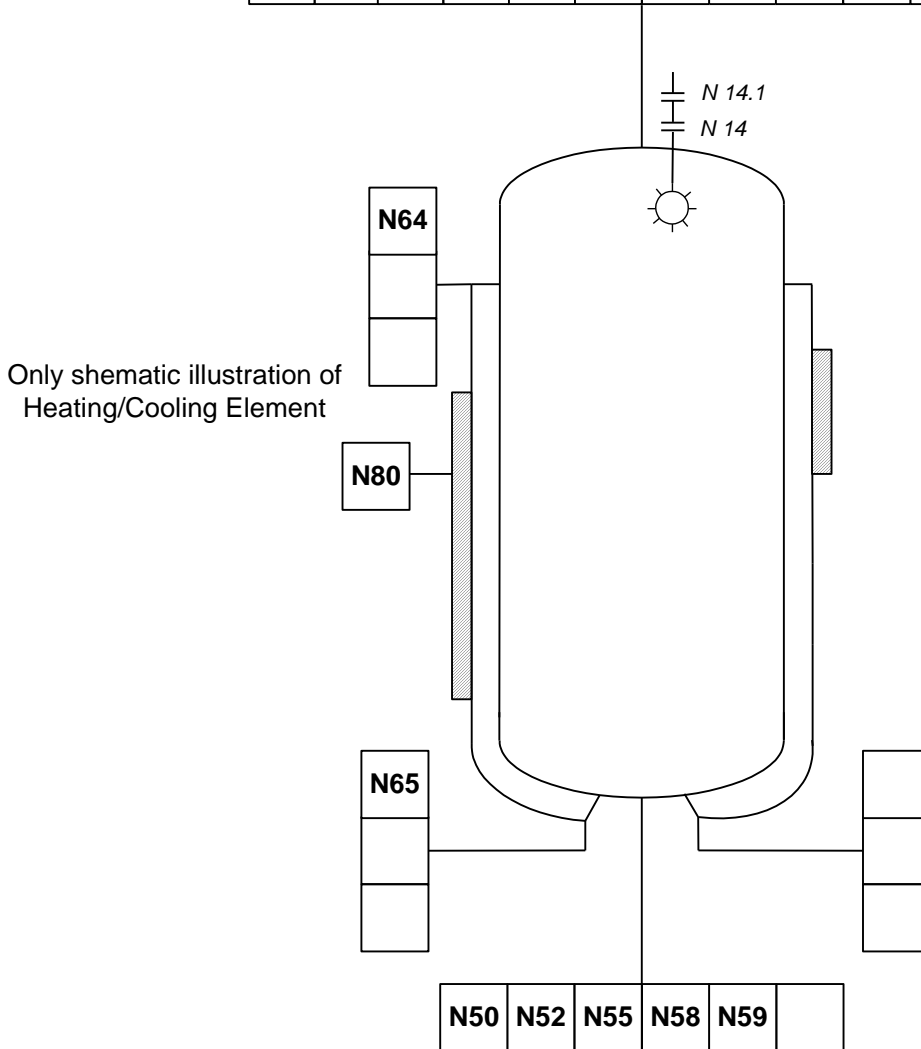
Rev	Table of Nozzles							
	Ident.	No.	DN	PN	Norm	Flange-/Nozzletype	Sealing Face	Service
1	N01	1	600			Zimmerlin lid	O-ring	0315 - Manhole with safety switch / indicator
3	N03	1	150		similar DIN 28117	aseptic block flange, radial	O-ring	0106 - Sight glass
3	N04	1	50		DIN 11864-3 BKS	Dim. DIN 11866-B	O-ring; Form A	0348 - Sight glass with light
3	N05	1	32		Dim. DIN 11866-B	Na-connect	Flat	0125 - Rupture disc
3	N07	1	B25			Neumo BioControl	O-ring	0142 - Pressure gauge
3	N08	1	B25			Neumo BioControl	O-ring	0142 - Pressure probe
4	N09	1	40		DIN 32676	Dim. DIN 11866-B	Flat	0344 - Filling level
3	N11	1	B25			Neumo BioControl	O-ring	0142 - Level switch
3	N12	1	40		DIN 11864-2 BF	Dim. DIN 11866-B	O-ring; Form A	0351 - Ventilation
4	N13	1	50		Dim. DIN 11866-B	Na-connect	Flat	0304 - Sampling (Spare port)
3	N14	1	100		DIN 11864-3-BKS	Dim. DIN 11866-B	O-ring; Form A	0350 - CIP 1 (vessel-connection)
3	N14.1	1	40		DIN 11864-3-BKS	Dim. DIN 11866-B	O-ring; Form A	0350 - CIP inlet 1
3	N15	1	100		DIN 11864-3-BKS	Dim. DIN 11866-B	O-ring; Form A	0350 - CIP 2 (vessel-connection)
3	N15.1	1	40		DIN 11864-3-BKS	Dim. DIN 11866-B	O-ring; Form A	0350 - CIP inlet 2
3	N16	1	100		DIN 11864-3-BKS	Dim. DIN 11866-B	O-ring; Form A	0350 - CIP 3 (vessel-connection)
3	N16.1	1	40		DIN 11864-3-BKS	Dim. DIN 11866-B	O-ring; Form A	0350 - CIP inlet 3
3	N19	1	65		DIN 11864-3-BKS	Dim. DIN 11866-B	O-ring; Form A	0316 - Inlet pipe (J-tube)
3	N19.1	1	32		DIN 11864-3-BKS	Dim. DIN 11866-B	O-ring; Form A	0316 - inlet pipe
1	N50	1	40		Südmo block flang	Type Südmo SVP	O-ring	0318 - Bottom outlet
3	N52	1	3/8"			Thermowell		0352 - Temperature measurement
3	N55	1	40		Dim. DIN 11866-B	Na-connect; Nova Septum	Flat	0304 - Sampling (5 port)
1	N58	1	G 1 1/4"		Ingold	25H7	O-ring	0330 - Spare (pH)
1	N59	1	B50			Neumo Biocontrol, radial	O-ring	0143 - Spare (conductivity)
3	N64	1	32	40	DIN EN 1092-1 11	welding neck flange	Form B1	Outlet Tempering Media
3	N65	1	32	40	DIN EN 1092-1 11	welding neck flange	Form B1	Inlet Tempering Media
1	N80	1	1/4"		supplier standard	socket with thread		0149 - testsocket insulation

Rev	Remarks Nozzles
0	Nozzle typical number: S-E-AT-XXXX(number in Service column)
0	
0	
0	
0	
0	

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Code	NRCFF					
Tag-No.	3B3520					
		<b>Vessel</b>				
PFD-No.	PVF_B_03_0053	Building-No.	B	Process	3 (rVIIa-FP) / 3UB35 Media Hold Prod. Bioreactor 1	
P&ID -No.	PRI_B_03_0054	Level	20	Name	Media Hold Vessel 5 (Harvest + Filter Train Flush)	
Drawing-No.	115160	Room-No.	B_20_1018	Type	Vessel	
<b>Sketch</b>						


											N 14.1	N 15.1	N 16.1	N 19.1
N01	N03	N04	N05	N07	N08	N09	N11	N12	N13	N14	N15	N16	N19	



**Drawing Rev. 02**

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Tag-No.	3B3520				
		<b>Vessel</b>			
PFD-No.	PVF_B_03_0053	Building-No.	B	Process	3 (rVIIa-FP) / 3UB35 Media Hold Prod. Bioreactor 1
P&ID -No.	PRI_B_03_0054	Level	2O	Name	Media Hold Vessel 5 (Harvest + Filter Train Flush)
Drawing-No.	115160	Room-No.	B_2O_1018	Type	Vessel
<b>Additional Information for Equivalent Equipment</b>					

Tag-No.	Description	Process	PFD-No./PID-No./ Drawing-No.	Building-No./ Level/Room-No.
3B4140	Buffer Hold Vessel 5 (C1 Reg. + Neutral.)	3 (rVIIa-FP) / 3UB41 Buffer Hold Chroma 1	PVF_B_03_0059 PRI_B_03_0074	B 1O B_1O_1033
3B4170	Buffer Hold Vessel 23 (C1 Wash 3)	3 (rVIIa-FP) / 3UB41 Buffer Hold Chroma 1	PVF_B_03_0068 PRI_B_03_0092	B 1O B_1O_1033