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CLEMCO®
INTERNATIONAL

OWNER'S MANUAL

Pressure Blast Cabinet

Type series PULSAR (III, VI, VI+, VIII and VIII+)

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1 Abbreviations, definitions, symbols and icons

	Risk of injury! Connect electric circuit points only by authorized electrician		Electrostatic strokes! Ground!
	Noise > 85dB(A)! Wear ear protection		Explosion hazard caused by dust! Ground!
	Explosion hazard! Connect only max. admitted pressure.		Risk of injury! Discharge completely pressure during maintenance jobs.

2 Product description

2.1 Conventional utilization and restrictions

	PULSAR III	PULSAR VI	PULSAR VIII	PULSAR VI+	PULSAR VIII+
Max. carrying capacitance steel grating	1000 N	1000 N	1000 N	1000 N	1000 N
Max. carrying capacitance with wrack	2000 N	2000 N	2000 N	2000 N	2000 N
Operating time	< 4h / day			Continuaous operation	
Basic parameters	See yellow cover patch				

Blast cabinets of the „Pulsar series“ without further electrical drives do not have own potential ignition sources in critical areas. That is why they do not fall in the coverage of the ATEX code. (please though see 2.2)

2.2 No conventional utilisation – Warnings for misuse

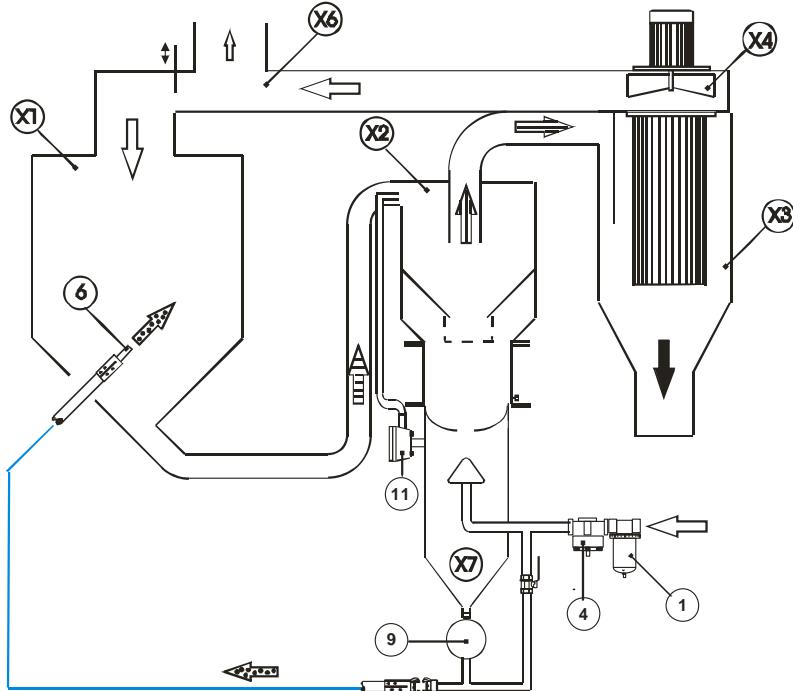
Utilization is interdicted:

As a blow –off cabinet in use of explosive and/or harmful solvents

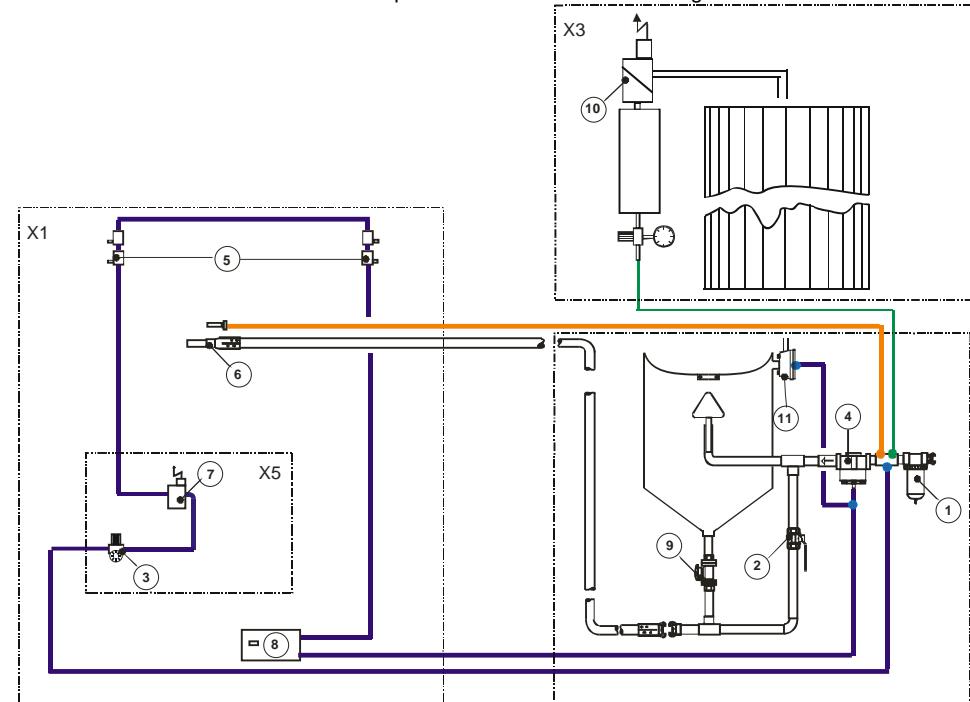
- in explosion hazard zones
- for blasting parts, where hazardous materials were released
 - o by explosion hazards
 - o which where not retained enough by the dust collector
 - o which causes damages caused to somebodys health during a defectuous dust collector

2.3 Operating mode of the complete system

Abrasiv circuit flow - Basic principle

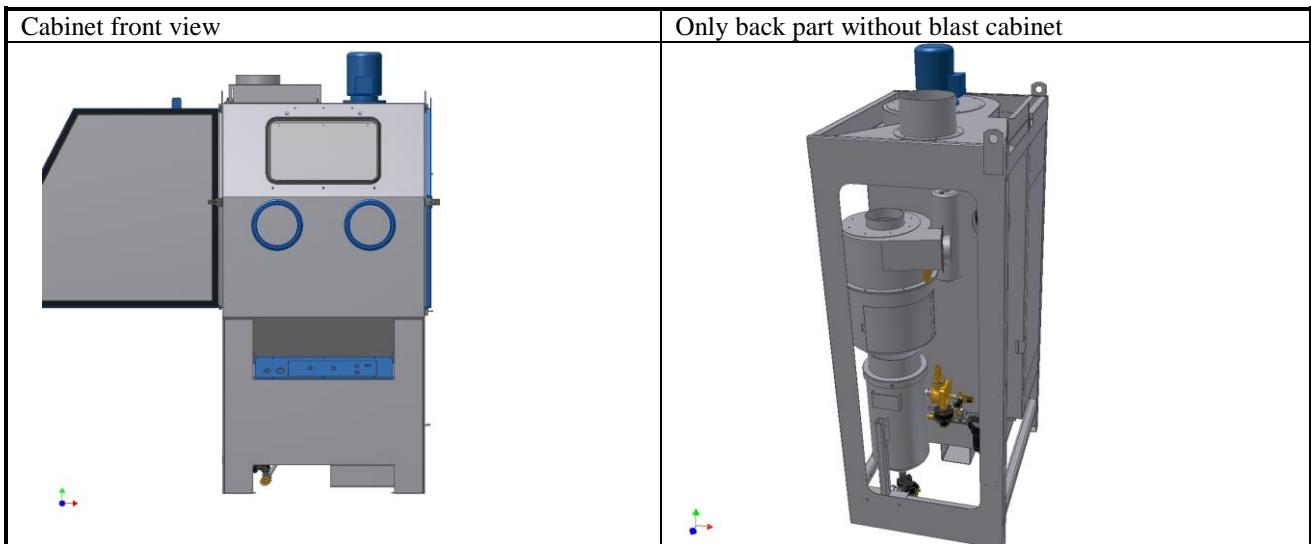


Pneumatic flow scheme - colours of pneumatic hoses are not binding



	Pure air		Foot pedal 3/2-way solenoid valve
	Abrasiv, dust and air		Manual abrasive metering valve
	Abrasive and air		Diaphragm valve /cleaning
	Dust and air		Outlet valve
	Dust	X1	Blast cabinet
1	Moisture separator, dust collector	X2	Reclaimer
2	Ball valve	X3	Cartridge dust collector
3	Pilot regulator	X4	Exhaust muffler
4	Pressure regulator auch Einlaßventil	X5	E-box
5	Pneumatic door interlock - 3/2-way solenoid valve	X6	Connection channel between fan and blast cabinet *1)
6	Nozzle	X7	Blast machine
7	3/2-way solenoid valve		

2.4 Description



2.4.1 Media-recovery system (Reclaimer)

- Cyclon principle
- Compartmentation of:
 - o Dust in dust collector
 - o Good media in circuit
 - o Coarse impurities in screen

2.4.2 Blast machine

- Volume:
 - o Pulsar III : 20 l
 - o Pulsar VI, VI +, VIII, VIII+ : 40 l
- Media metering valve: manual
- Controlled over foot pedal

2.4.3 Dust collector cartridge

- ⇒ automatically dedusting trough air pulse with backlash
- ⇒ Pulse interval : ca. 40..60 s
- ⇒ Pulse duration : ca. 500 ms
- ⇒ Backlash: ca. 5min
- ⇒ exchangeable cartridge.
- ⇒ Dust container.

2.4.4 Operating elements

	where	notes /functions
Pressure regulation blasting	Control box	2 to 7 bar
Dedusting filter cartridge	Pressure regulator on air balance vessel – Backside of blast cabinet	Preference pressure: 5 bar
ON/OFF	Control box	Activating: - Control circuit -Fan -Light -Filter cartridge dedusting function (OFF - backlash is not deactivated)
Emergency STOP	Control box	Deactivating electrical supply

2.5 Energy consumption

- air consumption: see yellow cover sheet

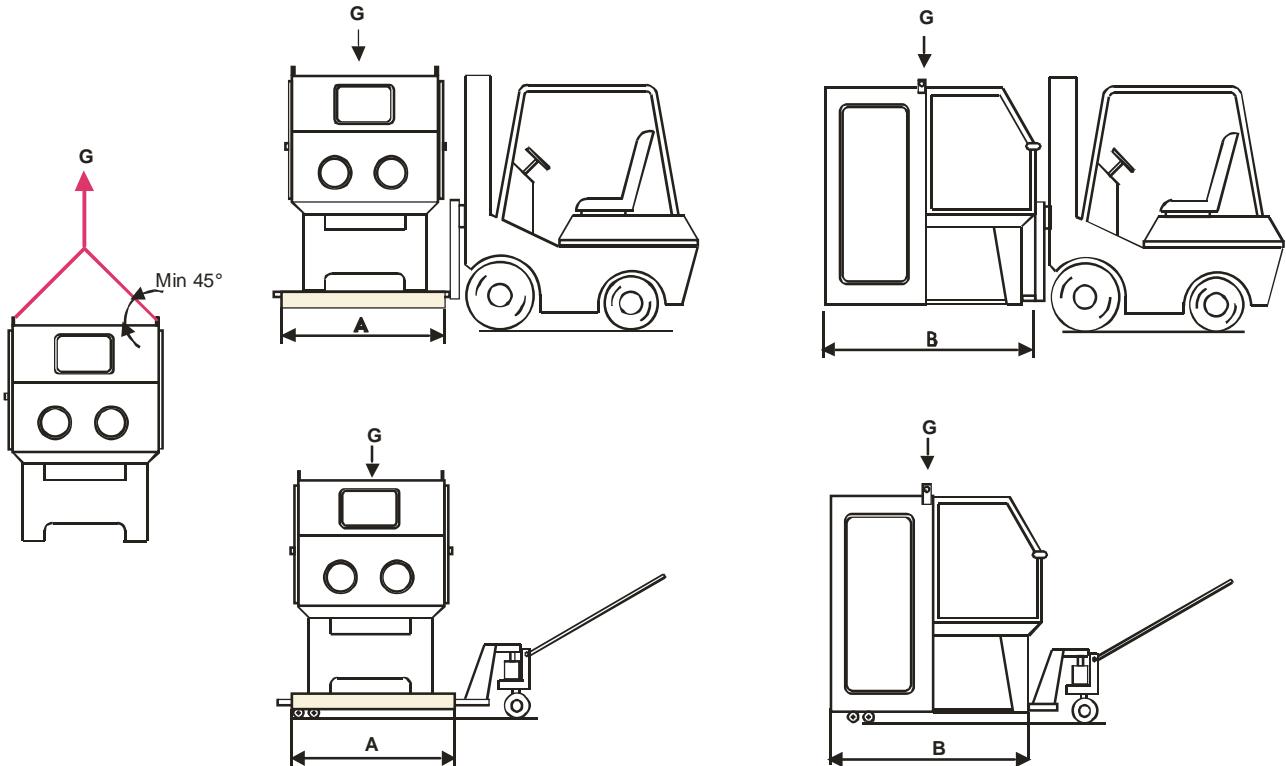
- electrical connection: seemachine shield

2.6 Emissions

See yellow cover sheet

3 Set-up for initial installation

3.1 Carriage / Handling of cargo



	Weight		A (mm)	B(mm)
Pulsar III Pressure	4000 N	(400 kg)	1100	1700
Pulsar VI Pressure	4600 N	(460 kg)	1450	1900
Pulsar VI+ Pressure	4800 N	(480 kg)	1450	1900
Pulsar VIII Pressure	4800 N	(480 kg)	1450	2200
Pulsar VIII+ Pressure	5000 N	(500 kg)	1450	2200

3.2 Unpacking and disposing the packing material

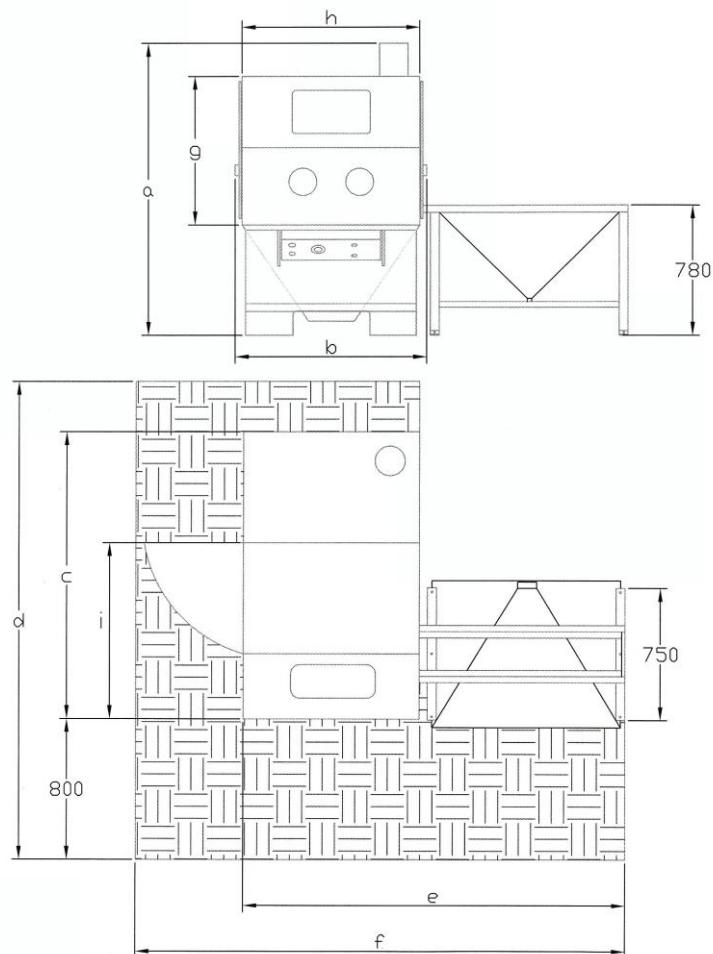
- Pallet: Wooden pallets
- Plastic film :

3.3 Requirements

- basic allowance: see yellow cover sheet

- Required space:

Dimensions (± 10 mm)	Model				
	PULSAR III	PULSAR VI	PULSAR VI+	PULSAR VIII	PULSAR VIII+
a	2010	2090	2090	2090	2090
c	1640	1855	1970	2115	2230
d during blasting	2490	2705	2820	2965	3080
d during repairing	3040	3255	3370	3515	3630
e	2200	2570	2570	2570	2570
f	3050	3520	3520	3520	3520



3.4 Set-up, assembling and operation checkout

<i>Cabinet set-up.</i>	<p>-Requirements: see yellow cover sheet -Bracing in the floor not necessary</p>	
	 Warning	Warning! Explosion hazard! Connect only max. admitted pressure
<i>Air supply</i>	<p>- max. 7 bar - by higher pressures install pressure regulator and safety valve between cabinet and air supply -air hose between air supply and cabinet: + Inner diameter : min 19 mm + Length: max. 10m</p>	
<i>Filter cartridge dedusting</i>	Adjust pressure regulator for dedusting to 5 bar	
	 Warning	Warning! Risk of injury! Connect electric circuit points only by authorized electrician.
	 Warning	Warning! Explosion hazard caused by dust! Ground!
	 Caution	Caution! Risk of injury! Ground!
<i>Electrical connection and grounding</i>	<p>-16A Euro plug connector -Cabinet grounding - min 10 mm² - earth screw in stock, ground wire etc. no shipment</p>	
	 Caution	Caution! Noise > 80dB(A) Wear ear protection!
<i>Operation checkout without media</i>	<p>Close the doors. Switch-on electricity (green push button). Control the following: -Is lighting on?</p>	

	<ul style="list-style-type: none"> -Is the fan motor starting?.Turns the motor in direction of the arrow? Otherwise reverse the polarity. -Is dedusting pulse for cartridge filter aktiv ? (Interval. ca 40 s) -Take the nozzle in your hand and press the foot pedal.. Is the blast process starting? -Step on the foot pedal und open left resp. right door (2. person. Is the blast process stopping? Test cabinet with media, if no irregularities can be detected. Otherwise remedy errors. Therefor see section 6.
<i>Media loading</i>	<ul style="list-style-type: none"> - Exhauster off. - add media slowly into reclaimer hopper through the reclaimer door (blast pot). <p>Media capacity (initial fill)</p> <ul style="list-style-type: none"> +Pulsar III pressure : 10 l +Pulsar VI pressure, VI +pressure, VIII pressure, VIII+pressure : 20 l
<i>Operation checkout with media</i>	<ul style="list-style-type: none"> -Close doors. - adjust blast pressure. -Grask firmly nozzle and hold it in direction grate. Step on the foot pedal → Blast process starts Check, if dust passes of (second. person). Critical zones: <ul style="list-style-type: none"> -Doors -suction hose connections -Connections dust collector and dust container. Leak tightness can be remarked only during dedusting.

4 Instruction handbook

4.1 Set up and operation, Shut down

<i>Turn on air supply</i>	
<i>Adjust blast pressure</i>	
<i>Switch on electricity</i>	Green push button
<i>Load parts to be blasted into the cabinet</i>	Close doors
<i>Blasting</i>	Grask firmly blast gun/nozzle and step on the foot pedal
<i>Blow off media</i>	Clen parts with blow off gun
<i>Disconnect electricity</i>	<ul style="list-style-type: none"> - Red push button - Dedusting process works after for ca. 5 min
<i>Disconnect air supply</i>	

4.2 Emergency stop

<i>Push emergency stop button</i>	Electrical supply is disconnected, dedusting too
<i>-depressurizing the installation</i>	see 4.4.1
Clarification of causation	see 6.

4.3 Shut down by longer interruption of work or moving the cabinet

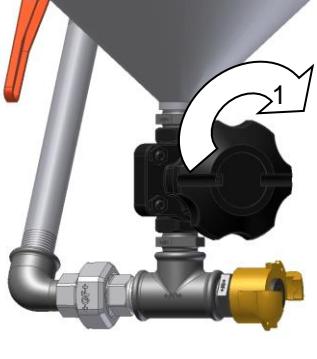
<i>Remove media</i>	see 4.4.4.
<i>Disconnect electricity</i>	Authorized electrician
<i>Depressurize installation</i>	see 4.4.1.

4.4 Special procedures

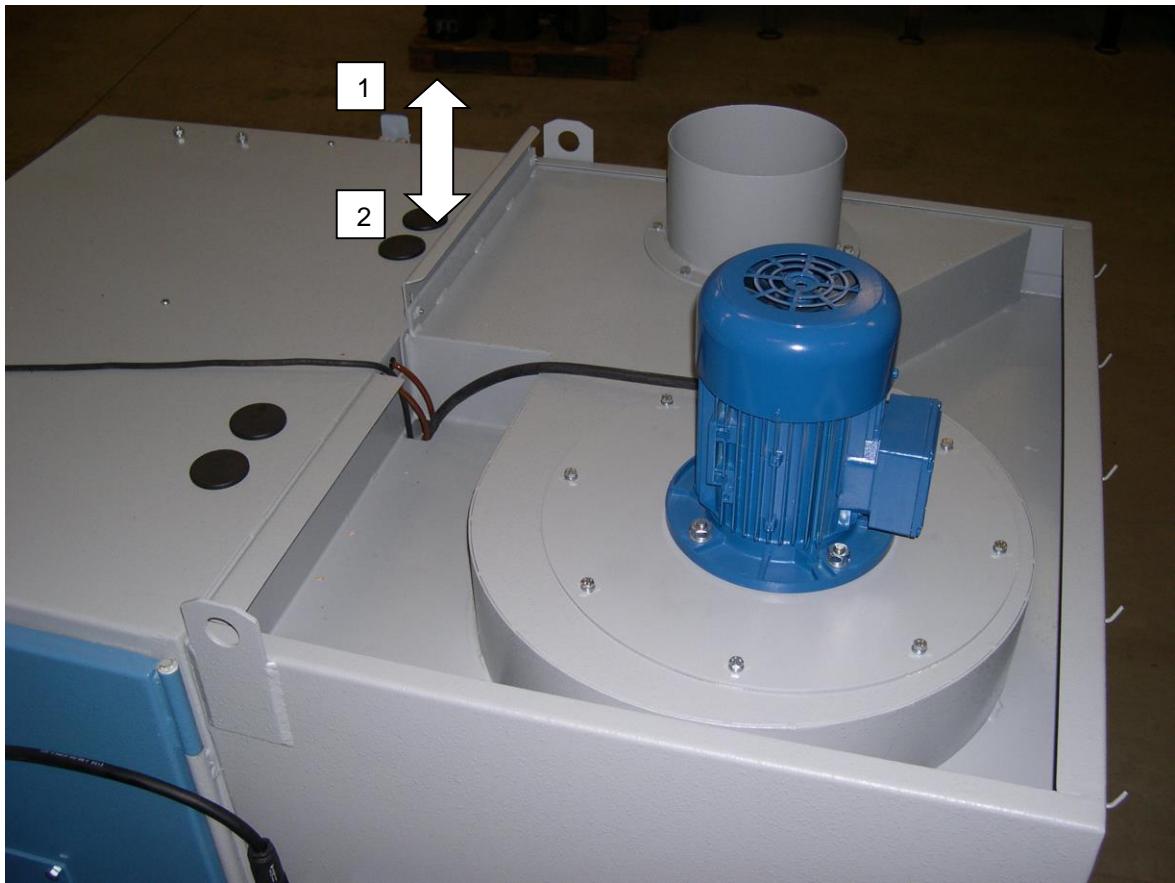
4.4.1 Bleed installation

<i>Close external air supply</i>		Depressurize over drain screw moisture separator
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4.4.2 Adjust media / air mixture

	<ul style="list-style-type: none">- Close media metering valve on the blast machine (direction 1)- open step by step; jet ist ok when the blast media comes out the nozzle as a light mist
---	---

4.4.3 Negative pressure, view, media consumption and conveyance



Damper	Negative pressure	View	Media exhausting / Consumption	Media suction
1	lower	better	higher	better
2	higher	worser	lower	worser

4.4.4 Media unloading

Turn on exhauster	Green push button
Unloading the blast pot	<ul style="list-style-type: none"> - Close choke valve on the blast pot - fully open media metering valve (turn fully left) - Blasting pressure: should be reduced to low pressure - unscrew nozzle and nozzle holder - put a container such as a bucket on the cabinet grating - hold hose into the container - press foot pdeal → direct media flow into the container
Clearing cabinet	<ul style="list-style-type: none"> -closed doors -exhauster is working -with blow off nozzle
Unloading the reclaimer	-open door and remove media into the hopper
Unloading blast pot again	-only residues

4.4.5 Pulsing (cleaning) dust collector cartridge / replace cartridge / disposal of residues

Replace cartridge	<ul style="list-style-type: none"> - pulse filter cartridge two times - start again cabinet and turn off after more than 2min → + ca. 5 minutes dedusting pulse - push emergency stop - close air supply - depressurize installation (see 4.4.1) - unscrew filter cover - pull a (≥ 120 l) plastic bag over the filter cartridge - unscrew the nuts on the flange and pull out the filtercartridge with the plastic bag. - screw the new filter cartridge and take care of the position of the seal kit. - Seal dust collector cover
Empty dust container	<ul style="list-style-type: none"> -release the dust container from the cover <p>WARNING! If toxic residues, dispose dust as hazardous waste!</p>

4.4.6 Window replacement

	<table border="1"> <thead> <tr> <th>No.:</th><th>Description</th></tr> </thead> <tbody> <tr> <td>1</td><td>Filler strip</td></tr> <tr> <td>2</td><td>molding</td></tr> <tr> <td>3</td><td>Place for filler strip</td></tr> <tr> <td>4</td><td>Cabinet wall (fits into narrow slot)</td></tr> <tr> <td>5</td><td>Window tool</td></tr> <tr> <td>6</td><td>Filler strip</td></tr> <tr> <td>7</td><td>window (fits into expanded slot)</td></tr> </tbody> </table>	No.:	Description	1	Filler strip	2	molding	3	Place for filler strip	4	Cabinet wall (fits into narrow slot)	5	Window tool	6	Filler strip	7	window (fits into expanded slot)
No.:	Description																
1	Filler strip																
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3	Place for filler strip																
4	Cabinet wall (fits into narrow slot)																
5	Window tool																
6	Filler strip																
7	window (fits into expanded slot)																

Pull filler strip from the window molding	
Remove window	Push the window from the cabinet inside
Install a new window molding	Strip channel facing the front of the cabinetg
Install window	Push into the slot
Thread filler strip	With installation tool

4.4.7 Adjust door safety interlock

Nr:	Description
1	Door safety interlock
2	Nut for dcrew adjusting
3	Actuating screw for safety interlock
4	Cabinet door

5 Maintenance and cleanse

5.1 Preface

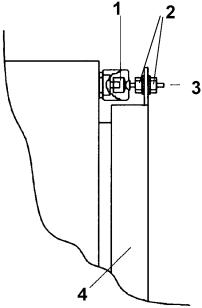
During operation the cabinets are exposed to wear. In order to ensure safe operation and high efficiency the blast machines should be maintained regularly.

	 Warning	Warning! Risk of injuri! Discharge completely pressure during maintenance jobs. (see 4.4.1)
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5.2 If required

	Check and if necessary. replace /cleanse
<i>View Window</i>	-cover lenses -if necessary window glass – see 4.4.6
<i>gloves.</i>	

5.3 after max. 8 h of blasting

	Check and if necessary. replace /cleanse
<i>Door interlock</i>	<p>-Open doors</p> <p>- press pin (1). It has to return from alone.</p> 
<i>Empty dust container.</i>	- could be necessary already after one hour
<i>Media recovery system (Reclaimer).</i>	-empty screen → Turn off exhauster. This may be necessary more often - screen magnet .
<i>Nozzle and nozzle holder</i>	Check gasket for wear and replace if it's necessary

5.4 After max 50 h of blasting

	Check and if necessary. replace /cleanse
(1) Blast gun and nozzle	Nozzle gasket.
(2) Moisture separator.	Clean filter and sight glass with soap and warm water
(3) Air hoses and blast hoses.	<p>- gaskets of couplings for wear</p> <p>-blast hose by hand for soft spots</p>
(4) Blast pot	<p>- pop up valve for wear by hand</p> <p>-Verschleiß Verschlußkegel durch Abtasten mit Fingern überprüfen</p>

5.5 After max 150 h of blasting

(1) Gasket on cabinet doors.	
(2) Filter cartridge.	- see 4.4.5

5.6 After other periods of time

	replace (even without wear) after maximal
Blsat hoses	6 years
Remote control hoses	6 years
Air hoses – external air supply	6 years
O-rings	5 years
Pop up valve (blast pot)	5 years
Gaskets	5 years

6 Troubleshooting

Problem	Probable cause	Remedy
(1) Poor visibility.	Exhaust motor does not rotate.	

	Slide damper in false position	See 4.4.3
	Dirty filter cartridge.	Blow off filter cartridge. replace (see 4.4.5).
	Exhaust motor rotates in the wrong direction.	Reverse polarity (only through licensed electrician).
	Blast media breaks down rapidly and develops dust	- lower blast pressure - other media..
	Blocked hose between blast cabinet and reclaimer	Check and if necessary disassemble hose and remove dust and media. Blockage is not the real cause.
	Negative pressure.	Check the following components: - Reclaimer door open or leaky. - Test the connections of hose for leaks - Suction hoses for wear. - Dust leaking from dust container
(2) Abnormally high media consumption.	Reclaimer door open or leaky.	Replace gasket.
	To fine or lightweight media.	Install and adjust supplementary a Vortex cylinder.
	Negative pressure too high	See 4.4.3
(3) Poor cleaning rate.	Not enough blast media in circuit.	Check and if necessary refill.
	Media metering valve is adjusted incorrect	A new adjustment is necessary (see 4.4.2).
	Reduced air-pressure	- Check air supply - If the static pressure decreases during blasting, the following components should be checked : + moisture separator + pressure regulator + nozzle
	Blocked blast hose or gun / nozzle.	- Push nozzle against an elastic object (for example rubber plate) and step on the foot pedal. - Disassembly hose or gun and cleanse. - Search after the cause of blockage: ⇒ Missing or overfilled screen in the reclaimer. ⇒ Incorrectly adjusted metering valve. ⇒ Too heavy blast media.
	Worn nozzle	-nozzle
	Moist blast media.	- Frequent bridging or blockage in the media metering valve can be caused by moist blast media. Following reasons could be possible: ⇒ Media was filled moist → remove ⇒ Humidity from air supply → interconnect humidifier

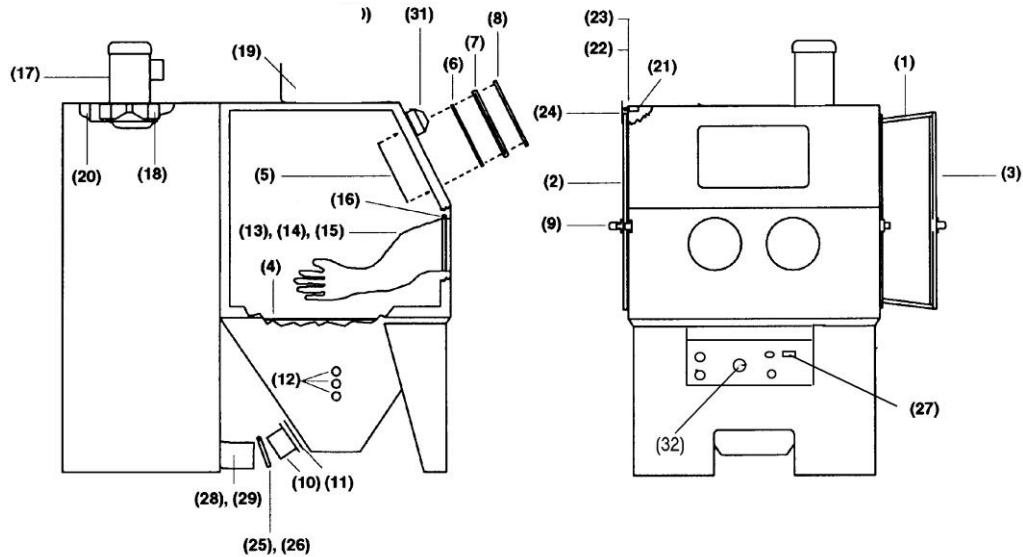
		⇒ Perspiration water through sharp drop in room temperaturer → Make sure, that there is not too much temperature fluctuation
(4) Dust comes out the blower	Dust filter gasket defective.	-replace gasket -see 4.4.5
	Defective cartridge.	- replace cartridge -see 4.4.5
(5) Static shocks		- improve grounding of the cabinet. - in exceptional cases use supplementary ground wire between blast gun and cabinet wall
(6) No air and no media comes out the nozzle	Door interlocks are not actuated	Adjust pin resp. door fixing bzw. see 4.4.7
	Wrong connection of pneumatic hoses on foot pedal → permanent air blow off	- only when foot pedal was new installed - connect properly
	Polluted (blocked) moisture separator.	Cleanse moisture separator
	Hose of control lines leaky	- need of second person - first person „is blasting“ - second person checks leakages on controles lines
(7) Air only (no media) comes out the nozzle	No blast media in the blast circuit	refill
	Moist media	-Remove moist media. -Remove cause for humid air supply.
		Caution! Risk of injuri! Discharge completely pressure during maintenance jobs.
(8) No interruption of blast process when foo pedal is released	Foot pedal valve blocked.	- bleed installation (see 4.4.1) - replace foot pedal valve
(9) Irregular flow or too much blast media comes out the nozzle	Incorrect adjusted media flow.	Adjust new (see 4.4.2).
(10) Media remains in the suction hose	Incorrect adjusted negative pressure	See 4.4.3
	Media too heavy	Use other media

7 Admitted modifications for users

Only with the approvalment of the producer! Otherwise the installation will loose garantie and CE-certification.

8 Replacement parts

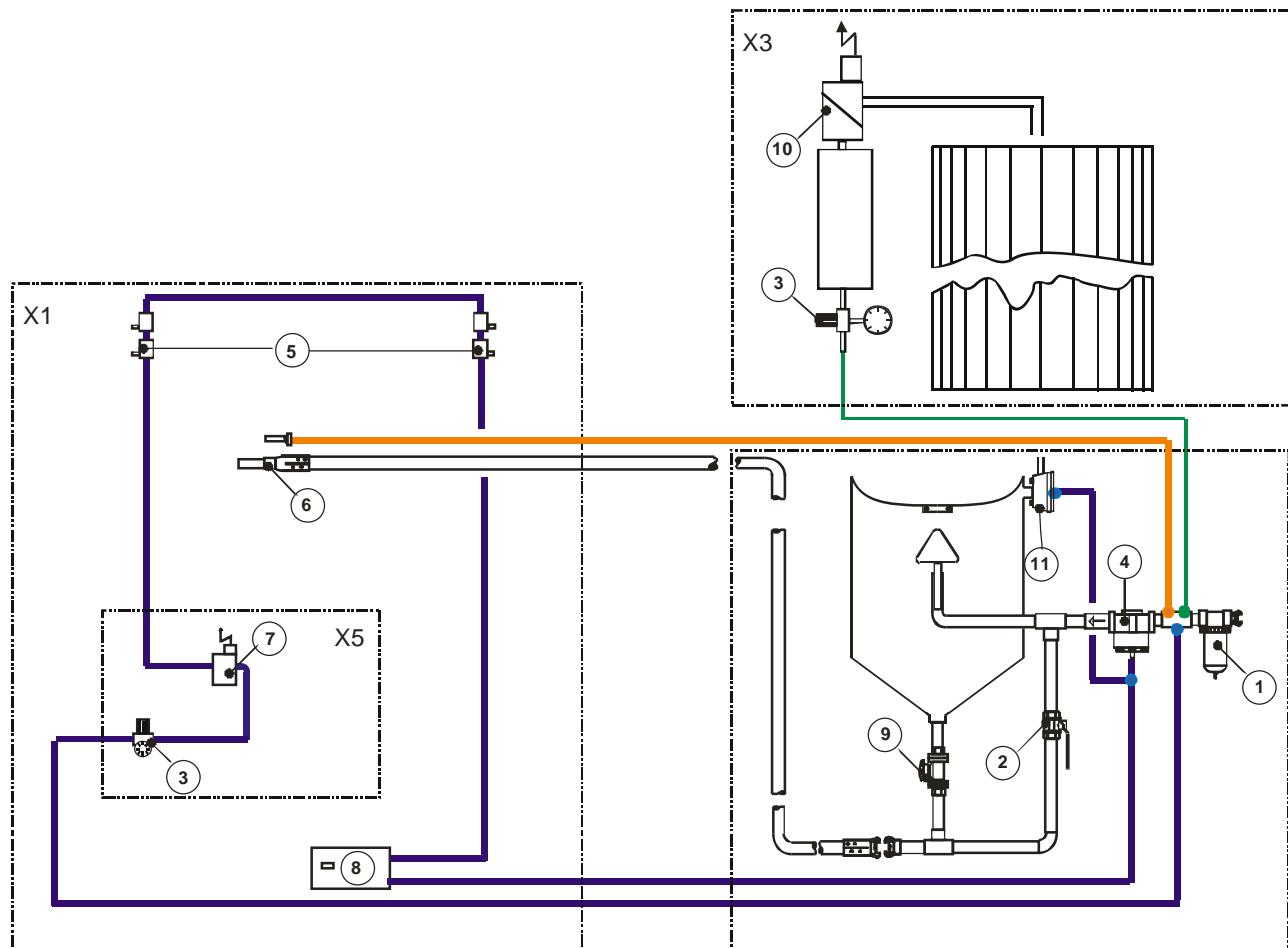
8.1 Cabinet assembly



Pos.	description	Pulsar III	Pulsar VI & VI +	Pulsar VIII&VIII+
(1)	Door gasket per m	12434Z	12434Z	12434Z
(2)	Left door complete (blue)	100326	100328	100328
(3)	Right door complete (blue)	100327	100329	100329
(4)	Gate	11811Z	11810Z	without
(5)	Change frame mylar - small	100960	100960	100960
-	Glass change frame-small	100991	100991	100991
-	Chain /m (necessary 0,5m)	24273Z	24273Z	24273Z
-	Door gasket (2m)	12434Z	12434Z	12434Z
-	Star handle IG M8	100551	100551	100551
(6)	Window glass - small (security glass)	12212Z	12212Z	12212Z
(7)	Gasket	12435Z	12435Z	12435Z
(8)	Filler strip	12436Z	12436Z	12436Z
(9)	Door opener spacial for cabinet	99585Z	99585Z	99585Z
(10)	Adaptor Ø 100 mm / 4“	12376Z	-	-
	Adaptor Ø 125 mm / 5“	-	12377Z	12377Z
(11)	Gasket Ø 100 mm / 4“ for adaptor	11776Z	-	-
	Gasket Ø 125 mm / 5“ for adaptor	-	11777Z	11777Z
(12)	Grommet for air hose	11798Z	11798Z	11798Z
(13)	Rubber gloves pair	99159Z	99159Z	99159Z
(14)	Rubber glove, left	12710Z	12710Z	12710Z

(15)	Rubber glove, right	12711Z	12711Z	12711Z
(16)	Clamp (for gloves)	11576Z	11576Z	11576Z
(17)	E-Motor, 230 / 415V, 0,75 kW ,B5, 2800 rpm	19026Z	19026Z	19026Z
(18)	Paddle for Pulsar III	21528Z	19235Z	19235Z
(19)	Grommet (for blast hose 6 mm)	12762Z	12762Z	12762Z
(21)	Pneumatic valve safety door	12202Z	12202Z	12202Z
(23)	Bushing safety door valve	15042Z	15042Z	15042Z
(26)	Clamp f. Ø 100 mm / 4“ (wire)	90241Z	-	-
	Clamp f. Ø 125 mm / 5“ (wire)		90260Z	90260Z
(29)	Suction hose PU Ø 100 mm / 4“ per m	12447Z	-	-
	Suction hose PU Ø 125 mm / 5“ per m	-	12449Z	12449Z
(31)	Lamp complete (less regulator)	19574Z	19574Z	19574Z
(-)	Lamp holder	11843Z	11843Z	11843Z
(-)	Lamp	11872Z	11872Z	11872Z

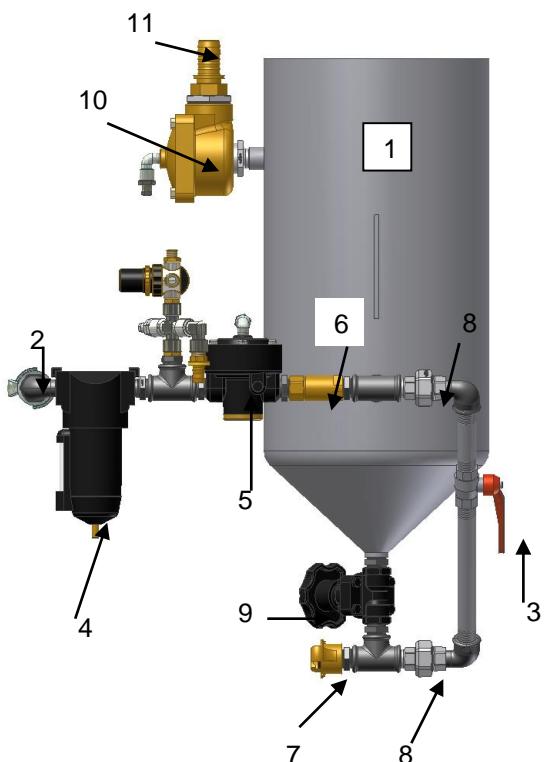
8.2 Pneumatic circuit



Pos.	Description	Pulsar III	Pulsar VI a. VI+	Pulsar VIII and VIII+
1	MM-HMS water separator 1/2"	90256D	90545D	90545D
3	Pressure regulator 1/4" (Pilot regulator) Gauge (front mounting)	100061 11831Z	100061 11831Z	100061 11831Z
4	Pressure regulator	10709Z	10711Z	10711Z
5	Pneumatic valve safety door	12202Z	12202Z	12202Z
ohne	Bushing safety door valve	15042Z	15042Z	15042Z
6	Nozzle holder , nozzle		see 8.5	
7	E-valve 1/8"	100741	100741	100741
8	Foot pedal Pulsar	06266Z	06266Z	06266Z
9	Media metering valve	see 8.3	see 8.4	see 8.4
10	Valve ASCO Pulsar (dedusting)	90804Z	90804Z	90804Z
11	Outlet valve	See 8.3	see 8.4	see 8.4
ohne	Air hose 1/8" (pro Meter) - brown	12475Z	12475Z	12475Z

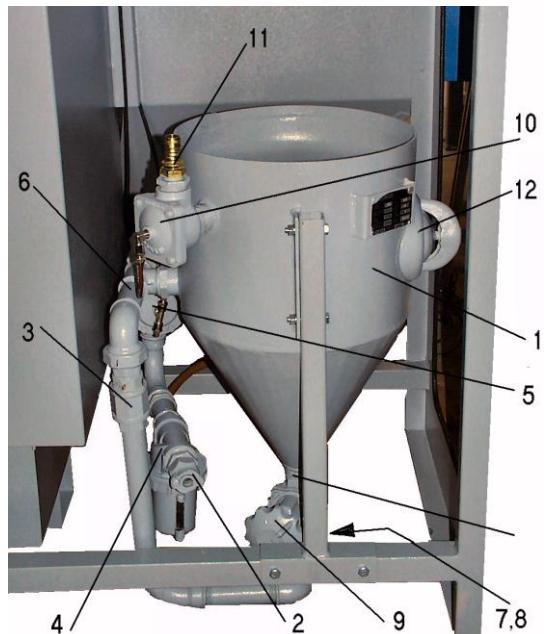
8.3 20 l Blast pot for Pulsar III

Pos.	Part no:	Description



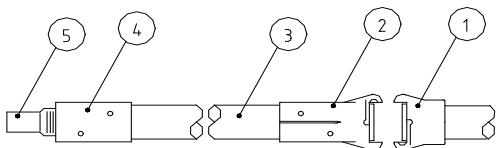
1	90967D	Blast pot SC-1028 only
2	90002D	KAG-12 air coupling
3	01241D	Ball valve ½“ F
4	90256D	MM-HMS Water separator ½“
5	10709D	Pilot regulator ½“
6	24217I	Non return valve ½“ with rubber ball
7	90257D	CFB-0 Brass coupling
8	90494D	Union ½“ FM
9	99555D	Media metering valve SA ½“
10	03371I	Outlet valve TLR
11	94301D	Hose nipple 1“x25mm
-	01245D	O-Ring MP 5
-	01243D	Pop-up valve MP-2 only
-	100747	Bushing for MP-2

8.4 40 l Blast pot for Pulsar VI, VI+, VIII, VIII+



Pos.	Part no.:	Description
1	99982A	Blast pot SC-1628 ZV SOFTonly(40l)
2	94284D	KAG 54 Air coupling 1 ¼“ M
3	02397D	Ball valve 1 ¼“ with handle
4	90545D	HMS Water separator 1 ½“
5	10711Z	Pilot regulator 1 ½“
6	99633D	Non return valve 1 ¼“ with rubber ball
7	100986	T-VA – 1 ¼“ x 1 ¼“ x 1“
8	01808D	Red. nipple 1 ¼“ – 1“ I Nr. 245
9	99921D	Media metering valve SA 1“-
Option	90386D	Media metering valve SA 1“-rubber coated
Option	100987	Red. nipple VA 1 ¼“ – 1“
10	03371D	Outlet valve TLR
11	94301D	Hose nipple 1 x 25mm
12	02323D	Inspection door ASSY
-	02321D	P-2 Pop-up valve with shaft
-	99157D	O-Ring P-5 with quarterlip

8.5 Nozzles, Blast hose, Couplings, etc



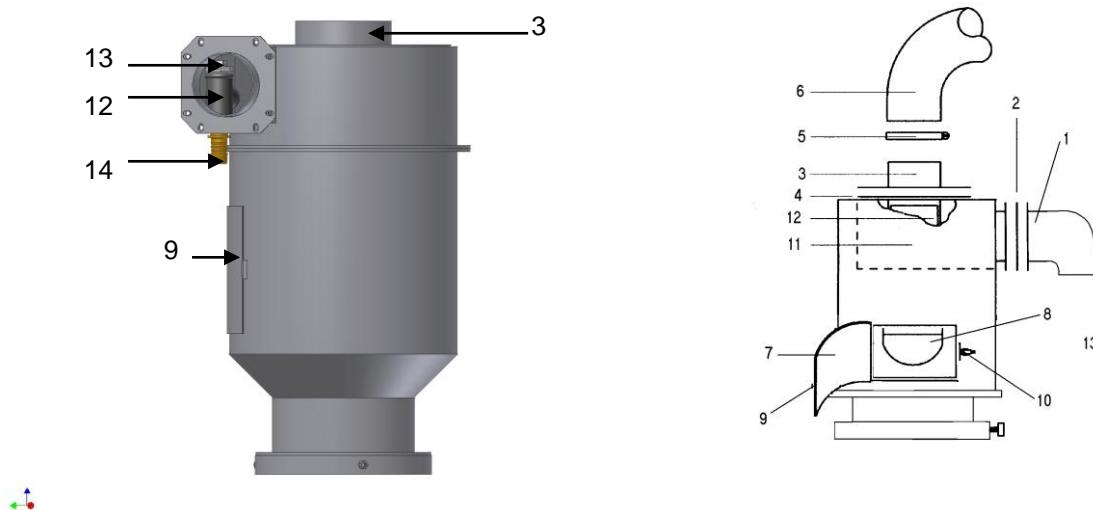
Pos.	Description	Pulsar III	Pulsar VI&VI +	Pulsar VIII&VIII+
(1)	CFB-0 –Brass coupling 1 1/4“ (pot)	90257D		
	CFT –Iron cast coupling 1 1/4“ (pot)	-	91011D	91011D
(2)	CQB-0 –Brass coupling for 13 x 7,5	90258D		
	CQP 3/4“ Plastic coupling for 19x7	-	94350D	94350D
(3)	Blast hose 13 x 7,5 pro m	04257D	-	-
	Blast hose 19 x 7 pro m	-	04301D	04301D
(4)	NHP-0 nozzle holder f. blast hose 13x7,5	90269D	-	-
	NHP-3/4“ nozzle holder f. blast hose 19x7		99204D	99204D
(5)	Nozzles with fine thread 25 mm			
	CB-2/25 Boron carbide nozzle (3 mm)	94210D	-	-
	CB-3/25 Boron carbide nozzle (4,5 mm)	94211D	-	-
	CB-4/25 Boron carbide nozzle (6 mm)Standard	94212D	-	-
	CB-5/25 Boron carbide nozzle (8 mm)	94212D	-	-
	Nozzles with coarse thread 50 mm			
	CTJG-3 Clemlast TC 8mm	-	05288D	05288D
	CTJG-4 Clemlast TC 8mm	-	05289D	05289D
	CTJG-5 Clemlast TC 8mm Standard	-	05290D	05290D
(-)	Nozzle holder	100559	100559	100559
(-)	Clamp ZERO 12mm	99868Z	99868Z	99868Z
(-)				

8.6 Foot pedal



Pos.	Description	Pulsar III	Pulsar VI a.VI +	Pulsar VIII a.VIII+
(-)	3-way foot valve only	06266A	06266A	06266A
(-)	3-way foot valve complete	06266Z	06266Z	06266Z
(-)	Silencer 1/4"	90941D	90941D	90941D
(-)	Pipe plug 1/4"	01950D	01950D	01950D

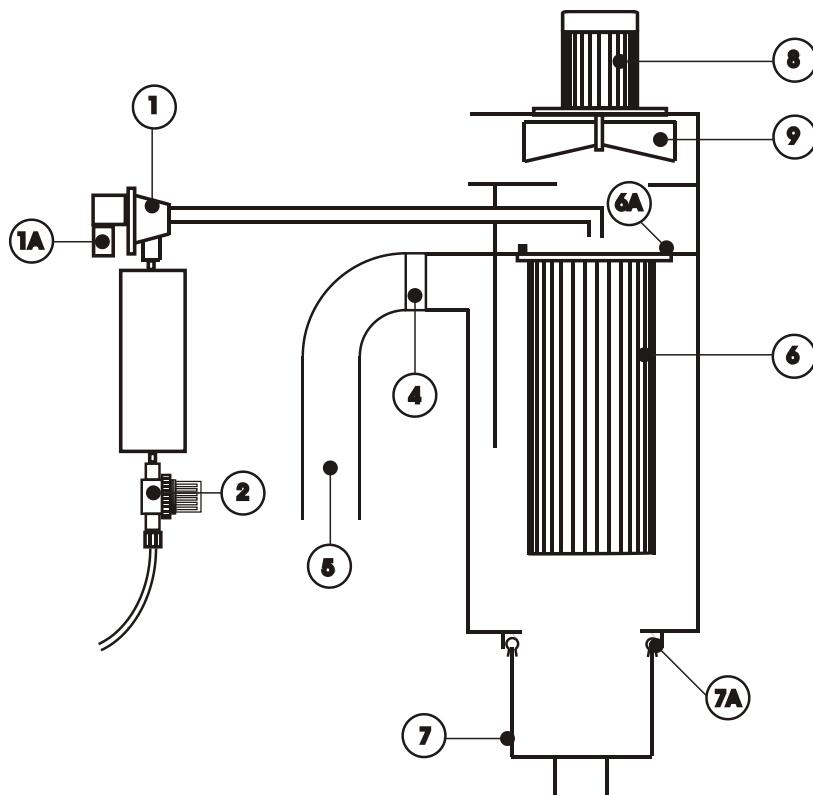
8.7 Cyclon



Pos.	Description	Pulsar III	Pulsar VI a. VI +	Pulsar VIII a. VIII+
ohne	Cyclon PA-VI pressure Mod 05 complete	-	100990	100990
(1)	Adaptor Ø 100 / 4"	12376Z	-	-
	Elbow PA-VI pressure inlet ø 125 mm / 5"		99575Z	99575Z
(2)	Gasket adaptor for Ø 100	11746Z	-	-
	Gasket adaptor for Ø 125		11779Z	99575Z

(3)	Adaptor 150 mm/ 6"	20343Z	20343Z	20343Z
(4)	Gasket for cleaner per m (outlet)	99751Z	99751Z	99751Z
(5)	Clamp for Ø 100	90241Z	-	-
	Clamp for Ø 125	-	90260Z	90260Z
	Clamp for Ø 150	90261Z	90261Z	90261Z
(6)	Suction hose ø 100 mm / 4"	12447Z	12447Z	12447Z
	Suction hose ø 125 mm / 5"	12449Z	12449Z	12449Z
	Suction hose ø 150 mm / 6"	12452Z	12452Z	12452Z
(7)	Door gasket cyclon	11745Z	11745Z	11745Z
(8)	Screen new-reclaimer	21265Z	21265Z	21265Z
(9)	Door	14271Z	14271Z	14271Z
(10)	Hook ASSY	12263Z	12263Z	12263Z
(11)	Rubber lined plate for 300 CFM	11984Z	11985Z	11985Z
(12)	T-piece 1 " no. 130	94201D	94201D	94201D
(13)	Pipe plug 1 "	01701D	01701D	01701D
(14)	Hose nipple 1"x25mm	94301D	94301D	94301D
Ohne	Pipe plug NPT 1"	12011Z drilled out	12011Z drilled out	12011Z drilled out

8.8 Cartridge dust collector and exhauster



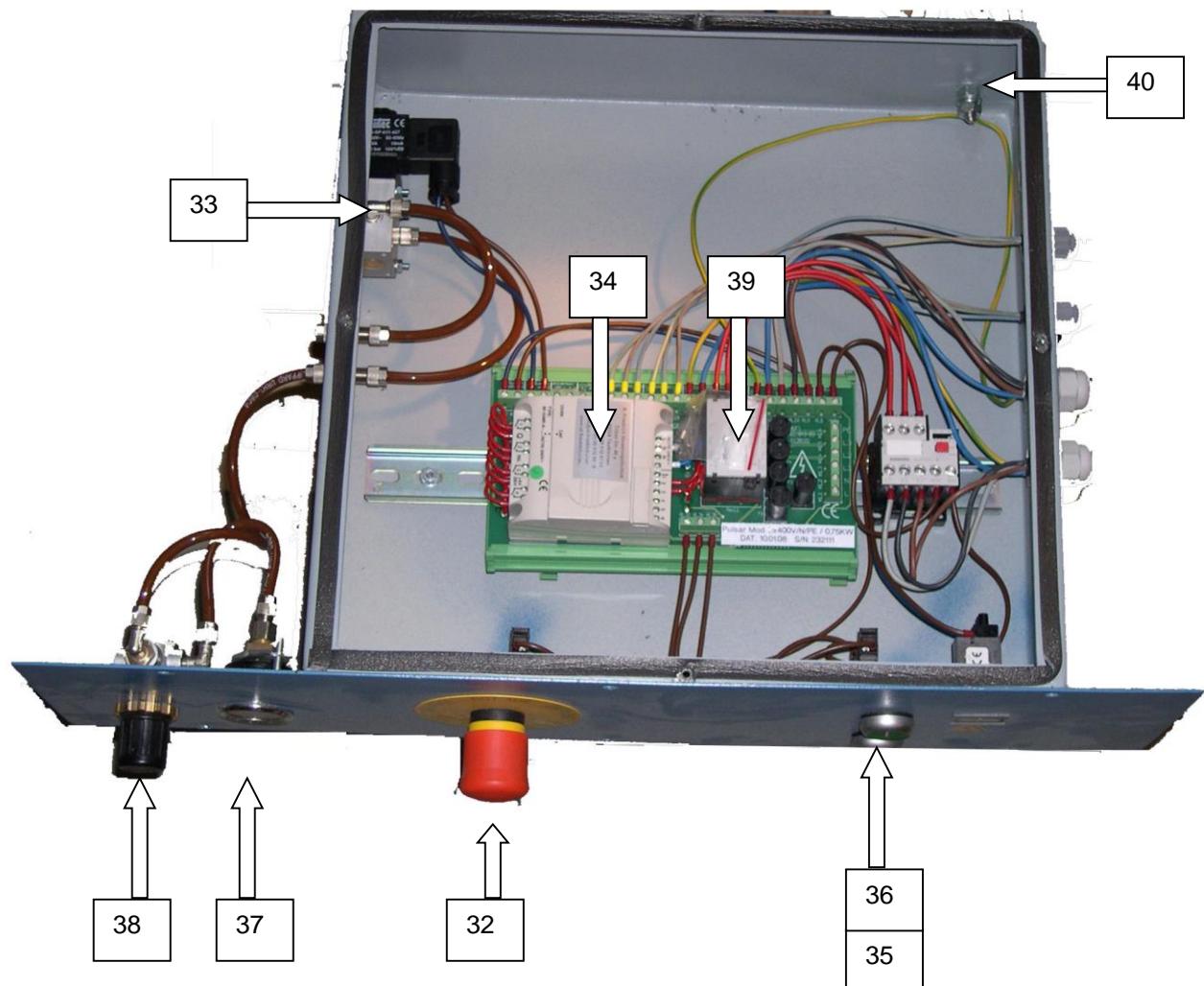
Pos.	Description	Pulsar III	Pulsar VI & VI +	Pulsar VIII & VIII +

(1)	Valve ASCO Pulsar	90804Z	90804Z	*1)
(1A)	Solenoid valve 220V	100039	100039	*1)
(2)	Pressure regulator 1/4“ with gauge	100061	100061	100061
(4)	Clamp for Ø 150 mm / 6“	90761Z	90761Z	90716Z
(5)	Suction hose Ø 150 mm / 6“ per m	12452Z	12452Z	12452Z
(6)	Filter cartridge	100537	100537	100537
(6A)	Screw M10 x 45 (per piece)	99081D	99081D	99081D
(7)	Dust contaioner	ohne	ohne	ohne
(7A)	Gasket for dust container	100832 2 m	100832 2 m	100832 2 m
(8)	E-Motor 0,75KW /230 / 410V, 2800 rpm	19026Z	19026Z	19026Z
(9)	Paddle wheel	19235Z	19235Z	19235Z

*1)at the time no part number.

8.9 Control box

Wiring diagram (see attachment)



Pos.	Description	Pulsar III	Pulsar VI & VI +	Pulsar VIII & VIII+
(32)	Emergency STOP button	100742	100742	100742
(33)	Solenoid valve 1/8"	100741	100741	100741
(34)	Module- Pulsar	100735	100735	100735
(35)	Push button (green)	100736	100736	100736
(36)	Push button (red)	100737	100737	100737
(37)	Gauge	11831Z	11831Z	11831Z
(38)	Pressure regulator	100061	100061	100061
(39)	Fuses F1 to F5 per piece	100743	100743	100743
(40)	Earth screw	100732	100732	100732

8.10 Erdung

Pos.	Description	Pulsar III	Pulsar VI a.VI +	Pulsar VIII a.VIII+
(-)	Earth screw M8 complete with nut, lug and earth washer	100732	100732	100732
(-)	Ground wire 10 mm ² per m	100769	100769	100769

8.11 Options, Accessories

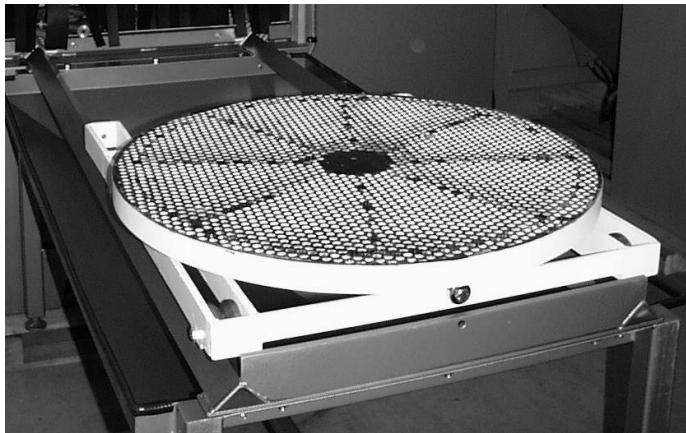


Figure 9: Track assembly: truck, hopper, work car with turntable

Pos.	Description	Pulsar III	Pulsar VI and VI +	Pulsar VIII and VIII+	Re-fitting requirements
(-)	Turntable, truck, hopper + work car	13530Z	12835Z	12835Z	Opening for rails
(-)	turntable Ø 760 mm only	90881Z	90881Z	90881Z	
(-)	wheel for work car without bearing	90987Z	90987Z	90987Z	
(-)	Stationary turntable Ø 760 mm complete	99840Z	99840Z	99840Z	keine
(-)	Gate 300 x 300 mm (per pcs.)	100282	100282	100282	Openings in door
(-)	Gate 400 x 400 mm (per pcs.)	*1)	100283	100283	Openings in door
(-)	Port 300 x 300 mm including mounting	90681Z	90681Z	90681Z	Openings in door
(-)	Port 400 x 400 mm including mounting	*1)	100302	100302	Openings in door
(-)	Tumble 4,5 l complete with E-motor 230V (door mounting possible))	100549	100549	100549	Openings in door Setting electrical connections
	Tumble 30 l complete with E-Motor 230V (door mounting possible)	Not recommended	100548	100548	Openings in door Setting electrical connections
(-)	Tool for window installation	12176Z	12176Z	12176Z	

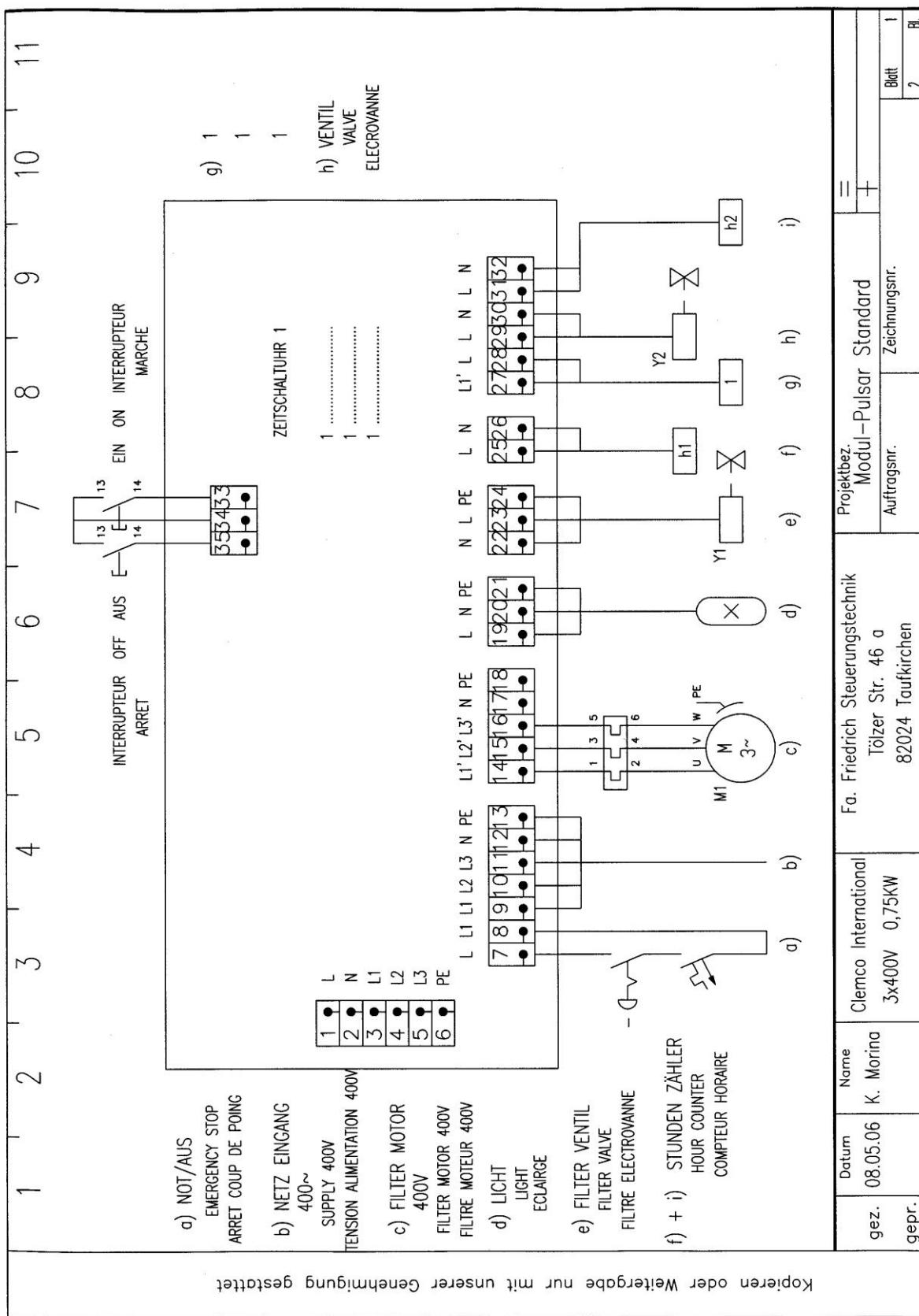
*1) not possible

8.11.1 Further options

	Re-fittings possibles by customer
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Reinforcements for loadings till 5000 N	conditional
Reinforcements for loadings till 20000 N	no
Oscillator horizontal , vertical)	no
Rubber coating	yes
PU coating	no
Grounding the nozzle	yes

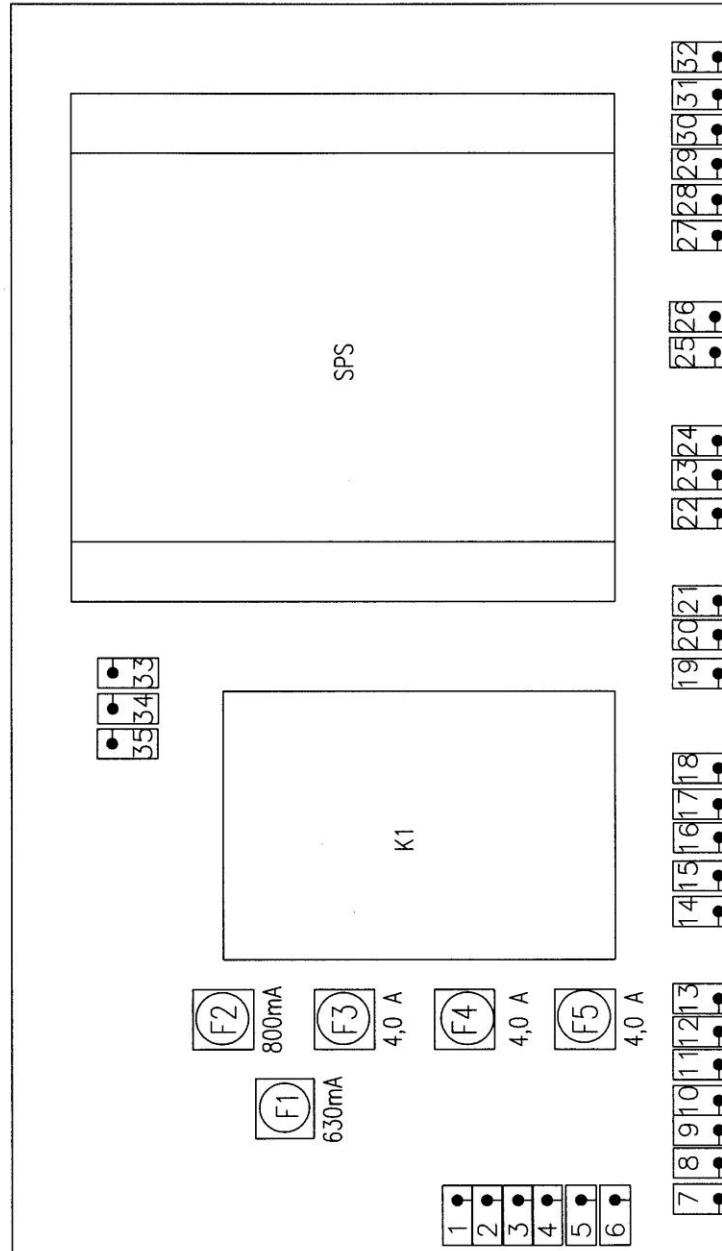
8.12 Control box- binding plan for 400 V, 0,75 kW



1 2 3 4 5 6 7 8 9 10 11

WERKSEINSTELLUNG FÜR FILTERVENTIL: KLEMME 22-24

- PAUSE - 40 sec
- PULS - 0.5 sec



- | | | |
|-------------------------------|----------------|------------------------|
| F3-F5 Motor Sicherung | F2 Beleuchtung | F1 Steuersicherung |
| F3-F5 Fuses For The Motor | F2 Light | F1 Control Fuse |
| F3-F5 Fusibles Pour Le Moteur | F2 Eclairage | F1 Fusible de Commande |

gez.	Datum	Name	Clemco International	R. Friedrich Steuerungstechnik Toelzer Str. 46 q	Projektbez.	
					Modul-Pulsar Standard	+TAUFKIRCHEN
	08.05.06	K.Morina	3x 400V 0,75kW	D-82024 Taufkirchen	Auftragsnr.	Zeichnungsnr.
					Batt	2 Bl.
					2	Bl.

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