

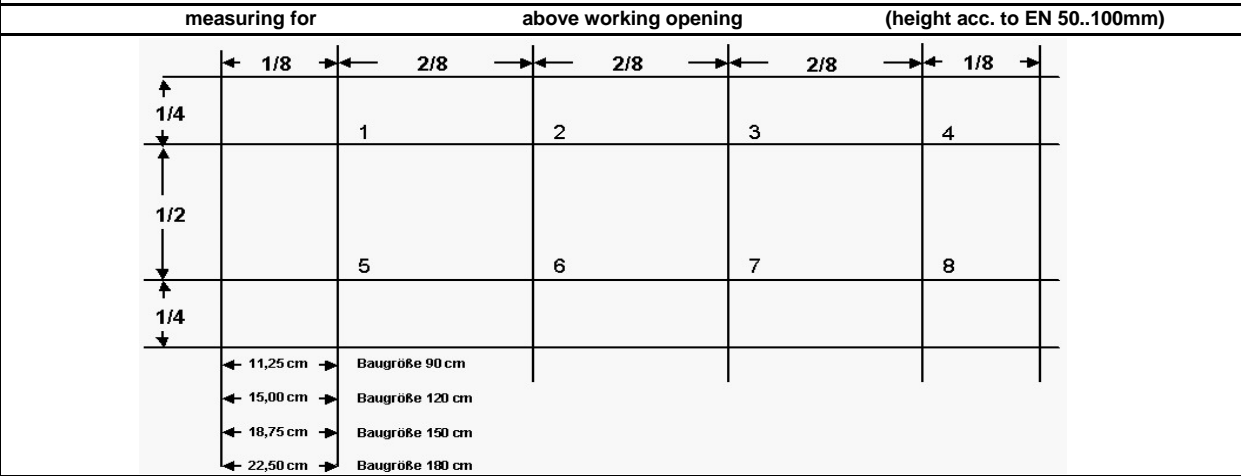
Validation Report

Instrument Location S-A-LE BV		Customer Contact <i>Name:</i> Kerkdijk Henk <i>Phone:</i> +31 6 53198879 <i>E-Mail:</i> info@s-a-le.nl	
De Stoven 22 7206 AX Zutphen NL		Floor / Building / Room <i>Floor:</i> <i>Building:</i> ground fl. <i>Room:</i>	
<i>Ticket Type:</i> Service Request <i>Contract No.:</i> <i>Purchase Order No.</i> Henk		<i>Service Engineer</i> Twan van de Ven <i>Purchase Order Date</i> 22/09/2023	
<i>Description</i> MSC-ADVANTAGE 1.2 230V 50HZ <i>Material No.:</i> 51025411 <i>Tech. ID:</i> <i>Installation Date:</i> 28/11/2022		<i>Serial No.:</i> 42594916 <i>Manufacturer SN:</i> ##### <i>Inventory No.:</i>	
Decontamination filled in		Yes: <input type="checkbox"/>	Not required: <input type="checkbox"/>
installation	<input type="checkbox"/>	maintenance	<input checked="" type="checkbox"/>
Description		tested / remarks	
		n.a.	
Boards, relays, connections, wiring	check	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Function test alarm	check	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Flow indicators / sensors	check	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Light workspace	check	<input type="checkbox"/>	<input checked="" type="checkbox"/>
UV-light	check	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fan day-/nightfunction	check	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front window	check	<input checked="" type="checkbox"/>	<input type="checkbox"/>
INFLOW VELOCITY TEST / air inflow velocity test (personal protection)			
<input type="checkbox"/> METHOD 1: Measuring air speed at exhaust filter front panel in working position			
Record Front opening width		mm	1
Record normal workheight of front panel		mm	2
Mean air speed related to height of working opening acc. to EN 12469		Average inflow velocity = 0.00 m/s	
<input checked="" type="checkbox"/> METHOD 2: Measuring air speed at reduced front panel			
Record Front opening width	1200	mm	
Record normal workheight of front panel	200	mm	Reduction Factor = 2.50
Front aperture reduced to	80	mm	
1	1.20	m/s	2
2	1.26	m/s	3
3	1.26	m/s	4
4	1.16	m/s	5
5	1.18	m/s	6
Mean air speed related to height of working opening acc. to EN 12469		Average inflow velocity = 0.48 m/s	
<input type="checkbox"/> METHOD 3: Measuring air speed in the work aperture			
Record Front opening width		mm	
Record normal workheight of front panel		mm	
		Left side	
		Middle	
		Right side	
		1	
		2	
		3	
		4	
		5	
		6	
		7	
		8	
		9	
Mean air speed related to height of working opening acc. to EN 12469		Average inflow velocity = 0.00 m/s	
Average value inflow. EN 12469:	The mean airflow velocity inward of the used method through the working aperture shall be no less than 0.40 m/s.		PASS

Validation report - BSC Type II

DOWNFLOW VELOCITY TEST / Low turbulence repression flow (product protection)

DOWNFLOW VELOCITY target value acc. to Standard EN12469:	Minimum average downflow velocity authorized = 0.25 m/s
	Maximum average downflow velocity authorized = 0.50 m/s
	No individual measurement should differ from the mean by more than 20%.



testing grid	1	0.34	m/s	2	0.32	m/s	3	0.33	m/s	4	0.35	m/s
measuring points	5	0.33	m/s	6	0.31	m/s	7	0.32	m/s	8	0.35	m/s

Min. downflow velocity authorized	0.25	m/s	Average down flow velocity measured	0.33	m/s	PASS
Max. downflow velocity authorized	0.50	m/s	Min. down flow velocity measured	0.31	m/s	PASS
			Max. down flow velocity measured	0.35	m/s	PASS

HEPA-filter integrity test	Penetration	Aerosol concentration 10µg/l			
Main filter: Efficiency > 99,999%	< 0,01 %	PASS	<input type="checkbox"/>	FAIL	<input type="checkbox"/>
Exhaust filter: Efficiency > 99,999%	< 0,01 %	PASS	<input type="checkbox"/>	FAIL	<input type="checkbox"/>
Prefilter: Efficiency > 99,99%	H14 < 0.01% <input type="checkbox"/>	H13 < 0.1% <input type="checkbox"/>	N.A.	<input type="checkbox"/>	PASS <input type="checkbox"/> FAIL <input type="checkbox"/>

Smoke visualization test					
Front aperture:	smoke should be inward over the whole area	PASS	<input checked="" type="checkbox"/>	FAIL	<input type="checkbox"/>
Work surface:	smoke should go downward without undue turbulence	PASS	<input checked="" type="checkbox"/>	FAIL	<input type="checkbox"/>

measuring equipment data:				
description:	Instrument No.:	Last calibration:	Next calibration:	Calibration label:
Anemo meter 9535	T95352109008	01 April 2023	01 April 2024	WA2317673

Protective Conductor Resistance R _{SL} < 0.3Ω	Check	<input checked="" type="checkbox"/>
Insulation Resistance R _{ISO} > 1.0MΩ	Check	<input checked="" type="checkbox"/>
Equivalent Leakage current I _{EA} < 3.5mA	Check	<input checked="" type="checkbox"/>
Main Voltage U _{NETZ}	229 V~	<input checked="" type="checkbox"/>

Remarks: Had to recalibrated the Biosafety cabinet.
 There is no light fitted in this cabinet.
 Downflow 63.0 % inflow 54,0 % downflow low 52,0 % inflow low 48 %

Date / Name Field Service Engineer 10/04/2023 Twan van de Ven	The microbiological safety cabinet meets the required standard	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	--	---