

Data Sheet Vessel

1B4110 Buffer Hold Vessel 2 (C1 Eq. + Pre/Post Load Wash) 1 (rVIII-SC) / 1UB41 Buffer Hold Chroma 1

Version 06

Status: As Built

This datasheet does also apply to:

2B4750

2B4700

1B4600

Total number:

8

1B4910


1B4610


1B4300

History:


Vers. Date

06.0	22.11.2017
05.0	23.10.2017
04.0	19.12.2016
03.0	08.12.2016
02.0	07.07.2016

Function	Company	Name	Date	Signature
Author	M+W	<i>Aku</i>	22.11.2017	<i>A. Kuhn</i>
Review	<i>M+W</i>	<i>S.M.</i>	<i>21.11.2017</i>	<i>S.M.</i>
Approval				
CSL Behring			M+W	
<p>CSL Behring Biotherapies for Life™</p> <p>CSL Behring Recombinant Facility AG Wankdorfstrasse 10 CH-3000 Bern 22 Switzerland</p>			<p> M+W GROUP</p> <p>M+W Central Europe GmbH Lotterbergstr. 30 D-70499 Stuttgart Germany</p>	
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Project RCF Project Lengnau			Document Type / Description Data Sheet	Page 1

Project-No.		2304996		Data Sheet									
Code		NRCFF		Vessel									
Tag-No.		1B4110											
PFD-No.		PVF_B_01_0060		Building-No.		B		Process		1 (rVIII-SC) / 1UB41 Buffer Hold Chroma 1			
P&ID -No.		PRI_B_01_0071		Level		10		Name		Buffer Hold Vessel 2 (C1 Eq. + Pre/Post Load Wash)			
Drawing-No.		E11047		Room-No.		B_10_2027		Type		Vessel			
01		General								Design Data			
02	5	Inquiry No. / Date		NA /		0		Pressure Vessel Code		AD2000; PED			
03	5	Bid No. / Date		0103705004 / 07.04.2017		3	v	Inside Diameter		1000	mm		
04	5	Order No. / Date		4500971482 / 27.04.2017		5	v	Length w/o Support		1807	mm		
05	5	Standard / Regulation		RS.00042 / RS.00043 / Rs.00044		5	v	Bottom Outlet Height		N/A	mm		
06	5	Inspection		RS.00042 / RS.00043 / Rs.00044		0		Nominal volume		1000	l		
07	5	Manufacturer / Supplier		KASAG / KASAG		5	v	Total volume		1295	l		
08	5	Necessary Certificates		RS.00042 / RS.00043 / Rs.00044				Design Temperature					
09	5	Documentation		RS.00042 / RS.00043 / Rs.00044		4	v	Inside		-10-150	°C		
10	0					4	v	Jacket (Heating / Cooling)		-10-150	°C		
11	0							Design Pressure²					
12		Operating Data						0	v	Inside		-1 / 6	bar
13	3	v	Medium		Process Media		0	v	Jacket (Heating / Cooling)		-1 / 10	bar	
14	3	v	Characteristics		aqueous solution		0	v	Type of bottom		dished end DIN 28011		
15	5	v	Working Volume min./max.		78,2 - 1008	l	5	v	Type of top		removeable, DIN 28011		
16	5	v	Operating Temp. Min./max.		19 - 23	°C			Wall Thickness				
17	5	v	Op. Pressure min./max.²		0 - 2,1	bar	5		Top / Bottom / Cylinder		6 / 6 / 5	mm	
18	5	v	Filling Rate min./max.		N/A	m ³ /h	5		Heating-/ Cooling Jacket		3	mm	
19	5	v	Draining Rate min./max.		N/A	m ³ /h	5		Inliner		N/A	mm	
20	3	v	Density / Bulk Density at [T]		1200	20 kg/m ³ °C	5		Insulation / Insulation Jacket		3	mm	
21	5	v	Specific Heat Capacity			~4.2 kJ/kg K	0		Corrosion Allowance		0	mm	
22	3	v	Dynamic Viscosity at [T]		0.002	20 Pa s °C	5		Welding Factor		acc. PED		
23	0	v	pH-Value min./max.		1 - 13,6		0	v	Vessel Orientation		vertical		
24	5	v	Flash Point		N/A	°C	5		Reinforcing Sheet(s)		no		
25	5	v	Inertisation ²		N/A	mbar	5		Test press. in-/outside²		8.9 / 16.2	bar	
26	0	v	Cleaning in Place		Yes		5		Gaskets / Type		acc. Pipe class		
27	0	v	Medium		0.5M NaOH, 0.1M HNO3		5		Heat Ex. Surface / Content		N/A	m ² / l	
28	0	v	Temperature		<=80	°C			Weight of Vessel				
29	0	v	Sterilisation in Place		Yes		5		Empty / Disaster		720 / 2075	kg	
30	0	v	Medium		pyrogen free steam				Construction Details				
31	0	v	Temperature		<135	°C	0		Heating / Cooling		cylinder		
32	0	v	Heating-/Cooling Medium		Tempering Media		5		Type		coil		
33	0	v	Inlet Temperature		14	°C			Support				
34	0	v	Outlet Temperature		20	°C	5		Type / No. / Norm		brackets / 4 /		
35	0	v	Operating Pressure ²		~3	bar			Fixing				
36	0	v	Density at [T]		1000	25 kg/m ³ °C	5		Type / No. / Norm		lifting lugs / 3 /		
37	0	v	Specific Heat Capacity		4,182	kJ/kg K	5		name plate / 1 /				
38	0	v	Dyn. Viscosity at [T]		0,001	25 Pa s °C	0		Earthing Connector/ 1 /				
39	5	v	Thermal Output (max)		N/A	kW	0		Accessories		/ /		
40	5	v	Thermal Input (max)		N/A	kW	0		Type / No. / Norm		/ /		
41	5	v	Heating-/ Cooling Rate		N/A / N/A	°C/min	0		Insulation		/ /		
42	0	v	Insulation		yes		0		Materials		/ /		
43			Materials						0				
44	0	v	Product Contacted Parts		1.4539		0	v	Agitator seal				
45	3	v	d-Ferrite Content		Fe <3%		0	v	Arrangement		none		
46	5	v	Gaskets		EPDM peroxid cured		0	v	Aseptic Design		yes		
47	0	v	Sight Glasses		DIN 7080		0		Surface Treatment				
48	0	v	Inliner		N/A				Outer surface				
49	5	v	Non Prod. Contacted Parts / Insulation Jacket		coil:1.4404 / 1.4435 rest:1.4301 / 1.4404		5		Surface finish		grinded		
50	5	v	Gaskets		N/A		0		Surface Roughness		RA <=1.2µm		
51	5	v	Supports		1.4301 / 1.4404		5		Welding Seam		grinded		
52	5	v	Insulation		Fabr. ISOVER, AGI Q132				Inner surface				
53	5	v	Screws, Nuts, Bolts		A4-70; A4		4	v	Surface finish		grinded		
54	5	v	Exterior coating				0	v	Surface properties		RA <=0.6µm		
55	5	v	Primer		N/A		0		Welding Seam		grinded		
56	5	v	Final Coating		N/A		0						
57	5	v											
58	0	v											
59			Remarks										
60			1. Lines marked with "v" contain process information										
61			2. Overpressure. Vacuum is marked with a negative sign.										
62													
63	5												
64	5												
65	5										Version 24b		


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Project-No.	2304996	Data Sheet				
Code	NRCFF					
Tag-No.	1B4110					
PFD-No.	PVF_B_01_0060	Building-No.	B	Process	1 (rVIII-SC) / 1UB41 Buffer Hold Chroma 1	
P&ID -No.	PRI_B_01_0071	Level	10	Name	Buffer Hold Vessel 2 (C1 Eq. + Pre/Post Load Wash)	
Drawing-No.	E11047	Room-No.	B_1O_2027	Type	Vessel	

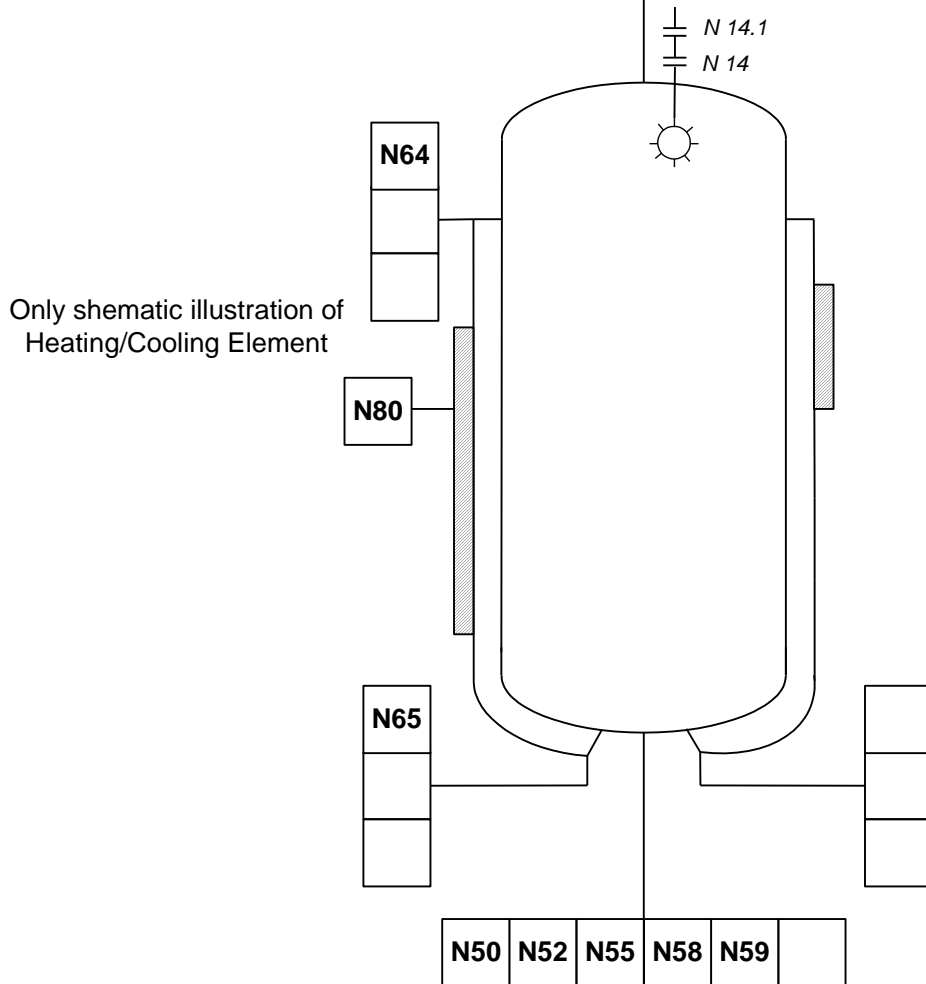
Rev	Table of Nozzles							
	Ident.	No.	DN	PN	Norm	Flange-/Nozzletype	Sealing Face	Service
5	N03	1	150		similar DIN 28117	aseptic block flange, radial	O-ring	0106 - Sight glass
5	N04	1	50		DIN 11864-3 BKS	Dim. DIN 11866-B	O-ring; Form A	0348 - Sight glass with light
5	N05	1	32		Dim. DIN 11866-B	Na-connect	Flat	0125 - Rupture disc
5	N07	1	B25			Neumo BioControl	O-ring	0142 - Pressure gauge
5	N08	1	B25			Neumo BioControl	O-ring	0142 - Pressure probe
6	N09	1	40		DIN 32676	Dim. DIN 11866-B	Flat	0344 - Filling level
5	N11	1	B25			Neumo BioControl	O-ring	0142 - Level switch
5	N12	1	15		DIN 11864-3 BKS	Dim. DIN 11866-B	O-ring; Form A	0351 - Ventilation
6	N13	1	50		Dim. DIN 11866-B	Na-connect	Flat	0304 - Sampling (Spare port)
5	N14	1	65		DIN 11864-3 BKS	Dim. DIN 11866-B	O-ring; Form A	0350 - CIP 1 (vessel-connection)
5	N14.1	1	25		DIN 11864-3 BKS	Dim. DIN 11866-B	O-ring; Form A	0350 - CIP inlet 1
5	N15	1	65		DIN 11864-3 BKS	Dim. DIN 11866-B	O-ring; Form A	0350 - CIP 2 (vessel-connection)
5	N15.1	1	25		DIN 11864-3 BKS	Dim. DIN 11866-B	O-ring; Form A	0350 - CIP inlet 2
5	N19	1	65		DIN 11864-3 BKS	Dim. DIN 11866-B	O-ring; Form A	0316 - Inlet pipe (J-tube)
5	N19.1	1	20"		DIN 11864-3 BKS	Dim. DIN 11866-B	O-ring; Form A	0316 - inlet pipe
1	N50	1	25		Südmo block flang	Type Südmo SVP	O-ring	0318 - Bottom outlet
5	N52	1	3/8"			Thermowell		0352 - Temperature measurement
5	N55	1	40		Dim. DIN 11866-B	Na-connect; Nova Septum	Flat	0304 - Sampling (5 port)
3	N58	1	G 1 1/4"		Ingold	25H7	O-ring	0330 - Spare (pH)
5	N59	1	B50			Neumo Biocontrol	O-ring	0142 - Spare (conductivity)
5	N64	1	20	40	DIN EN 1092-1 11	welding neck flange	Form B1	Outlet Tempering Media
5	N65	1	20	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)
5	*DN25 for factor IX/VII vessels
0	
0	
0	
0	

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Code	NRCFF					
Tag-No.	1B4110					
		Vessel				
PFD-No.	PVF_B_01_0060	Building-No.	B	Process	1 (rVIII-SC) / 1UB41 Buffer Hold Chroma 1	
P&ID -No.	PRI_B_01_0071	Level	10	Name	Buffer Hold Vessel 2 (C1 Eq. + Pre/Post Load Wash)	
Drawing-No.	E11047	Room-No.	B_10_2027	Type	Vessel	
Sketch						


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



Drawing Rev. 01

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Code	NRCFF					
Tag-No.	1B4110					
Vessel						
PFD-No.	PVF_B_01_0060	Building-No.	B	Process	1 (rVIII-SC) / 1UB41 Buffer Hold Chroma 1	
P&ID -No.	PRI_B_01_0071	Level	1O	Name	Buffer Hold Vessel 2 (C1 Eq. + Pre/Post Load Wash)	
Drawing-No.	E11047	Room-No.	B_1O_2027	Type	Vessel	
Additional Information for Equivalent Equipment						

Tag-No.	Description	Process	PFD-No./PID-No./ Drawing-No.	Building-No./ Level/Room-No.
1B4300	Buffer Hold Vessel 6 (Filter Eq+Displacem.+C2 El.)	1 (rVIII-SC) / 1UB43 Buffer Hold BDI Pooling	PVF_B_01_0063 PRI_B_01_0075 E11048	B 1O B_1O_2027
1B4500	Buffer Hold Vessel 7 (C2 Equilibration)	1 (rVIII-SC) / 1UB45 Buffer Hold Chroma 2	PVF_B_01_0064 PRI_B_01_0076 E11050	B 1O B_1O_2027
1B4600	Buffer Hold Vessel 10 (C3/C4 Flush + HETP 1)	1 (rVIII-SC) / 1UB46 Buffer Hold Chroma 3	PVF_B_01_0066 PRI_B_01_0077 E11048	B 1O B_1O_2027
1B4610	Buffer Hold Vessel 11 (C3/C4 Eq+Post Load Wash)	1 (rVIII-SC) / 1UB46 Buffer Hold Chroma 3	PVF_B_01_0066 PRI_B_01_0078 E11050	B 1O B_1O_2027
1B4910	Buffer Hold Vessel 13 (C5 Equilibration + Elution)	1 (rVIII-SC) / 1UB49 Buffer Hold Chroma 5	PVF_B_01_0067 PRI_B_01_0080 E11048	B 1O B_1O_2027
2B4700	Buffer Hold Vessel 19 (C3 Eluate 2. Dilution)	2 (rIX-FP) / 2UB47 Buffer Hold Chroma 4	PVF_B_02_0066 PRI_B_02_0087 E11049	B 1O B_1O_2020
2B4750	Buffer Hold Vessel 24 (C4 Sanitization)	2 (rIX-FP) / 2UB47 Buffer Hold Chroma 4	PVF_B_02_0068 PRI_B_02_0092 E11049	B 1O B_1O_2020