

OWNER'S MANUAL

Suction Blast Cabinet

BNP series

BNP 65, 75, 85, 220, 601 and 721

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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 General information

2.1 Technical documents

The technical documents are part of the machine and contains important manufacturer information. The technical documentation is intended for everyone who uses the cabinet.

These operating instructions provide important information on handling the device. The precondition for safe working is compliance with all specified safety instructions and handling instructions. In addition, the local accident prevention regulations applicable to the area in which the device is used and the general safety regulations must be followed. Read the operating instructions carefully before starting any work! It is part of the product and must be kept in the immediate vicinity of the device and be accessible to staff at all times. These technical documents must be made available to all persons who use the blasting cabinet under their own responsibility. Those responsible for the plant and operation must ensure that the documentation has been read and understood completely. On the basis of this documentation and taking into account the industrial safety regulation, appropriate maintenance and test plans as well as operating instructions for the operating and maintenance personnel must be derived.

	NOTE! The illustrations in these instructions are for basic understanding and may differ from the actual design of the device.
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2.2 Other applicable documents

The following operating instructions must also be noted:

- Operating instructions for the cyclone
- Operating instructions for the MBX Filter

3 Product description

	Remarks
Cabinet	none
Cyclone	none
Dust collector	Pay attention to the owners manual of the used type

3.1 Conventional utilization and restrictions

	BNP 65	BNP 220	BNP 601	BNP 721
Max. loading rate of the grate /floor	1000 N 100 kp	1000 N 100 kp	2500 N 250 kp	2500 N 250 kp
Max. loading rate of the housing	2000 N 200 kp	2000 N 200 kp	10 000 N 1000 kp	10 000 N 1000 kp
Max. load rating with rack (standard)	2000 N 200 kp	2000 N 200 kp	2500 N 250 kp	2500 N 250 kp
Operating time	Continuous duty			
Basic parameters	See attached yellow cover			

3.2 No conventional utilisation – Warnings for misuse

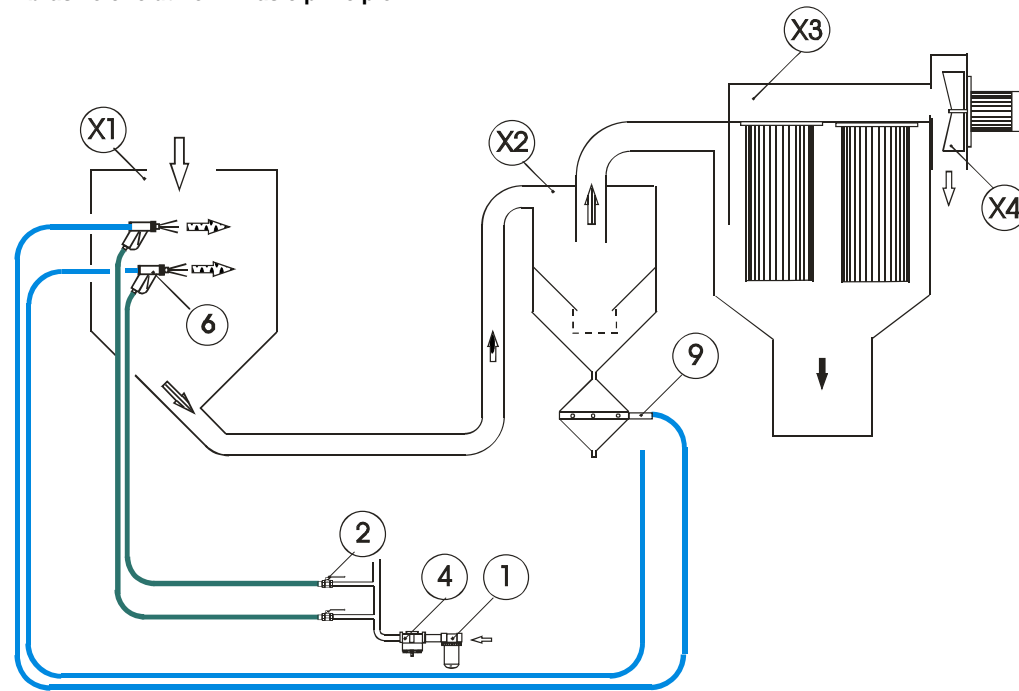
Utilization is interdicted:

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

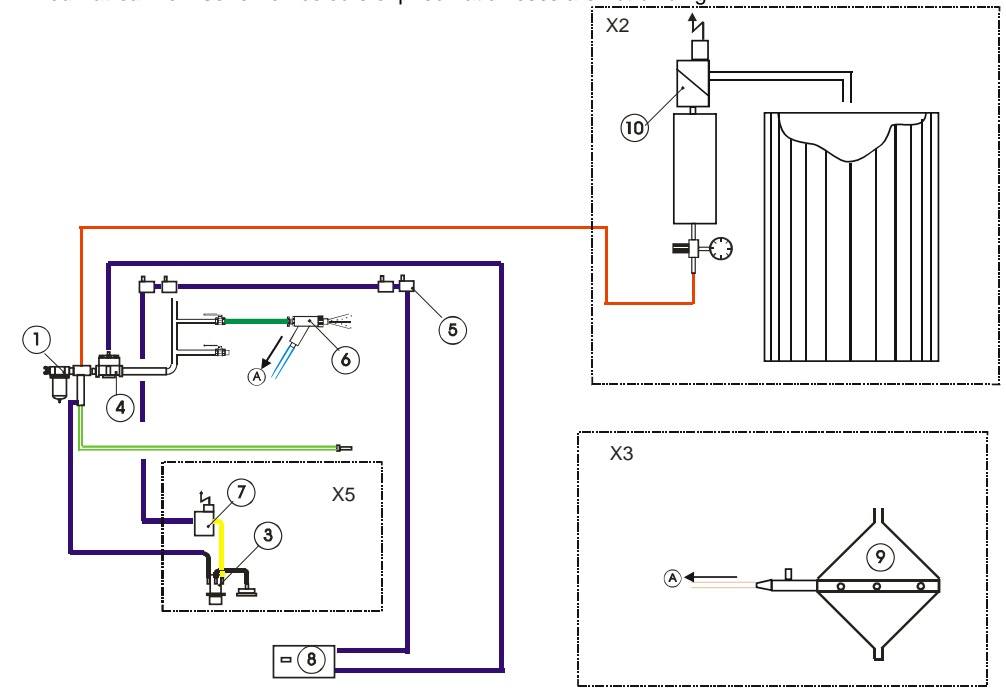
- in explosion hazard zones
- for blasting parts, where hazardous materials were released
 - o by explosion hazards
 - o which where not retained enough by the dust collector
 - o which causes damages caused to somebodys health during a defectuous dust collector

3.3 Operating mode of the complete system

Abrasive circuit flow - Basic principle



Pneumatical flow scheme - colours of pneumatic hoses are not binding



	Pure air	6	Blast gun
	Abrasive, dust and air	7	3/2-way solenoid valve
	Abrasive and air	8	Foot pedal; 3/2-way valve
	Dust and air	9	Sputnik + Metering valve
	Dust	10	Diaphragm valve /cleaning
1	Moisture separator, dust collector	X1	Blast cabinet
2	Ball valve	X2	Cyclon /Reclaimer
3	1/4 " regulator (pilot)	X3	Cartridge dust collector
4	Pressure regulator (main)	X4	Exhaust muffler
5	Pneumatic door interlock - 3/2-way valve	X5	E-box

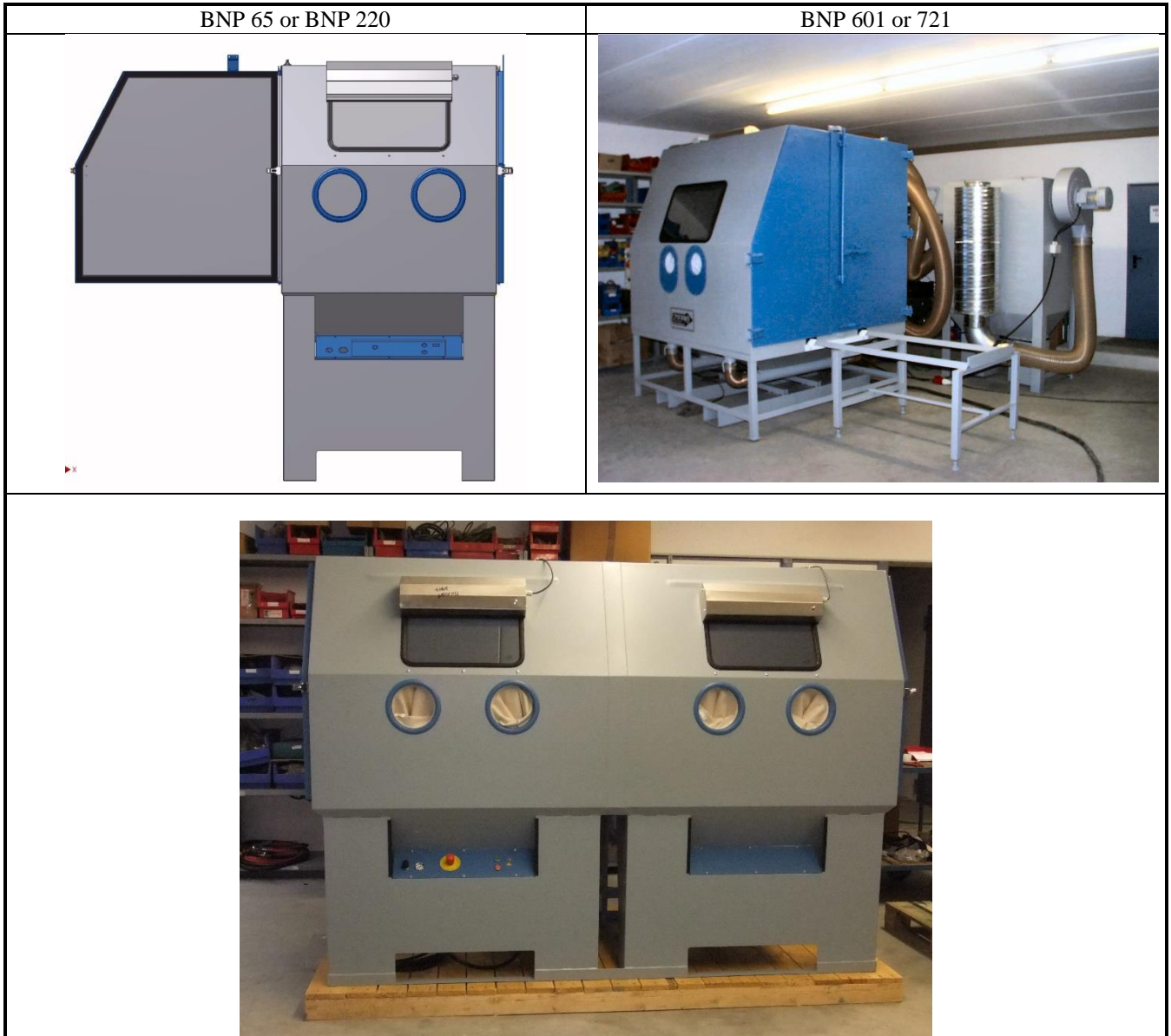
Figure 1

Figure 1 shows the pneumatic circuit of a BNP suction cabinet. The compressed air is fed into the system via a water separator (item 1), reaches the pilot regulator (item 3) via the air hose and from there to the door safety valves (item 5). If the foot pedal (pos. 8) is pressed and the cabinet doors are closed (door safety valves pos. 5 released), the control air flows to the pressure regulator (pos. 4) and compressed air flows to the injector jet gun (pos. 6). The abrasive is sucked out of the cleaner (reclaimer) with the abrasive hose and the blasting process begins. The desired pressure is set with the pilot regulator (item 3).

If the foot pedal is released, the blasting process is interrupted. This is also interrupted when the doors are opened (door safety valve pos. 5 closes).

The contaminated blasting media in the hopper floor of the blasting cabinet is sucked into the recovery system by the fan and cleaned using the cyclone principle (see picture for arrangement). The light impurities (dust) are transported with the air flow to the dust filter, the heavy particles fall down into the cyclone, whereby the oversized particles are caught with a coarse sieve. This completes the cycle.

3.4 Description



3.4.1 Media-recovery system (Cyclone)

- Cyclone principle
- Deposition of:
 - o Dust in dust collector
 - o Good media in circuit
 - o Coarse impurities in screen

3.4.2 Dust collector cartridge

- Standard: cartridge dust collector MBX
- Automatically cleaning with jet pulse and after running process
- Recommendations for MBX-Filter
 - Pulse interval: ca. 40..60 s
 - Pulse duration: ca. 500 ms
 - Follow up cleaning: ca. 5min
- exchangeable cartridge.
- Dust container

3.4.3 Control 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 (After running process)
Emergency STOP	Control box	Deactivating electrical supply

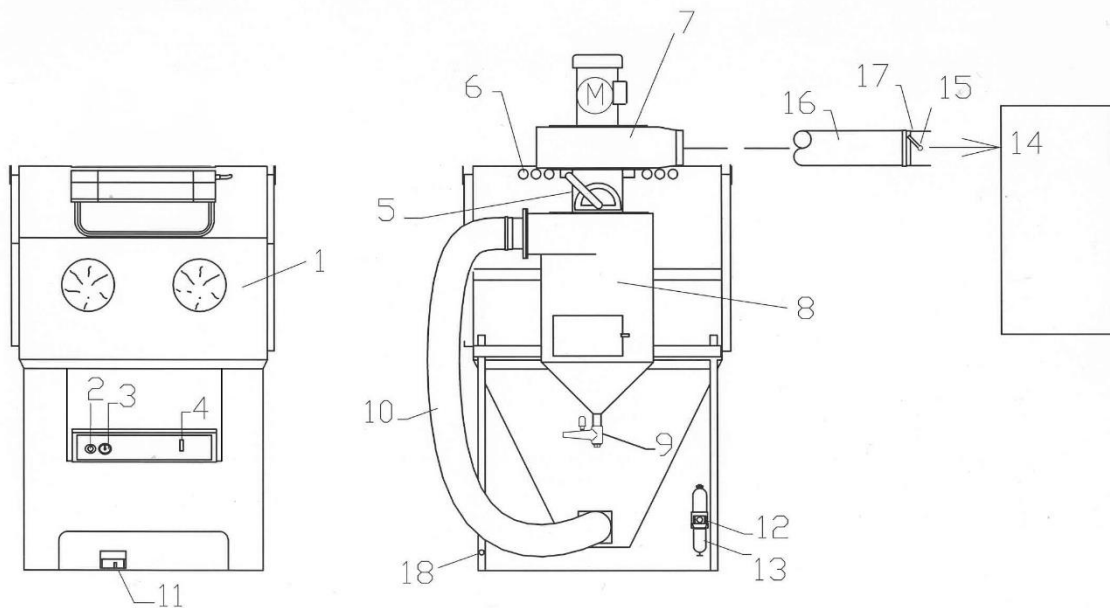


Figure 2: BNP-Suction blast cabinet

Pos. 1	Blast Cabinet
Pos. 2	Pilot regulator
Pos. 3	Manometer
Pos. 4	ON / OFF switch
Pos.5	Adjustable vortex cylinder (optional)
Pos.6	Air inlet
Pos.7	Ventilator
Pos.8	Cyclone
Pos.9	Metering valve

Pos.10	Suction hose
Pos.11	Foot pedal
Pos.12	Compressed air connection
Pos.13	Water separator
Pos.14	Filter
Pos.15	Control flap
Pos.16	Suction hose
Pos.17	Adapter inlet
Pos.18	Grounding screw

3.5 Energy consumption

- Air consumption: see yellow cover
- Electrical connection: see machine shield

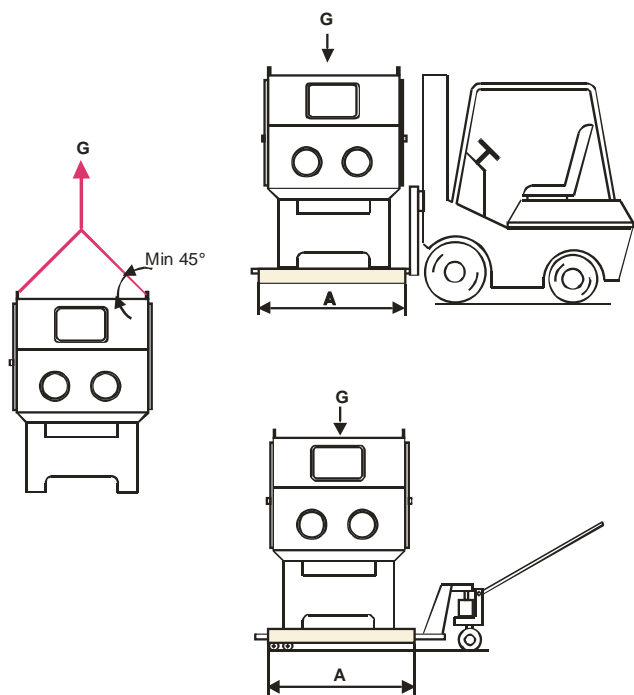
3.6 Emissions

See yellow cover.

4 Set-up for initial installation

4.1 Carriage / Handling

4.1.1 BNP 65 und BNP 220



BNP	G (weight)		A (mm)
65	2500 N	250 kg	1100
220	2800 N	280 kg	1450

4.1.2 BNP 75 und BNP 85

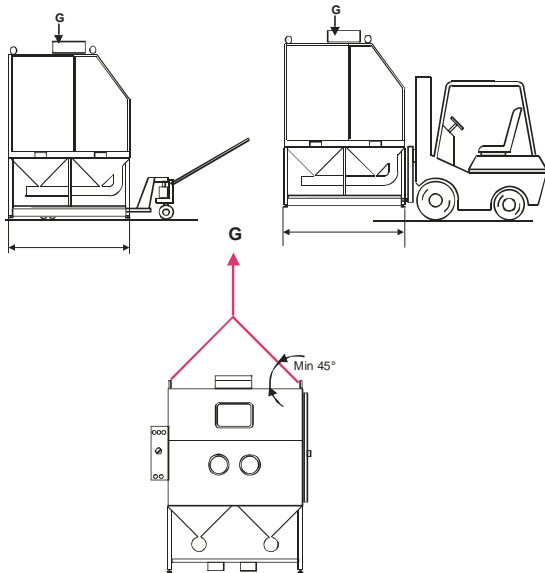
BNP	Weight		A (mm)	B (mm)
75	5000N	500 kg	2200	1200
85	5600 N	560 kg	2900	1300

Technical drawing showing the BNP 75 and BNP 85 units on a pallet, being lifted by a forklift. The drawing indicates the height (G) and width (A) of the unit.

Technical drawing showing the BNP 75 and BNP 85 units on a pallet, being lifted by a forklift. The drawing indicates the height (G) and width (B) of the unit.

Technical drawing showing the BNP 75 and BNP 85 units on a pallet, being lifted by a pallet jack. The drawing indicates the height (G) and width (B) of the unit.

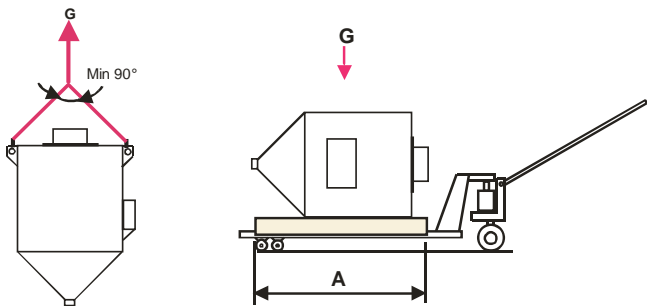
4.1.3 BNP601 und BNP 721



BNP	G (weight)		A (mm)
601	8000 N	800 kg	1500
721	10 000 N	1000 kg	1850

* Euro palett 800 x 1200

4.1.4 Cyclone



Type	G (weight)		A (mm)
900	500 N	50 kg	1200 mm*)
1200	700 N	70 kg	1200 mm*)

4.2 Unpackung and disposing the packing material

Pallet: Wooden pallets 800 x1200

Plastic film

4.3 Voraussetzungen zum Aufstellen einer Kabine

- Basic allowance: see yellow cover sheet

4.4 Componentents

4.4.1 Blast Cabinet

These consists of a stable steel construction and are designed as dust-tight vacuum cabins.

Model BNP	Size Work area H x B x T[mm]			Number of the doors
65	875	915	835	2
75	875	2x915	835	2
220	970	1255	935	2
85	970	2x1255	935	2
601	1450	1450	1450	1*
721	1660	1780	1780	1*

* Doors divided into two.

Table 1: Standard cabinet types

- ⇒ Doors for bringing in the materials.
- ⇒ Hand holes with adapted work gloves for carrying out the blasting work.
- ⇒ Viewing window for observing the blasting process.
- ⇒ BNP- injector gun.
- ⇒ Extraction hose (dimensions matched to the application).
- ⇒ Blasting room lighting.
- ⇒ Blow-off gun for blowing off dust and blasting media from workpieces
 - Control and safety devices
 - ON / OFF switch for blasting room lighting
 - Foot pedal for switching the blasting process on and off.
 - Pilot regulator with manometer for controlling the pressure regulator and for setting the jet pressure.
 - Safety circuit for automatic shutdown of the blasting process if the doors are accidentally opened prematurely.

4.4.2 Recovery system

See separate owner's manual.

The size of the cyclone is matched to the size of the cabinet.

Type	Suction power [m³/min.] resp. [cfm]	Electric motor fan	Befestigung
600 cfm	16,8 / 600	380V / 0,75 kW	Cabinet back wall
900 cfm	25,4 / 900	380V / 2,2 kW	Detached
1200 cfm	34 / 1200	380V / 4,0 kW	Detached

Table 2: Sizes of abrasive recovery systems

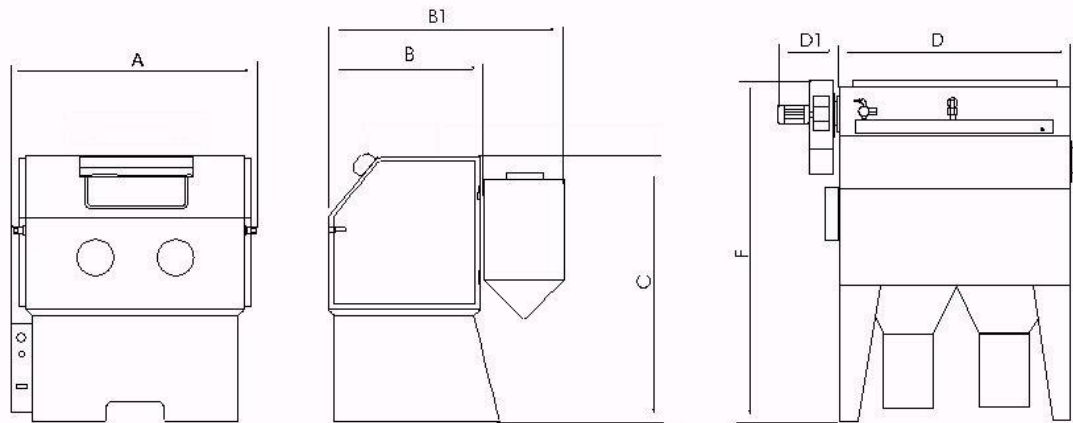
4.4.3 Dust collector

See separate owner's manual.

4.5 Requirements for setting up a cabinet

Basic requirements: See yellow cover sheet

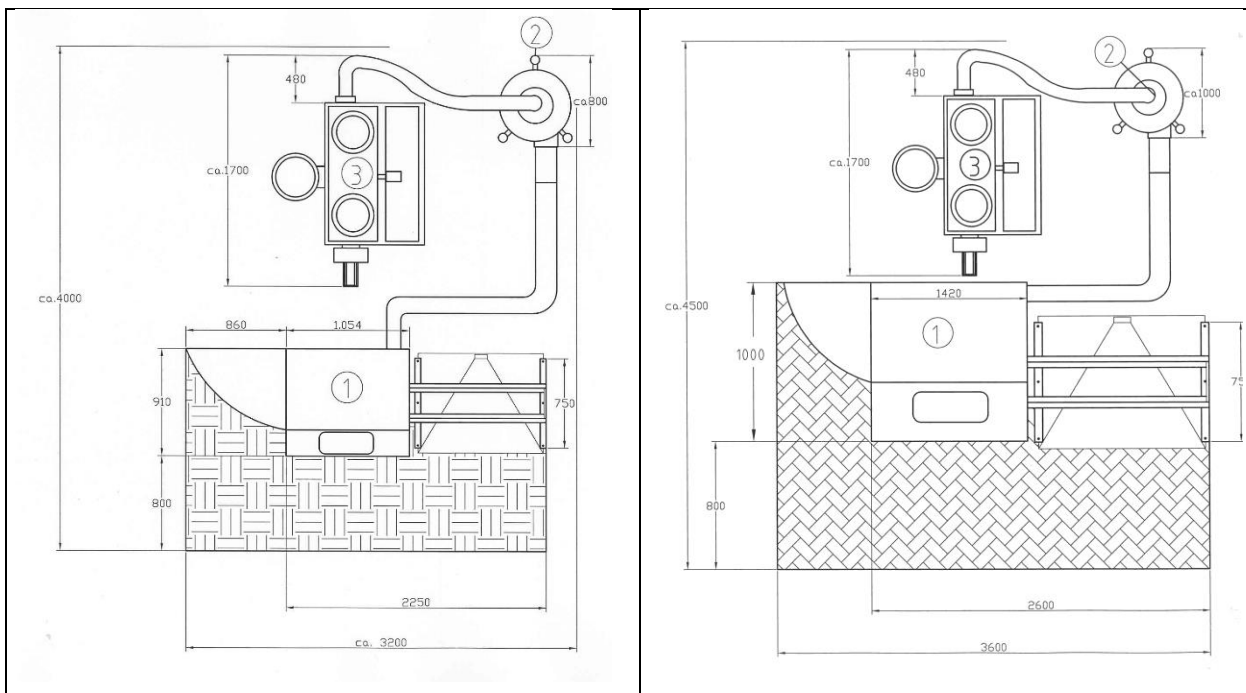
Space requirements:



	BNP 65	BNP 75	BNP 220	BNP 85		MBX 1500
A =	1054 mm	2 x A	1420 mm	2 x A mm	D =	1200 mm
B =	910 mm	910 mm	1000 mm	1000mm	D1 =	480 mm
B1 =	1460 mm	1460 mm	1550 mm	1550 mm	F =	2090mm
C =	1970 mm	1970 mm	2105 mm	2105 mm		

Picture 3a: Space requirements BNP-65, 75, 220 & 85

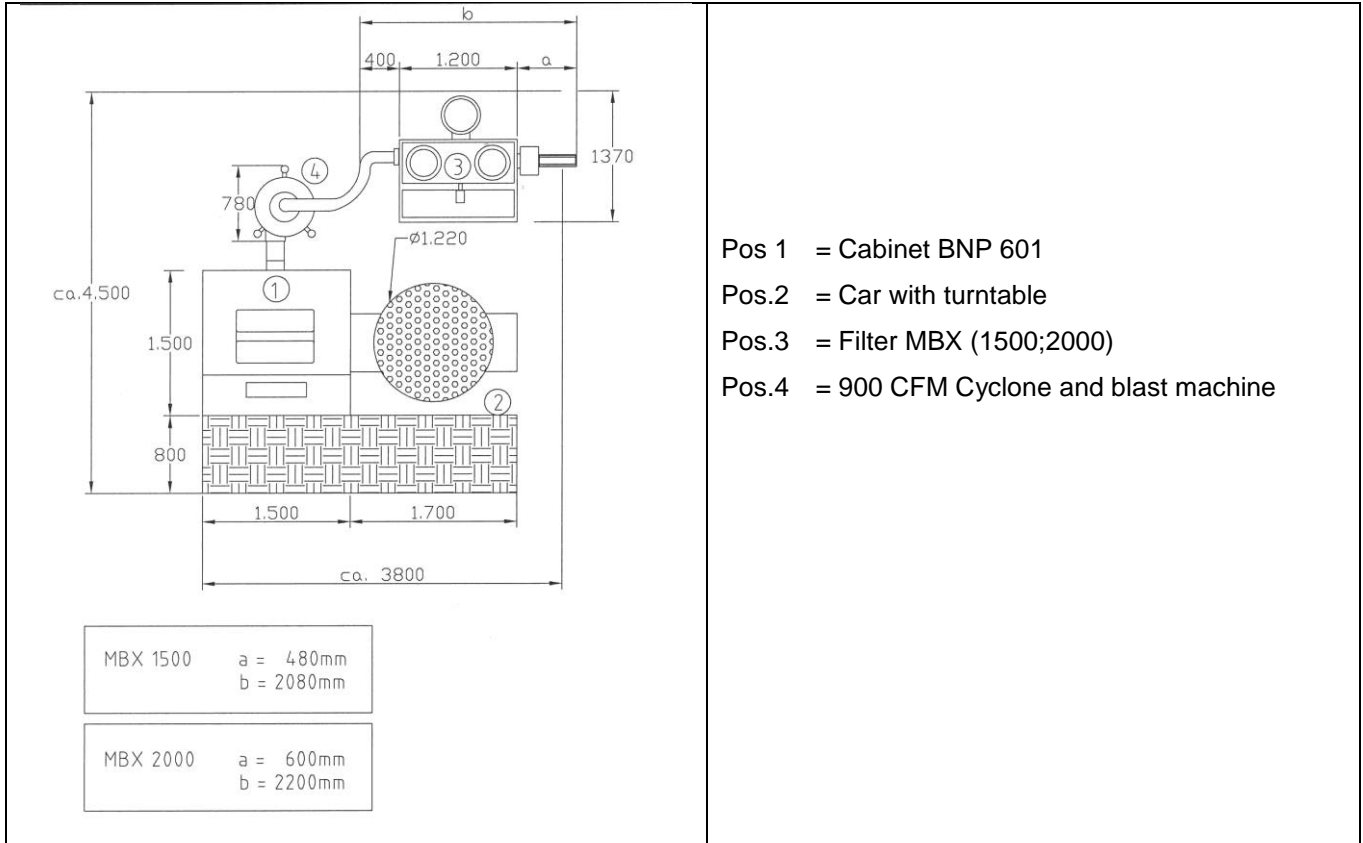
with Cyclon 600 CFM (on the rear wall of the cabinet) and MBX dust collector



Picture 3b: Required space for BNP-65 & 220 with stand alone cyclone and MBX-filter

Pos 1	BNP 65(left) und BNP 220 (right)
Pos 2	Cyclon (900 oder 1200 CFM) + blast pot
Pos 3	MBX Filter 1500 CFM

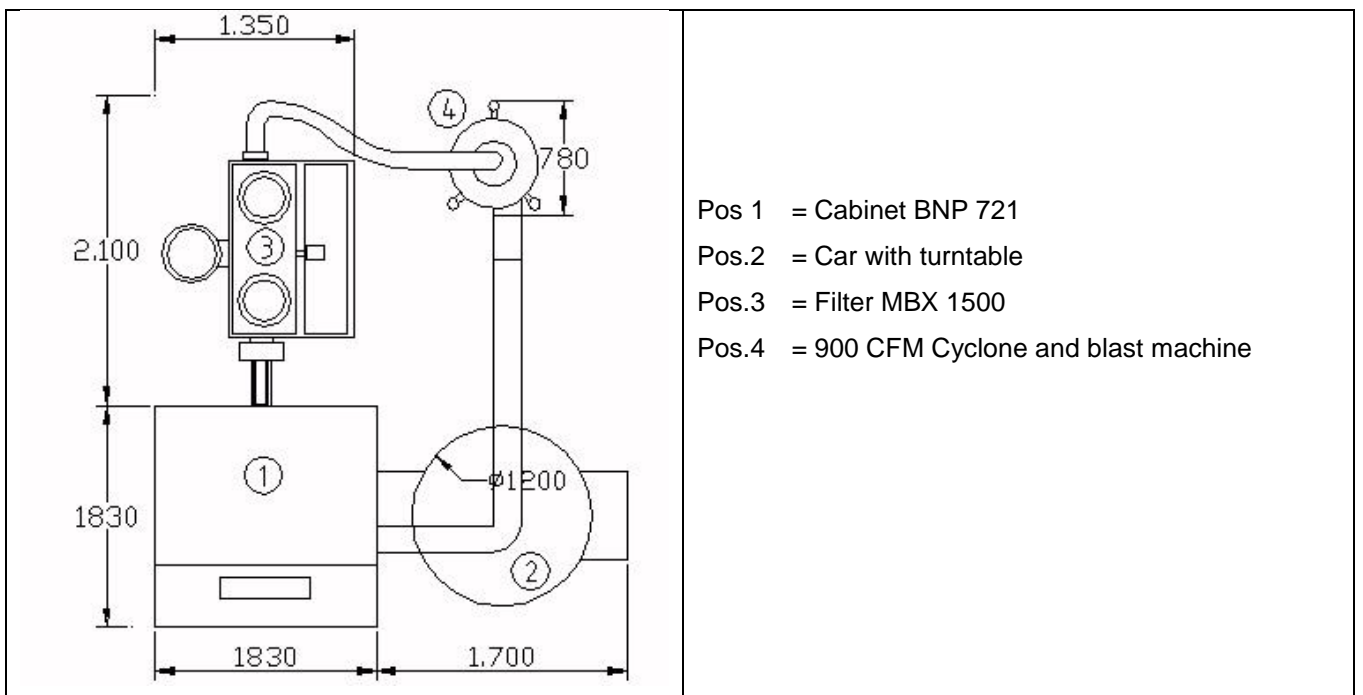
Required space for BNP 601



- Pos 1 = Cabinet BNP 601
- Pos.2 = Car with turntable
- Pos.3 = Filter MBX (1500;2000)
- Pos.4 = 900 CFM Cyclone and blast machine

Picture 4a: Required space for BNP-601











Required space for BNP 721





- Pos 1 = Cabinet BNP 721
- Pos.2 = Car with turntable
- Pos.3 = Filter MBX 1500
- Pos.4 = 900 CFM Cyclone and blast machine

Picture 4b: Required space for BNP-721

4.6 Installation, assemble and function test

Cabinet set-up.	<ul style="list-style-type: none"> -Requirements: see yellow cover -Bracing in the floor not necessary 	
	 Warning	Warning! Explosion hazard! Connect only max. admitted pressure
Air supply	<ul style="list-style-type: none"> - max. 7 bar - for higher pressures install pressure regulator and safety valve between cabinet and air supply - air hose between air supply and cabinet: <ul style="list-style-type: none"> + Inner diameter : min 19 mm + Length: max. 10m 	
Filter cartridge dedusting	Adjust pressure regulator for dedusting to 5 bar	
	 Warning	Warning! Risk of injuri! Connect electric circuit points only by authorized electrician.
	 Warning	Warning! Explosion hazard caused by dust! Ground!
	 Caution	Caution! Risk of injuri! Ground!
Electrical connection and grounding	<ul style="list-style-type: none"> - 16A Euro plug connector - Ground cabinet, cyclone and dust collector <ul style="list-style-type: none"> - min 10 mm² - earth screw in stock, ground wire etc. no shipment 	
	 Caution	Caution! Noise > 80dB(A) Wear ear protection!
Operation checkout without media	Close the doors. Switch-on elctricity (green push button). Control the following: <ul style="list-style-type: none"> -Is lighting on? -Is the fan motor starting? Turns the motor in direction of the arrow? Otherwise reverse the polarity. -Is dedusting pulse for cartridge filter activ? (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 (second. person). Is the blast process stopping?Test cabinet with media, if no irregularities can be detected. Otherwise remedy errors. Therefor see section 7. 	
Media loading	- Exhauster off.	

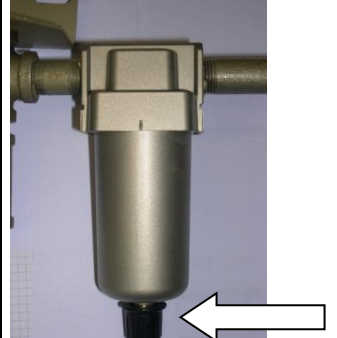
	<ul style="list-style-type: none"> - Add media slowly into reclaimer hopper through the reclaimer door. - Media capacity (initial fill): <ul style="list-style-type: none"> BNP 65: 5 l BNP 220: 10 l BNP 601 / 721: 25l 	
	 <p>Caution</p>	<p>Caution! Noise > 80dB(A)</p> <p>Wear ear protection!</p>
<p><i>Operation checkout with media</i></p>	<ul style="list-style-type: none"> - Close doors. - Adjust blast pressure. - Hold nozzle 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 between dust collector and dust container. Leak tightness can be remarked only during dedusting. 	

5 Operating

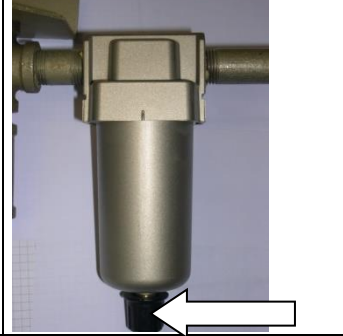
5.1 Installation and operation, shut down after work

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

5.2 Emergency stop

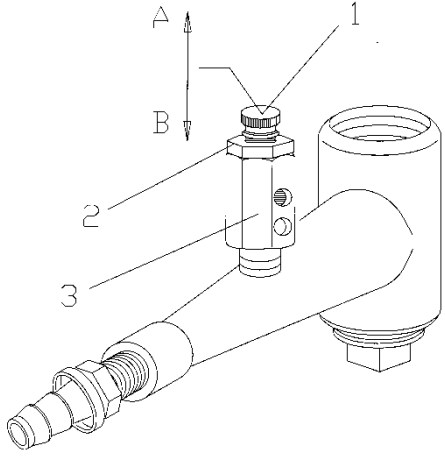
<i>Push emergency stop button</i>	Electrical supply is disconnected, dedusting too	
<i>-close external air supply</i>		Depressurize moisture separator over drain screw
Clarification of causation		

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

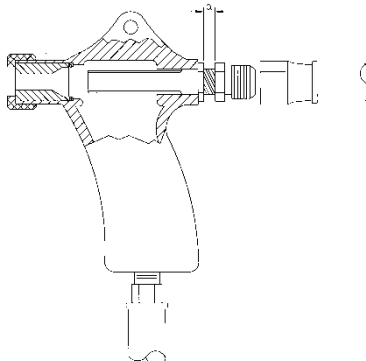
<i>Remove media</i>	see 5.4.4.	
<i>Disconnect electricity</i>	Authorized electrician	
<i>close external air supply</i>		Depressurize moisture separator over drain screw

5.4 Special procedures

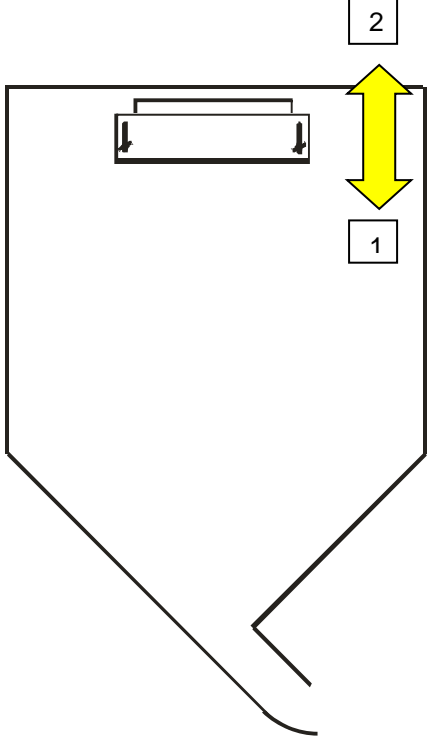
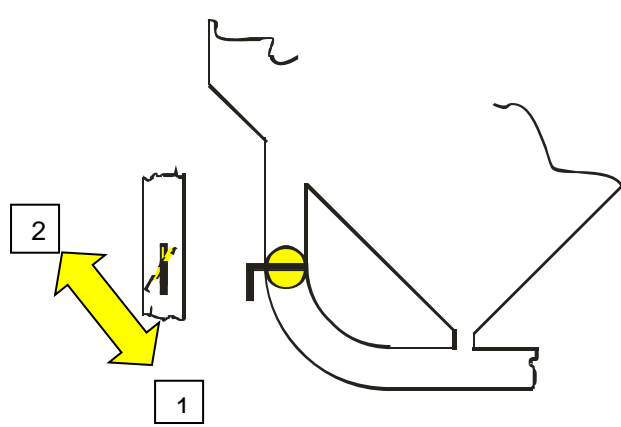
5.4.1 Adjust media / air mixture

	Pos.No.:	Description
	1	Adjust screw
	2	Locking nut
	3	Housing
		Direction A → less media Direction B → more media

5.4.2 Adjusting BNP gun

Please note the combination of air- and blast nozzle	-See schedule „air consumption“ yellow cover sheet -Worn nozzles influence the right rate
Turn the orifice into the BNP blast gun.	 <p data-bbox="624 694 1444 763">– Behind the locking nut should be seen 3,5 to 4 fully pitches of screw thread. (distance „a“)</p>

5.4.3 View and media consumption

 <p data-bbox="151 1646 383 1691">BNP 65 & BNP 220</p>	 <p data-bbox="798 1624 989 1668">BNP 601 & 721</p>
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Damper	Negative pressure	View	Media exhausting / Consumption	Media suction
1	lower	better	higher	better
2	higher	worse	lower	worse

5.4.4 Media unloading

Turn on cabinet	Green button
Blow-off cabinet	-Doors closed -Exhauster working -With blow-off nozzle
Remove media from cyclon	- Turn off fan - Place an empty container under cyclon - Unscrew the plastic plug (wrench no.: 22) - Permit media to flow into container, lastly strike easily with your hand against the cyclon to let the rest flow out

5.4.5 Cleaning dust collector / replace cartridge / disposal of residues

See owner manual for dust collector.

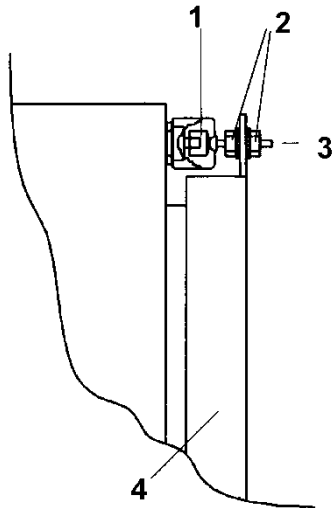
5.4.6 Window replacement

Figure 5: Thread filler strip

	No.:	Description
	1	filler strip
	2	gasket
	3	groove for filler strip
	4	cabinet wall (fits into narrow slot)
	5	window tool
	6	filler strip
	7	window (fits into expanded slot)

<i>Pull filler strip out of window molding</i>	
<i>Remove window</i>	Push the window from the cabinet inside
<i>Install a new gasket</i>	Groove facing the front of the cabinet
<i>Install window</i>	Push into the groove
<i>Pull in filler strip</i>	With installation tool

5.4.7 Adjust doorsafety interlock





No.:	Description
1	Door safety interlock
2	Nut for screw adjusting
3	Actuating screw for safety interlock
4	Cabinet door

Figure 6: Door safety interlock connection

6 Maintenance and cleaning

6.1 Preface

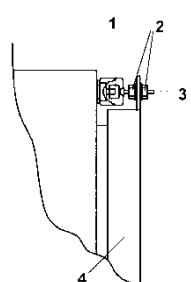
During operation the cabinets are exposed to wear. In order to ensure safe operation and high efficiency the blast machines must be maintained regularly.

	 Warning	<p>Warning! Risk of injury!</p> <p>Dicharge completely pressure during maintenance jobs. (see 5.4.1)</p>
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6.2 If required

	Check and if necessary. replace /cleanse
View window	-Cover lenses -If necessary window glass – see 5.4.6
Gloves	

6.3 After max. 8 h of blasting

	Check and if necessary. replace /cleanse
<p>Door interlock</p> 	<p>-Open doors</p> <p>- Press pin (1). It has to return from alone.</p>

Empty dust container (dust collector).	- Could be necessary already after one hour
Media recovery system (Reclaimer).	- Empty screen → Turn off exhauster. This may be necessary more often - Screen magnet .
Nozzle and nozzle holder	- Check gasket for wear and replace if it's necessary

6.4 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.	- Gaskets of couplings for wear - Blast hose by hand for soft spots

6.5 After max. 150 h of blasting

(1) Gasket on cabinet doors.	
(2) Filter cartridge.	- See owner manual „ Dust collector“

6.6 After other periodes of time

	replace (even without wear) after maximal
Blast hoses	6 years
Remote control hoses	6 years
Air hoses – external air supply	6 years
O-rings	5 years
Gaskets	5 years

7 Troubleshooting

Problem	Probable cause	Remedy
(1) Poor visibility.	Exhaust motor does not rotate.	
	Slide damper in false position	See 5.4.3
	Dirty filter cartridge.	Blow off filter cartridge. Replace
	Exhaust motor rotates in the wrong direction.	Reverse polarity (only through licensed electrician).
	Blast media breaks down rapidly and creates dust	- lower blast pressure - Other media.
	Blocked hose between blast cabinet and reclaimer / cyclone	Check and if necessary disassemble hose and remove dust and media. Blockage is not the real cause.
	Air leakage in the suction cycle.	Check the following components: - Reclaimer door open or leaky. - Test the connections of hose for leaks

		<ul style="list-style-type: none"> - Suction hoses for wear. - Dust leaking from dust container
(2) <i>Abnormally high media consumption.</i>	Cyclone door open or leaky.	Replace gasket.
	Too fine or too lightweight media.	Install and adjust supplementary a Vortex cylinder.
	Negative pressure too high	See 5.4.3
(3) <i>Poor cleaning rate.</i>	Not enough blast media in circuit.	Check and if necessary refill.
	Media metering valve is adjusted incorrect	A new adjustment is necessary (see 5.4.1).
	Reduced air-pressure	<ul style="list-style-type: none"> - Check air supply - If the static pressure decreases during blasting, the following components should be checked : <ul style="list-style-type: none"> + moisture separator + pressure regulator + nozzle
	Blocked blast hose or gun / nozzle.	<ul style="list-style-type: none"> - Push nozzle against an elastical object (for example rubber plate) and step on the foot pedal. - Disassembly hose or gun and cleanse. - Search after the cause of blockage: <ul style="list-style-type: none"> ⇒ Missing or overfilled screen in the reclaimer. ⇒ Incorrectly adjusted metering valve. ⇒ Too heavy blast media.
	Worn nozzle	-remove / change blast or air nozzle
	Moist blast media.	<ul style="list-style-type: none"> - Frequent bridging or blockage in the media metering valve can be caused by moist blast media. Following reasons could be possible: <ul style="list-style-type: none"> ⇒ Media was filled moistly → remove ⇒ Humidity from air supply → interconnect humidifier ⇒ Perspiration water caused by sharp drop in room temperature → Make sure, that there is not too much temperature fluctuation
	BNP gun adjusted incorrectly	- Adjust gun new –See 5.4.2.
(4) <i>Dust comes out the blower</i>	Dust collector gasket defective.	See owner manual „Dust collector „
	Defective cartridge.	See owner manual „Dust collector „
(5) <i>Static shocks</i>		<ul style="list-style-type: none"> - Improve grounding of the cabinet. - In exceptional cases use supplementary ground wire between blast gun and cabinet wall
(6) <i>No air and no media comes out the nozzle</i>	Door interlocks are not actuated	Adjust pin resp. door fixing bzw. see 5.4.7
	Wrong connection of pneumatic	- Only when foot pedal was new installed

	hoses on foot pedal → permanent air blow off	- Connect properly
	Polluted (blocked) moisture separator.	-Clean moisture separator
(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.
(8) No interruption of blast process when foot pedal is released	Foot pedal valve blocked.	- Depressurize the installation - Replace foot pedal valve
(9) Irregular flow or too much blast media comes out the nozzle	Incorrect adjusted media flow.	Adjust new (see 5.4.1).
	Air nozzle screwed too far into the gun.	See 5.4.2

8 Admitted modifications for users

Only with the approval of the producer! Otherwise the installation will lose guarantee and CE-certification.

9 Replacement parts

9.1 Replacement parts BNP 65 and BNP 220

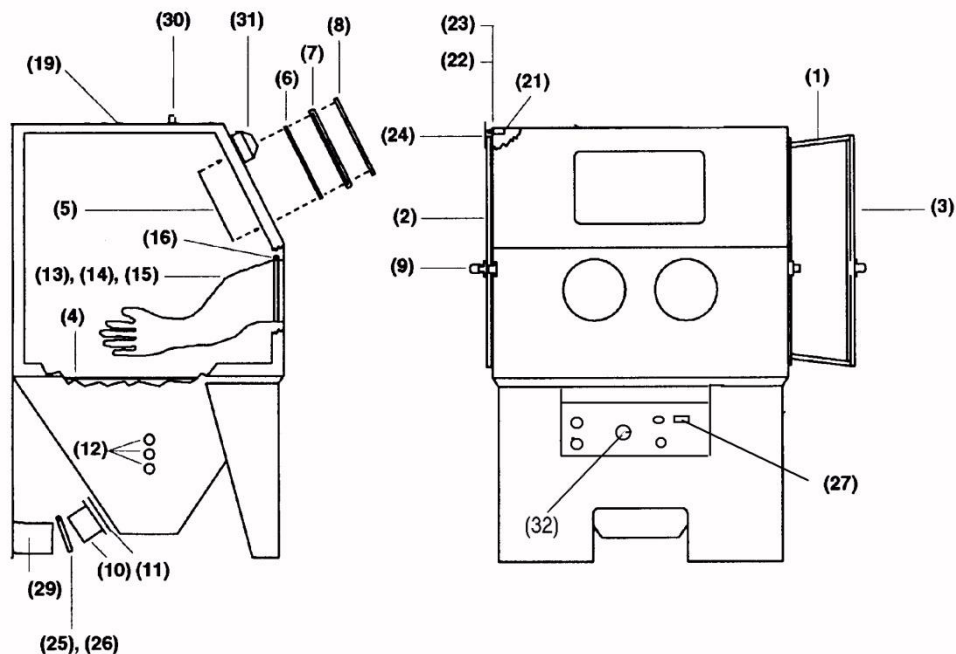
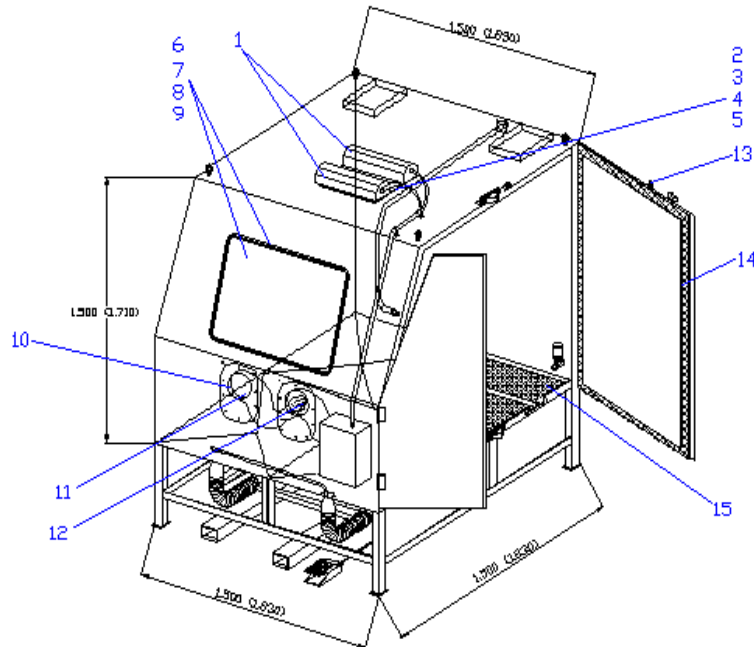


Figure 7: Replacement BNP-65, BNP-220

Pos.	Description	BNP 65 / BNP 75	BNP 85 / BNP 220
(1)	Door gasket per m	12434Z	12434Z
(2)	Left door complete	100326	100328
(3)	Right door complete	100327	100329
(4)	Gate	11811Z	11810Z
(5)	Mylar lens cabinet (5 pcs) small	06190Z	06190Z
	Change frame mylar (5 pcs)- small	100960	100960
-	Glass change frame-small	100991	100991
-	Chain /m (necessary 0,5m)	24273Z	24273Z
-	Door gasket (2m)	12434Z	12434Z
-	Star handle IG M8	100551	100551
(6)	Window glass 0583-0001 (security glass)	12212Z	12212Z
(7)	Gasket for window glass small (1,65m)	12435Z	12435Z
(8)	Filler strip for window glass small (1,65m)	12436Z	12436Z
	Tool for window mounting	12176Z	12176Z
(9)	Door opener special for cabinet	99585Z	99585Z
(10)	Adapter Ø 100 mm / 4"	12376Z	-
	Adapter Ø 125 mm / 5"	-	12377Z
(11)	Gasket Ø 100 mm / 4" for adapter	11776Z	-
	Gasket Ø 125 mm / 5" for adapter	-	11777Z
(12)	Grommet for air hose 0236-0025	11798Z	11798Z
	Rubber sleeve for 19x7	11799Z	11799Z
(13)	Rubber gloves pair	99159Z	99159Z
	Cotton gloves cabinet (pair)	100585	100585
(14)	Rubber glove, left	12710Z	12710Z
(15)	Rubber glove, right	12711Z	12711Z
(16)	Clamp (for gloves)	11576Z	11576Z
(19)	Grommet 0236-0001 (for blast hose 6 mm)	12762Z	12762Z
(21)	Bushing safety door valve	15042Z	15042Z
(23)	Pneumatic valve safety door	12202Z	12202Z
(25)	Clamp f. Ø 100 mm / 4" (wire)	90241Z	
(26)	Clamp f. Ø 125 mm / 5" (wire)		90260Z
(27)	Hour counter	100579	100579
(29)	Suction hose PU Ø 100 mm / 4" per m	12447Z	-
	Suction hose PU Ø 125 mm / 5" per m	-	12449Z
(31)	Lamp less regulator (2x15W)	19574Z	19574Z
(-)	Lamp 0312-0004	11872Z	11872Z
		100742	100742

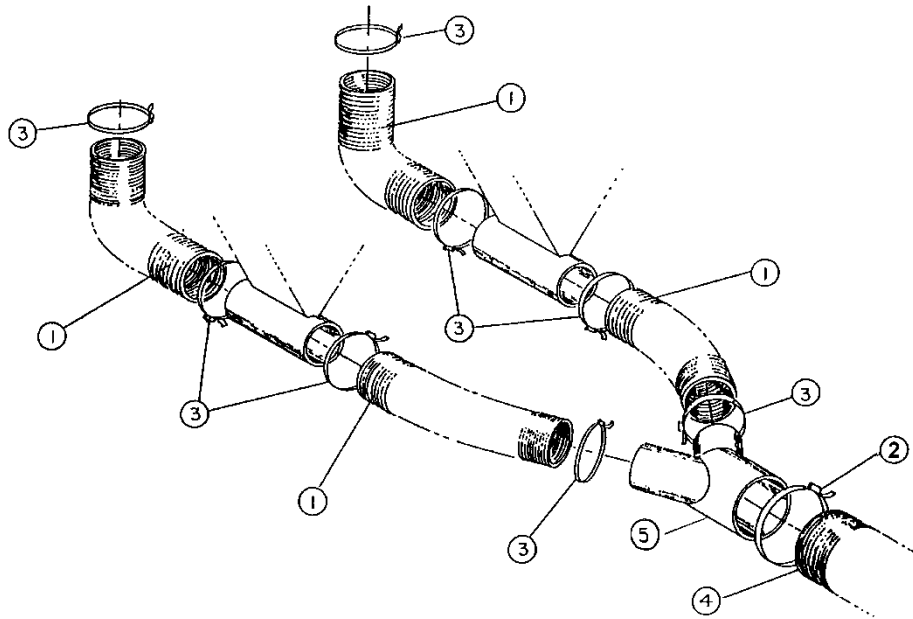
(-)	Lamp holder	11843Z	11843Z
	Handhole rubber set for cabinet 238mm (OD)	99912Z	99912Z
	Handhole ring for cabinet	99913Z	99913Z
	Y-150x100x100 – for MBX 1500	11379Z *only BNP 75	11379Z * only BNP 85

9.2 Replacement parts BNP 601 and 721



Pos.	Description	BNP 601	BNP 721
(1)	Lamp complete LED (36W)	100695	100695
(2)	Mylar lens (small window glass)-5 pcs.	06190Z	06190Z
(6)	Mylar lens (large window glass) – 5 pcs.	100661	100661
	Filler strip for:		
(3)	- Window glass-small (1,65 m)	12436Z	12436Z
(7)	- Window glass-large (2,70 m)	100963	100963
	Gasket window glass for:		
(4)	- window glass-small (1,65 m)	12435Z	12435Z
(8)	- window glass-large (2,70m)	100962	100962
(5)	Window glass 0583-0001 – small 497 x 317 mm (security glass)	12212Z	12212Z
(9)	Window glass (20" x 30") 0583-0002- large 508 x 762 mm (security glass)	12213Z	12213Z
	Change frame complete	100959	100959
	Gasket 3 m	12434Z	12434Z
	Star handle	100551	100551
	Glass change frame small	100991	100991
	Window glass for Change frame large 535 x 800 x 3mm	100992	100992

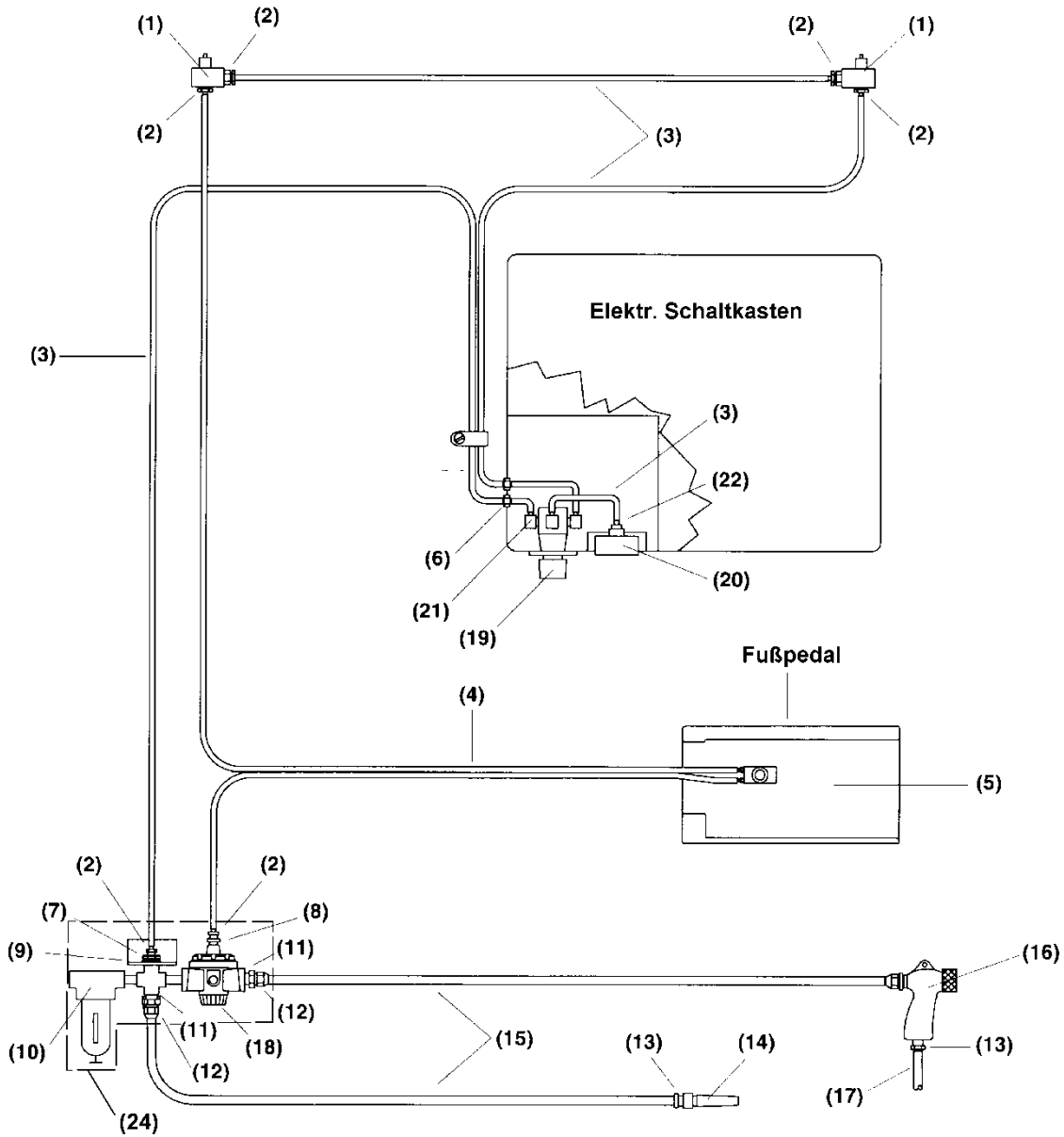
(10)	Clamp for glove	11576Z	11576Z
	Rubber gloves-pair	99159Z	99159Z
(11)	Rubber glove, left	12710Z	12710Z
(12)	Rubber glove, right	12711Z	12711Z
(13)	Door opener special for cabinet	11879Z	11879Z
(14)	Door gasket	90233Z	90233Z
(15)	Grating (4 pcs. / cabinet)	100367	100394
	Control box - complete	100402	100402



Picture 9: Replacement parts BNP-601 and 721

Pos.	Description	601	721
(1)	Suction hose Ø 100 mm / 4" PUR	12447Z	12447Z
(2)	Clamp Ø 150 mm / 6" Draht	90261Z	90261Z
(3)	Clamp Ø 100 mm / 4" Draht	90241Z	90241Z
(4)	Suction hose Ø 150 mm / 6"	12452Z	12452Z
(5)	Y-piece 150-100-100	12379Z	12379Z

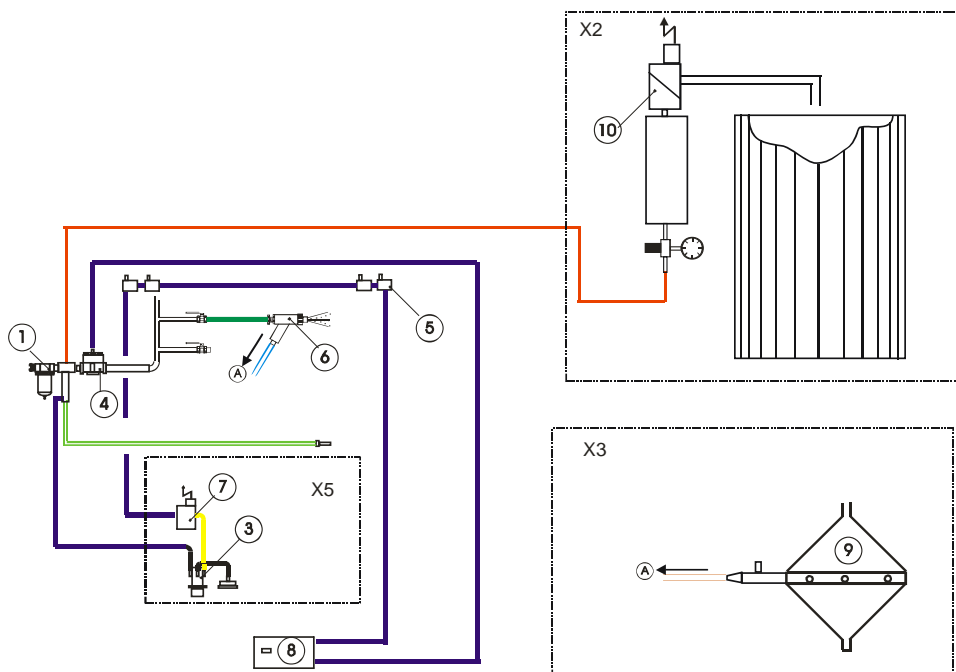
9.3 Pneumatic diagram



Picture 10: Pneumatic diagram

Pos.	Part no.	Description
(1)	12202Z	3 way valve - pneumatic
(2)	11732Z	Screw connection 1/8 "
(3)	12475Z	1/8" Urethan hose per 3m
(5)	06266Z	3-way foot valve
(12)	11723Z	Screw connection
(13)	11724Z	Screw connection
(14)	13116Z	Blow off nozzle cabinet
(15)	12472Z	Air hose 1/2"

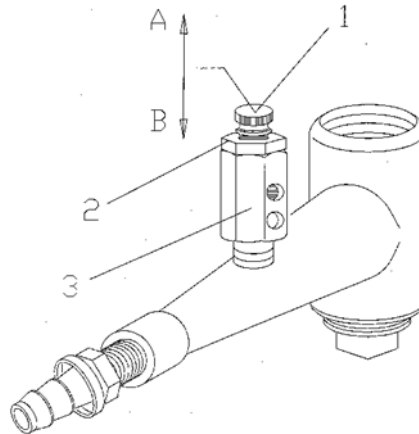
(16)		BNP suction gun
-	12301Z	Suction gun for 6 mm
-	12302A	Suction gun for 8 mm
-	12303A	Suction gun for 9,5 mm
-	12304Z	Suction gun for 11 mm
(17)	12476Z	Blast hose 1/2" PUR
(18)	12057Z	Pressure regulator 3/8" Pilot
(19)	100061	Pressure regulator 1/4" mit Manometer
(20)	11831Z	Manometer
(24)	12763Z	Filter and regulator unit Assy



Pos.	Part N°	Description
1	90545D	Water separator
3	100061 11831Z	Pressure regulator 1/4" (Pilot regulator) Gauge (front mounting)
4	10711Z	Pressure regulator 1 1/2"
5	12202Z	Pneumatic valve safety door
-	15042Z	Bushing safety door valve
6	See 8.5	Blast gun
7	100741	Solenoid valve 1/8"
8	20194Z	Foot pedal Pulsar
9	see 8.4	Media metering valve

10	See additional owner's manual „Dust collector „	Diaphragm valve
-	12475Z	Air hose 1/8" (per m) - brown

9.4 Metering valve



Picture 11: Metering valve

<i>Pos.</i>	<i>Part no.</i>	<i>Description</i>
(-)	12417Z	Metering valve complete
	12012Z	Rubber cap for valve
	12148Z	Air bolt for valve
	11532Z	Valve body
	12011Z	Blind plug

9.5 Cyclon

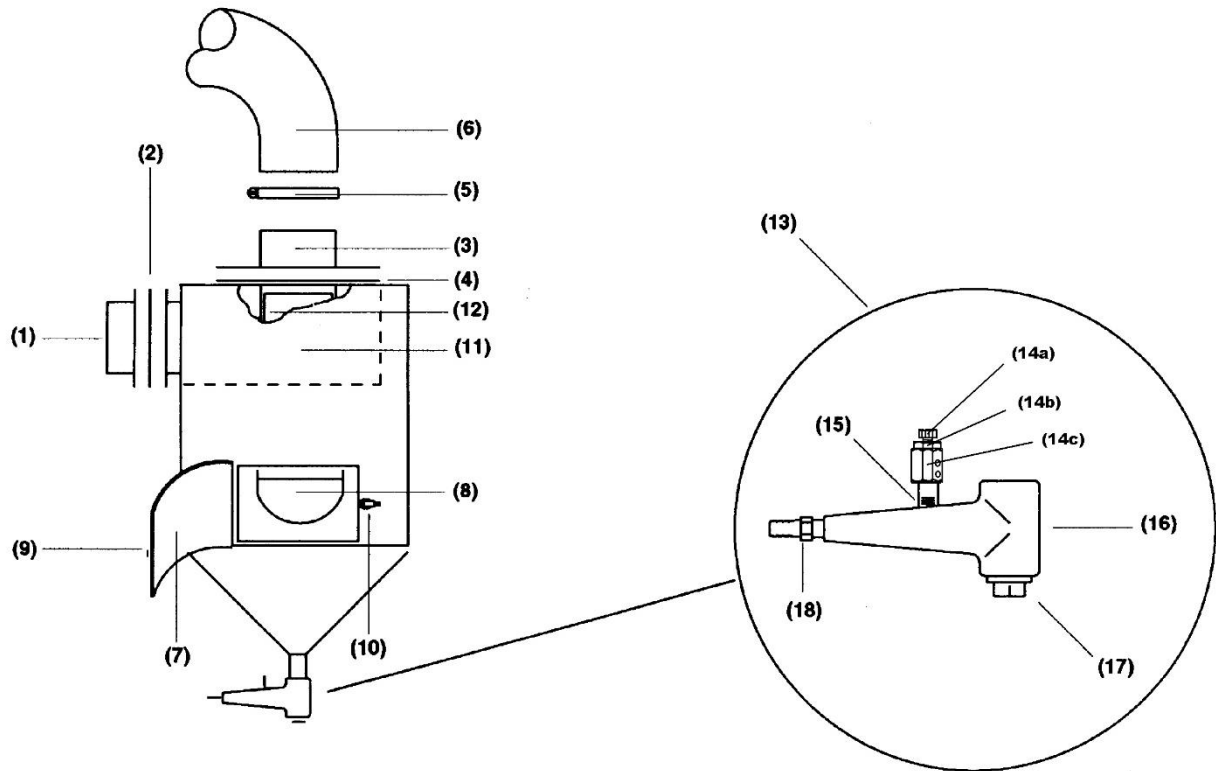


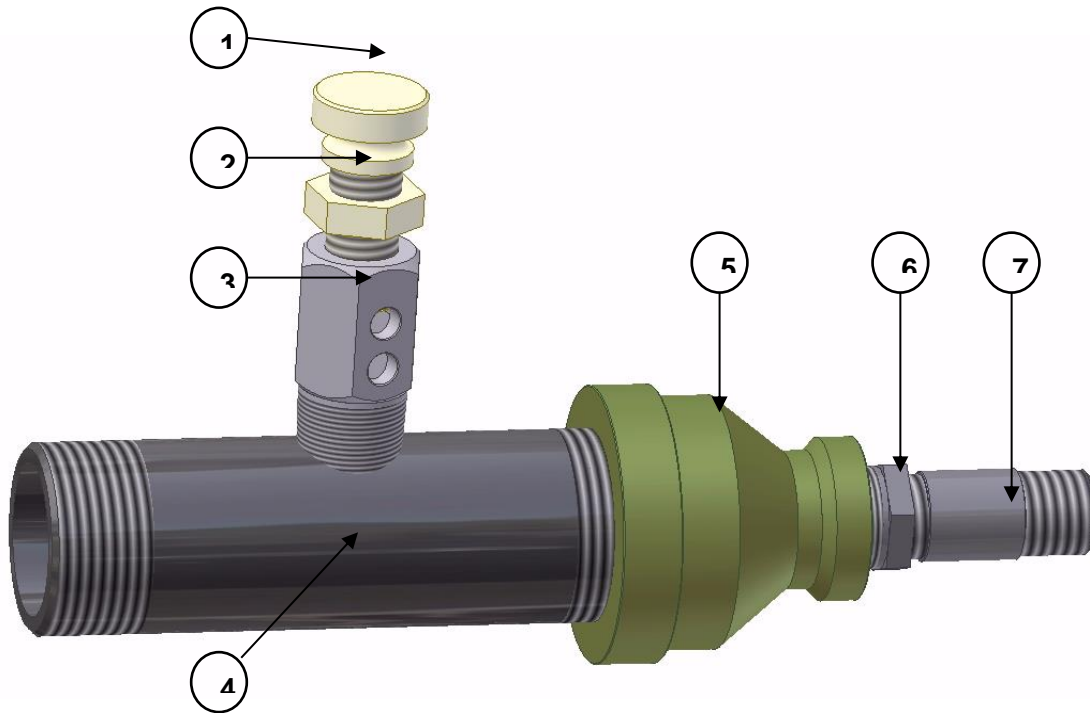
Bild 12: Spare parts cyclon

Pos.	Description	BNP 65	BNP 220
(-)	Cyclon complete	20340Z	20341Z
(1)	Adaptor Ø 100 mm / 4" Cyclon outlet	12365Z	-
	Adaptor Ø 125 mm / 5" Cyclon inlet	-	12361Z
(2)	Gasket for Ø 100 mm / 4" adaptor	11746Z	-
	Gasket for Ø 125 mm / 5" adaaptor	-	11779Z
(3)	Adaptor Ø 150 mm / 6" Cyclon outlet	20343Z	20343Z
(4)	Gasket for outlet adaptor per m	99751Z	99751Z
(5)	Clamp for Ø 150 mm / 6"	90261Z	-
(6)	Suction hose Ø 150 mm / 6"	12449Z	12449Z
(7)	Door gasket cyclon	11745Z	11745Z
(8)	Screen fein-2-3mm	21265Z	21265Z
(8)	Screen coarse 5mm	21275Z	21275Z
(9)	Door	14271Z	14271Z
(10)	Door latch	12263Z	12263Z

(11)	Rubber wear plate	11984Z	11985Z
(12)	Vortex pipe (option)	On request	On request
(13)	Metering valve complete	12417Z	12417Z
	Metering valve for Sputnik	See below	
(14a)	Screw adjusting	100790	100790
(14b)	Nut adjusting STEM lock	100791	100791
(14c)	Housing metering valve	100789	100789
(15)	Nipple for valve	12148Z	12148Z
(16)	Valve body	11532Z	11532Z
(17)	Blind plug for valve	12011Z	12011Z
Option	Sputnik	Not possible	12322Z*1)

*1) Use only at BNP 601 und BNP 721

9.6 Metering valve for Sputnik



Picture 13: Metering valve for Sputnik

Pos.-no.:	Part no.:	Description
1	100790	Screw adjusting
2	100791	Nut, adjusting stem lock
3	100789	Stem, metering adjusting
4	11534	Body, metering valve
5	12024	Bell reducer
6	12818	Pipe bushing
7	11912	Pipe nipple
1-7	12420	Complete assembly

9.7 Suction guns and support

9.7.1 BNP gun

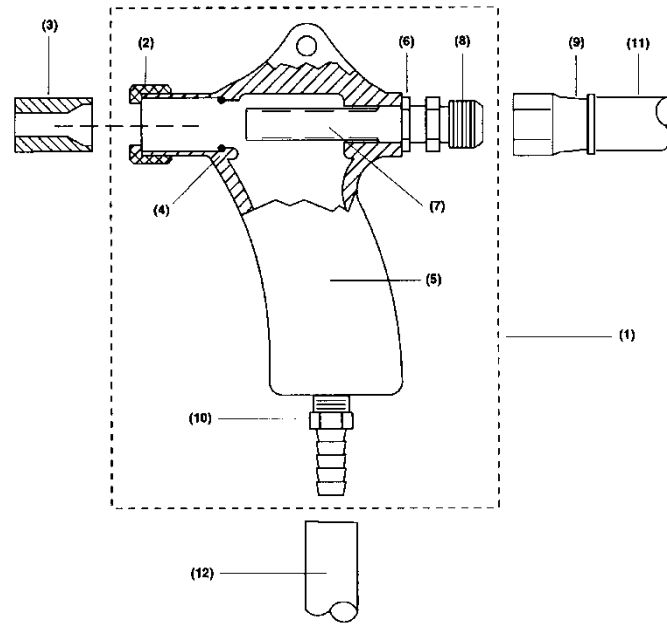


Figure 14: Spare parts BNP gun

Pos.	Description	Part no.:
	Suction gun with 6 mm Boron Carbide nozzle	100766
	Suction gun with 8 mm Boron Carbide nozzle	100534
	Suction gun with 9,5 mm Boron Carbide nozzle	100908
	Suction gun with 8 mm Boron Carbide nozzle-flat jet	100703
	Gun complete with boron carbide nozzle 9,5 mm (wide nozzle)	11934Z
(2)	Nut for short nozzles (brass)	11914Z
(2)	Nut for long nozzles (brass)	11916Z
(2)	Nut for short nozzles (stainless steel)	24229Z
(2)	Nut for long nozzles (stainless steel)	100704
(3)	Boron carbide nozzle No 4 (6 mm) straight	99643Z
(3)	Boron carbide nozzle No 5 (8 mm) straight	11935Z
(3)	Boron carbide nozzle No 6 (9,5 mm) straight	11936Z
(3)	Boron carbide nozzle No 7 (11,0 mm) straight	11937Z
(3)	Angle nozzle 6", 8 mm option	12374Z
(3)	Angle nozzle 9", 8 mm option	12373Z
(3)	Nozzle (long) 3", 8 mm option	11921Z
(3)	Nozzle (long) 3", 9,5 mm option	11922Z
(3)	Nozzle (long) 3", 11 mm option	11923Z
(3)	Nozzle (long) 6", 8 mm option	11927Z
(3)	Nozzle (long) 6", 9,5 mm option	11928Z

(3)	Nozzle (long) 6“, 11 mm option	11929Z
(3)	Nozzle (long) 9“, 8 mm option	11924Z
(3)	Nozzle (long) 9“, 9,5 mm option	11925Z
(3)	Nozzle (long) 9“, 11 mm option	11926Z
(4)	O-ring	12031Z
(5)	Gun housing	11802Z
(6)	Nut	11918Z
(7)	Rubber bushing	12097Z
(8)	Orifice no.: 4 (3,2 mm) for blast nozzle 6 mm	12342Z
	Orifice no.: 5 (4,0 mm) for blast nozzle 8 mm	12343Z
	Orifice no.: 6 (4,8 mm) for blast nozzle 9,5 mm	12344Z
	Orifice no.: 7 (5,6 mm) for blast nozzle 11 mm	12345Z
	Orifice no.: 8 for blast nozzle 11 mm (special case)	12346Z
(9)	Union 0219-030	11723Z
(10)	Fitting 3/8“ 0219-034 (brass)	11724Z
(10)	Fitting autom. gun (stainless steel)	100756
(11)	Air hose 1/2“ per m	12472Z
(12)	Blast hose PU 1/2“ per m	12476Z
	Clamp collar for long nozzles	

*with thread for fixing on rack; O= without ; M=centric ; R= right; L=left

9.7.2 Automatic gun

Useable only with support (see 9.7.3)

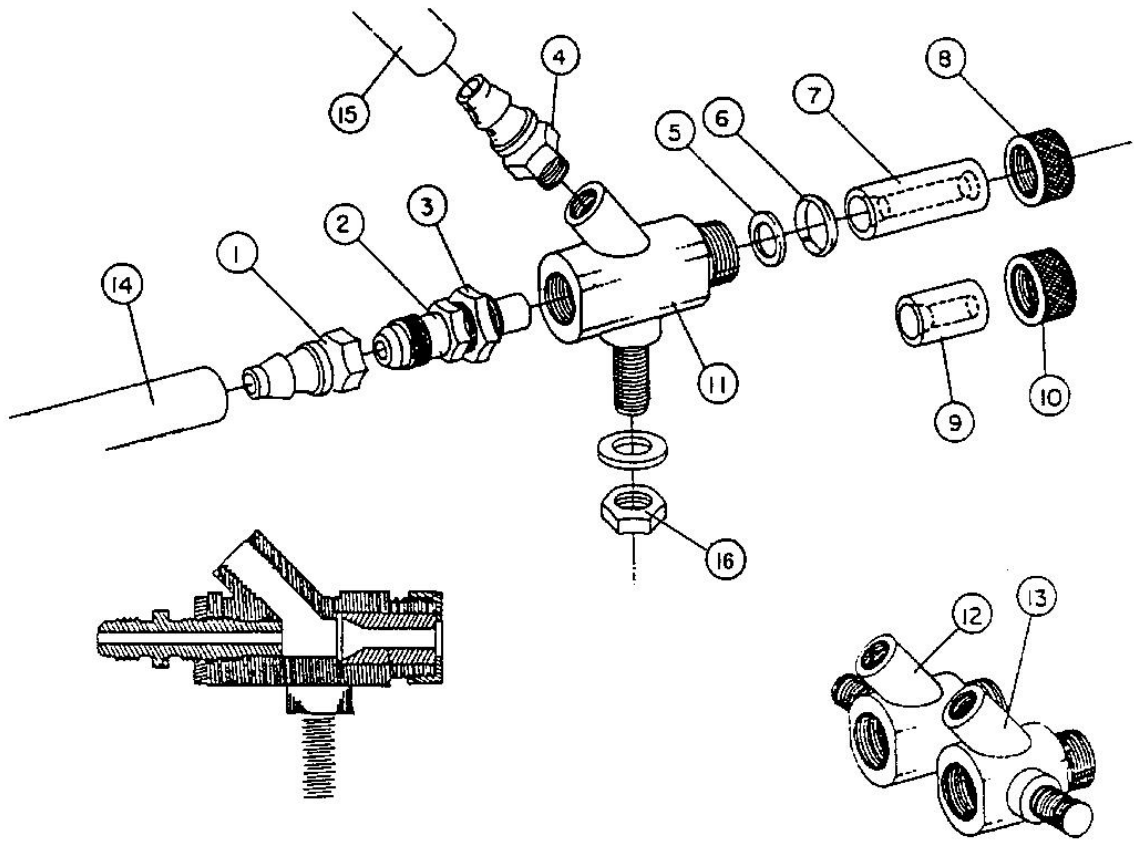


Figure 15: Spare parts automatic gun

Pos no.	Part no.	Description
	90807Z M*	Autom. gun assy with 6mm nozzle
	100099 M*	Autom. gun assy with 8mm nozzle
	-	Autom. gun assy with 9,5mm nozzle
	99551Z L*	Autom. gun assy with 9,5mm nozzle
	99552Z M*	Autom. gun assy with 9,5mm nozzle
	99553Z R *	Autom. gun assy with 9,5mm nozzle
1	11723Z	Union 1/2"
2	11959Z	Orifice no. 4 (3,2 mm) for blast nozzle 6 mm
	11960Z	Orifice no. 5 (4,0 mm) for blast nozzle 8 mm
	11961Z	Orifice no. 6 (4,8 mm) for blast nozzle 9,5 mm
	11962Z	Orifice no. 7 (5,6 mm) for blast nozzle 11 mm
	11963Z	Orifice no. 8 for blast nozzle 11 mm (special cases)
3	11918Z	Adjustment nut for orifice

4	11724Z	Union 3/8" 0219-034
5	12031Z	O-Ring
6	12038Z	Clamp collar for long nozzles
7	11934Z	Boron carbide nozzle no. 6 - 9,5mm, lenght 70mm
	100703	Boron carbide nozzle 8mm, lenght 70mm
	11921Z	Boron carbide nozzle 3", 8 mm 0348-0023 Option
	11922Z	Boron carbide nozzle 3", 9,5 mm 0348-0024 Option
	11923Z	Boron carbide nozzle 3", 11 mm 0348-0025 Option
	11927Z	Boron carbide nozzle 6", 8 mm 0348-0034 Option
	11928Z	Boron carbide nozzle 6", 9,5 mm Option
	11929Z	Boron carbide nozzle 6", 11 mm Option
	11924Z	Boron carbide nozzle 9", 8 mm Option
	11925Z	Boron carbide nozzle 9", 9,5 mm Option
	11926Z	Boron carbide nozzle 9", 11 mm Option
8	11916Z	Nut for long nozzles (bras)
	100704	Nut for long nozzles (VA)
9	99643Z, No. 4	Boron carbide nozzle 6mm, lenght 36mm straight
	11935Z, No. 5	Boron carbide nozzle 8mm, lenght 36mm straight
	11936Z, No. 6	Boron carbide nozzle 9,5mm, lenght 36mm straight
	11937Z, No. 7	Boron carbide nozzle 11mm, lenght 36mm straight
	12374Z	Angle nozzle 6", 8 mm Option
	12373Z	Angle nozzle 9", 8 mm Option
10	11914Z	Nut for short nozzles (bras)
	24229Z	Nut for short nozzles (VA)
11	12276Z	Gun housing, middle
12	12275Z	Gun housing, left
13	12277Z	Gun housing, right
14	12472Z	Air hose 1/2" per m
	11723Z	Union for air hose 0219-030
	12476Z	Blast hose PUR 1/2" pro m

	12471Z	Blast hose Gummi ½"
	11724Z	Union for blast hose (bras)
	100756	Union for blast hose (VA)

9.7.3 Nozzle holder /Option

Pos.	Description	for BNP-gun	For autom. gun
	Nozzle holder base frame	100559	100559
	Clamp ZERO 12mm	99868Z	99868Z
	Nozzle holder	100569	ohne

9.8 Options, Accessories

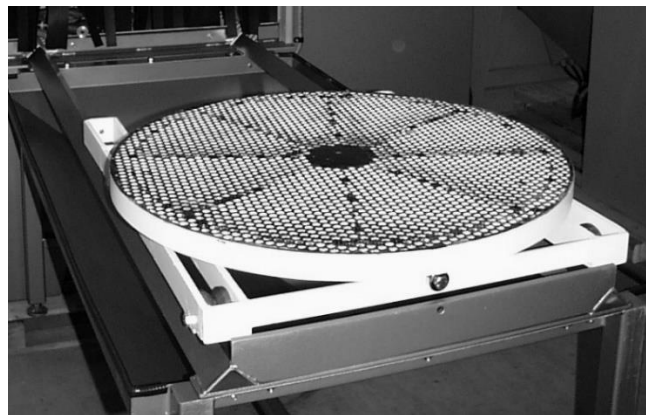


Figure 16: Track assembly: truck, hopper, work car with turntable

Pos.	Description	BNP 65 / 75	BNP 220 / 85	BNP 601	BNP 721	Re-fitting requirements
(-)	Turntable, truck, hopper + work car	13530Z	12835Z	12524Z	12523Z	Opening for rails
(-)	Turntable Ø 760 mm only	90881Z	90881Z			
(-)	Turntable Ø 1200 mm only			21400Z	21400Z	
	Wheel for car complete	24337Z	24337Z	27355Z	27355Z	
	Wheel for work car without bearing	90987Z	90987Z	27356Z	27356Z	
	Bearing	100479	100479	30540Z	30540Z	
	Screw for bearing cover / Stück	100480	100480	100480	100480	
	Wheel axle	100478	100478	30541Z	30541Z	
(-)	Stationary turntable Ø 760 mm complete	99840Z	99840Z			none
(-)	Gate 300 x 300 mm (per pcs.)	100282	100282	100282	100282	Openings in door
(-)	Gate 400 x 400 mm (per pcs.)	*1)	100283	100283	100283	Openings in door
(-)	Port 300 x 300 mm including mounting	90681Z	90681Z	90681Z	90681Z	Openings in door

(-)	Port 400 x 400 mm including mounting	*1)	100302	100302	100302	Openings in door
(-)	Tumble 4,5 l complete with E-motor 230V (door mounting possible))	100549	100549	100549	100549	Openings in door Setting electrical connections
	Tumble 30 l complete with E-Motor 230V (door mounting possible)	Not recommended	100548	100548	100548	Openings in door Setting electrical connections
(-)	Tool for window installation	12176Z	12176Z	12176Z	12176Z	

*1) not possible

9.8.1 Further options

	Re-fittings possibles by customer
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


9 Wiring diagram

See control box

10 Disposal

Unless a return or disposal agreement has been made, recycle the dismantled components:

- Scrap metals.
- Send plastic elements for recycling.
- Dispose of remaining components sorted according to material properties.

	<p>ATTENTION!</p> <p>Environmental damage through incorrect disposal! Electronic scrap, electronic components, lubricants and other auxiliary materials are subject to hazardous waste treatment and may only be disposed of by approved specialist companies!</p>
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The local authority or special waste disposal companies provide information on environmentally friendly disposal.