

Single Chamber Blast Machines Models BL1080, BL14160 BL20300, BL24650,BL24800

### This WARNING ALERT SYMBOL means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! ! WARNING!

The WARNING ALERT SYMBOL identifies important warnings, danger, precautions, and safety messages on equipment, safety signs, in manuals, or elsewhere. When you see this symbol, be alert to the possibility of serious bodily injury or impairment, serious illness, or death. Follow the instructions in the warning alert.

BEFORE USING THIS PRODUCT, READ ALL INSTRUCTIONS. LITERATURE, LABELS. SPECIFICATIONS AND WARNINGS SENT WITH AND AFFIXED TO THE EQUIPMENT. DO NOT PAINT OVER, ALTER OR DEFACE THE EQUIPMENT INSTRUCTION TAGS, DECALS, OR PLATES. IMMEDIATELY REPLACE ALL DECALS, TAGS, AND PLATES WHICH BECOME ILLEGIBLE. IF THE EQUIPMENT USER, OR ANY ASSISTANTS OF THE USER CANNOT READ OR THOROUGHLY UNDERSTAND THE WARNINGS AND INFORMATION CONTAINED IN THESE INSTRUCTION, IT IS THE RESPONSIBILITY OF THE USER'S EMPLOYER, AND THE ASSISTANTS EMPLOYER TO EDUCATE, TRAIN AND TEST THEM ON THE PROPER OPERATION AND SAFETY PROCEDURES OF THE EQUIPMENT. PERIODIC INSPECTIONS AT THE WORK SITE SHOULD BE MADE BY SUPERVISORY PERSONNEL TO ENSURE THE EQUIPMENT IS BEING PROPERLY USED AND MAINTAINED IN A SAFE WORKING ENVIRONMENT. A COPY OF THIS SAFETY MANUAL AND EQUIPMENT OWNER'S MANUAL MUST BE KEPT WITH THE EQUIPMENT, AND MUST BE READILY ACCESSIBLE TO THE EQUIPMENT USERS, USER ASSISTANTS, AND SUPERVISORS. FAILURE TO COMPLY WITH ALL INSTRUCTION CAN RESULT IN SEVERE BODILY INJURY OR IMPAIRMENT, SERIOUS ILLNESS, OR DEATH.

IMPORTANT NOTICE TO DISTRIBUTORS, PURCHASERS AND END USERS OF BLASTLINE PRODUCTS AND THIS INFORMATION MATERIAL.

The information provided, described and illustrated in this material is intended for experienced, knowledgeable users of abrasive blast equipment, surface finishing and supplies ("Products").

The products described in this material may be combined as determined solely by the user, in a variety of ways and purposes. However, no representations are made as to intended use, performance standards, engineering suitability, safe practices or compliance with government regulations and laws that apply to these products, products of others, or a combination of various products chosen by the user or others. It is the responsibility of the users of this product, products of third parties, and a combination of various products, to exercise caution, and familiarize themselves with all applicable laws, government regulations and safety requirements. Nor are representations made or intended as to the useful life, maintenance cycles, efficiency or performance of the referenced products or any combination of products.

Surface preparation job sites include a wide range of equipment used in the task of blast cleaning, including but not limited to: abrasive blast cleaning machines; scaffolding; air compressor; abrasive (media); work platforms or boom; dehumidification equipment; ventilation equipment; supplied air respirators; air filters; safety alarms and atmospheric measuring instruments; light system; material handling equipment; vacuum recovery systems; paint spray equipment and coating supplies.



While these products may be offered by BLASTLINE, many of the products may be supplied by other manufactures. It is the responsibility of the user, and/or employer of the equipment user to contact each equipment manufacturer and supplier of other products for information, training, instruction and warnings with regards to safe operation, and proper maintenance of the equipment in the particular application the equipment is being used.

This material must not be used for estimating purposes. Production rates, labour performance or surface finishes are the sole responsibility of the user based on the user's expertise, experience and knowledge of industry variables.

It is the responsibility of the user to ensure that proper and comprehensive training of operators has been performed, and all environment and safety precautions observed. Consult with the equipment manufacturer for training programs and instructional materials that are available.

BLASTLINE provides a variety of excellent products to the surface preparation industry, and we are confident that all proficient users, operators and contractors in this industry will continue to use our products in a safe and knowledgeable manner.

#### ! WARNING!

PRIOR TO READING THE ATTACHED OWNER'S MANUAL, THIS GENERAL SAFETY WARNING MANUAL MUST BE READ, IF THE EQUIPMENT USER, OR ANY ASSISTANTS OF THE USER CANNOT READ OR THOROUGHLY UNDERSTAND THE INFORMATION IN THIS MANUAL CONTACT YOUR SUPERVISOR. TRANSLATIONS MUST BE PROVIDED FOR NON-ENGLISH SPEAKING PERSONNEL.



### ! WARNING ! WORK ENVIRONMENT HAZARDS

It is the responsibility of the job contractor/blast operator employer to provide at no cost proper protective equipment to all job personnel prior to entering or working in an abrasive blast cleaning environment. NIOSH approved respirator MUST BE WORN AT ALL TIMES in blast cleaning process, contain toxic levels of dust containing silica, arsenic, cyanide or other toxins in the abrasive, or lead and other metals in the surface coating to be blast cleaned. The law requires that employer measure and monitor the air-borne contaminant levels in the work area and immediate vicinity for all existing and potential contaminants.

Failure to observe these steps may cause death and/or damage to your health, including certain delayed lung diseases such as silicosis, pneumoconiosis or asbestosis.

Other work environment hazards may be present from contaminated water, adjacent coating application fumes, asbestos, chemicals, and engine exhaust (carbon monoxide). The law requires that all operators consult with their employers on the proper personal protective equipment and measures that MUST be taken to protect personnel within the work environment, and others that may be EXPOSED to blast cleaning work environment hazard. For additional information contact the U.S Environment Protection Agency and the local OSHA office.

## ! WARNING! OPERATOR SAFETY EQUIPMENT

OSHA requires protective safety equipment and clothing be used at all times FOR ALL PERSONNEL IN THE IMMEDIATE VICINITY OF THE ABRASIVE BLAST CLEANING AREA, including, but not limited to:

- Abrasive-resistant suit, leather gloves, safety shoes with non-slip soles, ear and eye protection
- NIOSH approved air fed respirator(helmet) supplied by a source of breathing air that meets AT LEAST the requirement for type 1 gaseous air described in the compressed Gas Association Commodity Specification G7.1 as specified by Federal law 30 CFR, part II, subpart J, 11.121(b), and the respirator manufacturer. Air must be filtered and

monitored for carbon monoxide and other toxic gases to assure clean, breathing ait at all times.

Before using the NIOSH approved respirator, be sure your employer has determined that airborne contaminants concentrations do not exceed those allowed by applicable OSHA, EPA regulations and recommendations for continuous flow supplied respirators. Federal law requires that your employer measure and monitor airborne contaminants level in their work area.

Improper respirator use may damage your health and cause death improper use may also cause certain life-threatening delayed lung disease such



as silicosis. DO NOT wear NIOSH approved supplied air respirator if any of the following conditions exist:

- Atmosphere is immediately dangerous to your life or death.
- You CANNOT escape without the aid of respirator.
- Work area is poorly ventilated.
- Unknown contaminants are present
- Contaminants are in excess of regulations for recommendations as described above.
- Atmosphere contains less than 19.5 percentage oxygen.
- You are untrained and unfamiliar with the operation, limitation, and maintenance of respirator.
- The condition of the respirator he is born are damaged.

DO NOT wear a respirator until you have passed a complete physical exam (perhaps including a lung x-ray) conducted by qualified medical personnel, and have been trained in the respirators use maintenance and limitations by

a qualified individual who has extensive knowledge of respirator.

Inspect all components of the respirator system daily for signs of wear and tear or damage that might reduce the degree of protection original provided. Immediately replace worn or damaged component with NIOSH approved component or remove the respirator from service.

Be certain to check air filter and respirator system hose are not connected to implant lines that contain nitrogen toxic gases inert gases or any other non-breathable, non-Grade D air sources. Never use oxygen with a respirator. Never modify airline connections

To accommodate air filter/ respirator breathing hose WITHOUT FIRST testing the component of the airline. FAILURE TO CONNECT TO THE PROPER AIR SOURCE MAY RESULT IN SERIOUS BODILY INJURY OR IMPAIRMENT OR DEATH.



**1.0 PRODUCTION INTRODUCTION**: This manual is provided to assist you in safe operation and proper maintenance of Blastline single chamber, pressure blast machines with remote controls. Refer to this manual for replacement Parts for the following blast machine model:

BL1080 BL14160

BL20300 BL24650 BL24800

Refer to figure 1 and 2 for basic single-chamber blast machine components. Recommended accessory items are shown. Review all appropriate owner's manual prior to installing accessory items on any blast line equipment. To ensure safe and efficient operation use genuine Blastline parts and accessories.

1.1 SAFETYPRECAUTIONS: Safety precautions, warnings, caution alerts, danger alerts and notices have been prepared to advise the operator and operator assistants of shop and job site safety procedures. The safety precautions, warnings and alerts are to be used as a guide and supplement to all other safety precautions and warnings, in all other manuals pertaining to blast machines, other machinery, controls and auxiliary equipment; local plant and shop safety rules and codes; and Federal State, Provincial laws and regulations .All operators, and workers within the immediate vicinity of the blasting job site must fully understand and comply with all safety procedures and precautions. Refer to the latest edition of the OCCUPATIONAL SAFETY AND STANDARDS. HEALTH available from THE DEPARTMENT OF LABOUR.

Accidents can occur that result in serious injury to the operator or others due to clothing and other articles becoming entangled or in contact with revolving parts, levers, and electrical equipment. DO NOT wear neckties, scarfs, loose-fitting clothing near or in the vicinity of this machinery. DO NOT wear jewellery such as bracelets, watches, rings or neckties when operating this equipment or other machinery.

Be certain hearing protection equipment is in good working order and replace it as necessary. Wear hearing protection whenever entering or working in a noisy environment, such as a media blasting area, and when machinery is in **FAILURE** TO FOLLOW THIS operation. PRECAUTION CAN RESULT IN SEVERE BODILY INJURY OR IMPAIRMENT, SEVERE ILLNESS, OR DEATH REFER TO THE LATEST EDITION OF THE OCCUPATIONAL SAFETY AND **HEALTH** STANDARDS, (available from the department of labour) for permissible noise level guidelines.

Always report unsafe working conditions to the job supervisor or company safety department. Worn or broken flooring, Ladders and handrails, unstable slippery platforms of scaffolds must be repaired before use.

Do not use skids, stocks, media drums or Boxes as makeshift platforms, tables and climbing aides.

DO NOT paint over, alter, remove or deface equipment instructions decals/plates, warning decals/plates, safety decals/plates, danger decals/plates, or tags. Immediately replace all decals/plates which become eligible replacement decals plates and tags can be obtained from the manufacturer.

OSHA requires protective safety equipment and clothing be used all times FOR ALL PERSONNEL IN IMMEDIATE VICINITY OF THE ABRASIVE BLAST CLEANING AREA, including but not limited to

- Abrasion-resistance suit, leather gloves, safety shoes, ear and eye protection.
- NIOSH approved Air fed respirator (helmet) supplied by a source of breathing air that meets AT LEAST the requirements for type 1 gaseous air described in the Compressed gas Association commodity specification



G-7.1(Grade D or higher quality as specified by federal law 30 CFR, part subpart J11.121 (b) and the respirator manufacturer .Air must be filtered and monitored for carbon monoxide and other toxic gases to assure clean, breathing air at all times. Adhere to all NIOSH, EPA and ACGIH recommendations, limitations and regulations pertaining to approved respirator usage within permissible exposure limits(PEL) of hazardous substance concentrations.

1.2 OSHA REQUIREMENTS: Avoid serious bodily injury, impairment, or death. OSHA regulations must be followed on all abrasive blast cleaning operations, including but not limited to 1910.132, sections 1910.133, 1910.134 (Respiratory protection) section 1910.244 (b) (Abrasive blast nozzles, remote control devices), section 1910.1000 (air contaminants), section 1910.194 (Ventilation) and section 1926.62 (Employee protection requirements construction workers exposed to lead.)

#### 2.0 SET-UP PROCEDURES

**2.1 INSTALLATION:** Upon receiving the blast machine inspect the blast machine and remote control system for apparent and hidden damage. Check the pop-up valve pop-up valve seta gasket, inspection door components, remote control components, piping, and compression coupling fittings. Prior to operating the blast machine replace excessively worn or damaged parts, and tighten all fitting components.

Check the remote control system for missing components by checking the replacement parts listing in the appropriate owner's manual. Manually depress the switch handle to check for proper operation. Immediately report any shortages, or obvious damage to your supervisor, retailer and Blastline India. If you believe components are missing or damaged, DONOT ATTEMPT TO USE THE REMOTE CONTROL SWITCH OR SYSTEM.

Check the blast hose, nozzle holder and couplings for wear and damage. Replace any components or parts that are excessively worn or damaged.

Inspect all fittings for proper installation. Check the pipe and coupling connections for a secure fit, DO NOT operate the blast machine if connections are loose.

#### NOTE: ALWAYS GROUND THE BLAST MACHINE.

Check the blast hose couplings and nozzle holder for coupling gasket(s) and nozzle holder washer. Replace components if they are worn, soft, damaged or missing, REGULATIONS REQUIRE that the blast hose couplings be secured together that all blast hose coupling be secured together with safety clips or wire. In addition, safety cables must be used on all blast hose and air hose connections.

- **2.2** PRIOR to placing abrasive in the blast machine, inspect and test the remote control system.
- **2.3** Attach the deadman body switch to the blast hose. Adjust the nylon tie so the switch is firmly secured to the blast hose. The Blastline model RCV and remote control switches pneumatic utilize common fittings.
- **2.4** OSHA requires protective safety equipment and clothing be used at all times FOR ALL PERSONNEL ON THE BLAST CLEANING JOB SITE AND WITH IN THE IMMEDIATE VICINITY OF THE BLASTING AREA.



#### ! WARNING!

AVOID SERIOUS BODILY INJURY, IMPAIRMENT, OR DEATH! OSHA REGULATIONS REQUIRE AND OPERATIONAL DEADMAN REMOTE CONTROL SYSTEM BE USED ON ALL ABRASIVE BLAST CLEANING MACHINES NEVER OPERATOR IN A CELL IN ABRASIVE BLAST CLEANING MACHINE WITHOUT OPERATIONAL REMOTE CONTROLS REFER TO OSHA 1910.244(B).

#### 3.0 START-UP PREPRATION

- **3.1**: Place the air compressor as near to the blast machine as possible. Position the compressor so that the existing wind keeps dust and engine exhaust away from the compressor air intake.
- **3.2:** Be sure that the BI-line switch handle is raised and clear of the body handle. On the deadman handle the safety button should be protruding outward.
- **3.3:** Close the adjustable abrasive control valve, The handle of the abrasive control valve should be to the far right or left of the center position. If an abrasive girt valve is Attached to the machine, be certain the valve is closed prior to pressurizing the blast machine.
- **3.4:** Connect the coupled blast hose to the blast machine "pusher-line" outlet coupling. As a rule, the I.D of the blast hose used should be 3-4 times the nozzle orifice size.
- **3.5:** Load the supply of abrasive into the blast machine concave head. Once the machine is filled, reserve amounts of abrasive can be held in the concave head for instant refill when the blast machine depressurizes.
- **3.6:** Warm up the compressor until the required working pressure and operating temperature is attained.
- **3.7:** To prevent accidental start-ups, the safety air petcock on the blast machine remote control valve should be kept often while the remote control system is inactive. An open air petcock acts as a

- safety switch, and will deactivate an operating remote control system.
- **3.8:** Prepare the blast operator and personnel in the blast cleaning job site and immediate vicinity with protective safety equipment including, but not limited to NIOSH approved supplied-air respirator, leather gloves, ear and eye protection, and abrasive resistant body cover wear.
- **3.9:** Check the blast machine, air supply hose and remote control air lines and components for air leaks. BL air lines and fittings must be inspected. Secure control of the blast hose and nozzle. Close the safety air petcock on the blast machine remote control valve.
- **3.10:** If the remote control system is equipped with Blastline model RCV or remote control switch, air should now escape from the orifice below the switch handle. A malfunctioning blast machine remote control system can subject personnel within the blast vicinity to serious illness, injury, impairment, or death.



#### 4.0 SHUTDOWN/STORAGE

To maintain the operating condition of the blast machine always clean out the abrasive remaining in the blast machine .This will eliminate complications caused by moist abrasive in the blast machine system. To remove abrasive:

- Wear proper protective equipment, including but not limited to, face and eye protection, NIOSH approved respirator, ear protection and full body clothing
- Depressurize the blast machine and blast hose.
- Depressurize the air compressor air supply hose attached to the blast machine Blastline remote control valve.
- Close the blast Machine choke valve.
   Remove the nozzle from the blast machine nozzle holder.
- Adjust the abrasive control valve or abrasive grit value to a full open position.
- Point the blast hose end into a waste box container; THE OPERATOR MUST MAINTAIN CONTROL OF THE BLAST HOSE AT ALL TIMES.

- Close the air safety petcock. Pressurize
  the Air Supply line to the blast machine,
  and lower the balance with handle to the
  "on" position .Abrasive will begin to expel
  into the container.
- Once the abrasive blast machine is emptied, release the bi-line switch handle. Be certain the safety button or safety lever is locked into OFF position and the blast machine control hose and the blast force are completely depressurized before releasing the blast force and nozzle holder. Open the air safety petcock on the blast machine remote control system valve.
- Shut off the source of compressed air and depressurize the air supply hose connected to the blast machine.
- Blast hose and a supply hose should always be loosely coiled and tied when not being used. Always store the blast hose and a hose in a sheltered area. The blast machine should be covered and located in a shelter area.



#### 5.0 PREVENTIVE MAINTENANCE

Regularly scheduled maintenance the is responsibility of the equipment owner and user. Prior to each work shift the blast machine, remote control system and all related components must be inspected for worn or damaged parts. Avoid serious bodily injury, impairment, severe illness or death. Immediately replace all worn or damaged component parts with genuine Blastline parts prior to using the equipment. DO NOT substitute other brand replacement parts and components for genuine Blastline parts. Maintenance and repair service on Blastline blast machines and remote control systems should only be performed by qualified personnel completely trained and familiar with the Blastline product .When in doubt conduct Blastline industries.

#### ! WARNING!

PRIOR TO SERVING EQUIPMENT, ALWAYS REMOVE THE EQUIPMENT AWAY FROM THE JOB SITE TO A SAFE, CLEAN AREA FREE OF AIRBORNE CONTAMINANTS OR TOXIC OVERSPRAY FAILURE TO ABIDE BY THIS WARNING COULD LEAD TO SERIOUS ILLNESS, SEVERE BODILY INJURY OR IMPAIRMENT OR DEATH.

- **5.1** Remote control systems .The Blastline remote control systems are designed to operate trouble free if the following maintenance procedures are observed:
- **5.2** On a daily basis, prior to each work shift, be sure the remote control handle, handle insert, safety button assembly, safety Lever assembly and all fittings are inspected and cleaned. Remove all dust, abrasive and dirt from the control handle, rubber insert, springs, safety button or safety lever and fittings. Refer to appropriate remote control switch owner's manual. Clean the switch after each work shift
- **5.3** On a daily basis or more often if job conditions require, inspect the exhaust silencer. If the cartridge plug, body or threads are visibly damaged or a worn, replace the unit before using the blast machine.

#### BLAST MACHINE AND REMOTE CONTROL

NEVER OPERATE, SELL OR RENT A BLAST MACHINE WITHOUT OPERATIONAL REMOTE CONTROLS. SERIOUS OR FATAL INJURIES COULD RESULT.

Inspect and test remote controls prior to each work shift. Never modify or substitute different brand replacement part on Blastline remote control system. If Blastline remote controls are altered involuntary actions can occur which may cause serious personal injury or impairment death or property damage.

Do not substitute or use welding hose in a place of Blastline twin line remote control hose. Welding hose internal diameter and composition are unsafe and are not compatible with Blastline remote control system.

Protect remote control and operating hoses from freezing a blast machine remote control system is to be operated in freezing or near freezing weather. Freezing air temperatures can cause clogging at the remote control body and may cause involuntary activation of remote control.

Blast machines are not insulated. Maintain safe clearance from electrical power lines. Install grounding rod to the blast machine prior to blasting. Do not attempt to manually lift move or tilt a blast machine containing abrasive. Use an approved Forklift crane or Other specially designed devices.



# BLASTLINE

#### SINGLE CHAMBER BLAST MACHINES

#### **BLAST HOSE COUPLING AND NOZZLES**

Inspect the condition of a blast hose(s), air hose(s), nozzle holder(s), coupling(s) and the gasket several times during each work shift. Replace if worn distorted soft damaged or if air leaks are occurring, abrasive leakage can result in dangerous coupling or nozzle holder failure.

Regulations require that all blast hose couplings be secured together with safety clip or wire. Always use safety cables on our hose and blast hose connection to relieve tension on hose and control whipping action in the event of coupling blowout. Never install or use couplings and nozzle holder that are loose. DO NOT provide a tight fit on the last hose. Always use the manufacturers recommended coupling screws for productive blast cleaning, the air hose

and fittings connected to the blast machine and compressor must be four times size of the nozzle orifice size. Blast hose inner diameter must be three to four times the nozzle orifice size. To reduce pressure loss, excessive blast hose length and sharp bends in the blast hose should be avoided.

Point the abrasive blast nozzle only at the surface to be cleaned. Neglect use of nozzle can cause serious bodily injury or impairment service in death or property damage.

#### **OPERATING INSTRUCTIONS**

Turn the air ON at the compressor, and then open the abrasive metering valve. The operative should protect him/herself with suitable clothing, helmet, and air breathing supply; adjust the air breathing supply using the valve on the belt. Place the deadman's handle in the open position, close the pet cock on the RCV-1 valve. Adjust the drain cock on the water separator to allow a constant bleed of air/water vapour. Hold the blast hose and holder securely. ALWAYS DIRECT THE NOZZLE AT THE WORK PIECE, NEVER ANYWHERE ELSE AND NEVER NEAR TO PEOPLE. Pressurise the machine by closing deadman's handle, the pop-up valve will close the sealing ring, air will then pass through the nozzle. Purge the machine by permitting the air to discharge through the nozzle thus expelling any moisture which may have accumulated when the machine has not been in use. Depressurise the machine by either releasing the deadman's handle or opening the pet cock on the RCV-1 valve. Close the abrasive metering valve.

#### **HOW TO OPERATE MACHINE**

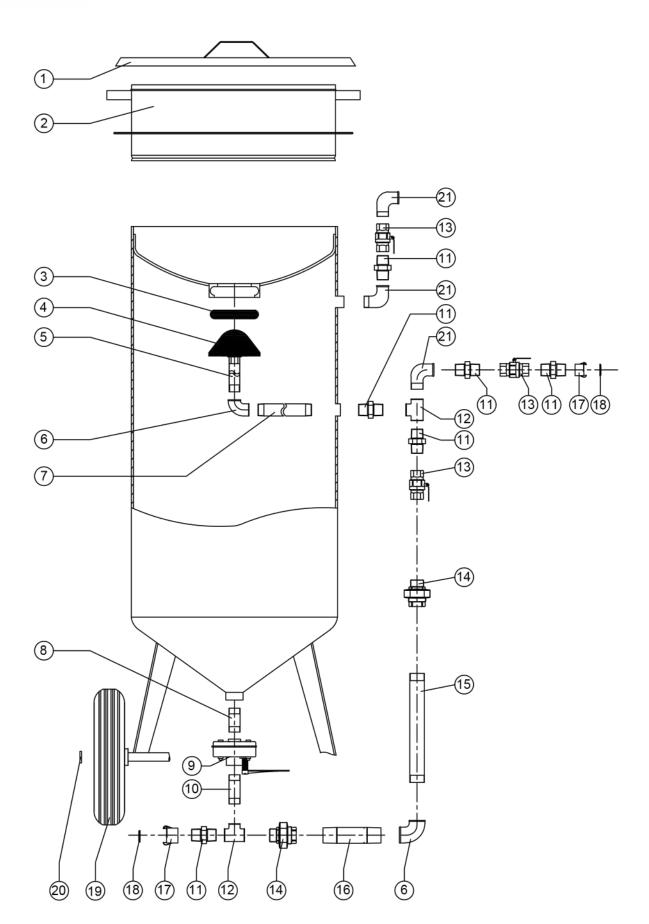
Open the mini ball valve of RCV; check that the abrasive sieve is in position. Load the chosen abrasive into the machine through the sieve, allowing if to flow through the filler hole in the centre of the concave head. Close the pet cock and direct the nozzle towards the work piece and close the deadman's handle.

The machine will pressurise and air will pass through the nozzle. The pot tender will open the abrasive metering valve slowly, allowing the introduction of the abrasive into the air stream. Adjust the valve to maintain the minimum amount of abrasive into the air stream.

To close the machine down depressurise it by either by releasing the deadman's handle or opening the pet cock on the RCV-1 valve. Empty machine of abrasive, otherwise it will become damp and obstruct the flow on restarting.



**MODEL: BL 1080** 



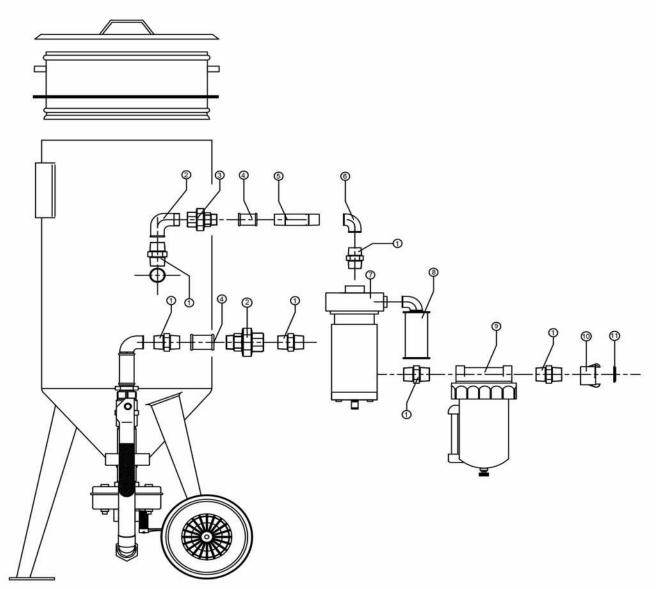


# SINGLE CHAMBER BLAST MACHINES MODEL: BL 1080

ART NO.		Model	DESCRIPTION		
1)	BL10101		Cover for 20L (BL 1080)		(1)
2)	BL10102		Screen for 20L (BL 1080)		(1)
3)	BL10103	OR-1	Pop-up valve O ring		(1)
4)	BL10104	PVS-1	Pop-up valve with shaft		(1)
5)	BL10105		Inner pipe <sup>1</sup> / <sub>2</sub> "		(1)
6)	BL10106		90° Threaded Elbow <sup>1</sup> / <sub>2</sub> "	FF	(2)
7)	BL10107		Inner pipe 1/2"		(1)
8)	BL10108		Pipe <sup>1</sup> / <sub>2</sub> "		(1)
9)	BL10109	AP-7	Abrasive Control valve 1/2"		(1)
10)	BL10110		Pipe $^{1}/_{2}$ "		(1)
11)	BL10111		Hex nipple <sup>1</sup> / <sub>2</sub> "		(4)
12)	BL10112		Threaded Equal Tee <sup>1</sup> / <sub>2</sub> "	FFF	(2)
13)	BL10113	AP-1	Air valve <sup>1</sup> / <sub>2</sub> "		(3)
14)	BL10114	UN-4	Threaded Union, Flat seat $^{1}/_{2}$ "	MF	(2)
15)	BL10115		Pipe $^{1}/_{2}$ "		(1)
16)	BL10116		Pipe $^{1}/_{2}$ "		(1)
17)	BL10117		Coupling $^{1}/_{2}$ " incl. rubber gasket		(2)
18)	BL10118	CQG-0	Rubber coupling gasket		(2)
19)	BL10119		Wheel for 20L (BL 1080)		(2)
20)	BL10120		Lock ring axle set		(2)
21)	BL10121		$90^{\circ}$ Threaded Street Elbow $^{1}/_{2}$ "	MF	(3)



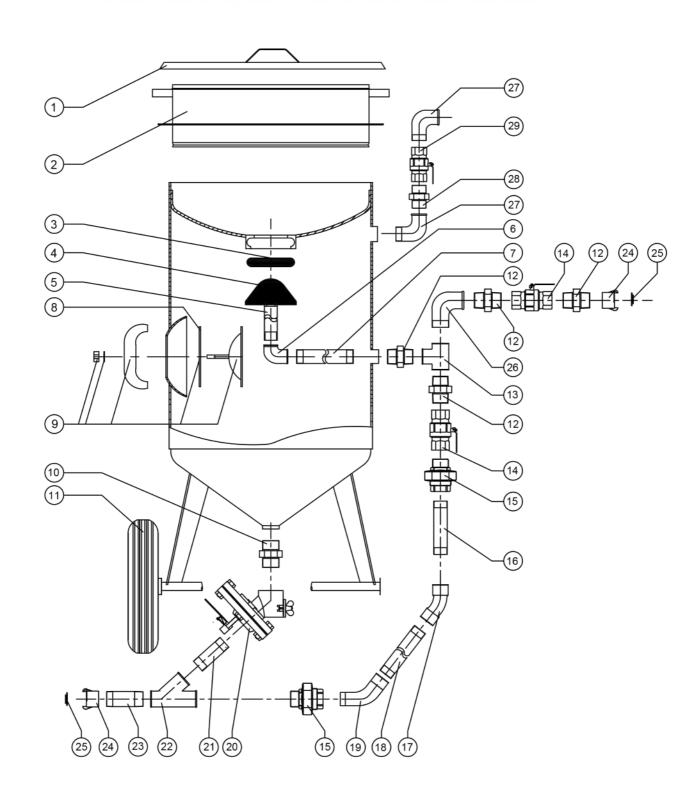
# SINGLE CHAMBER BLAST MACHINES MODEL: BL 1080



ART NO.		О.	Model	DESCRIPTION		
	1)	BL 10111		Hex nipple 1/2"		(6)
	2)	BL 10121		Elbow 1/2"	MF	(1)
	3)	BL 10203		Union <sup>1</sup> / <sub>2</sub> "		(2)
	4)	BL 10204		Socket 1/2"		(1)
	5)	BL 10205		Pipe <sup>1</sup> / <sub>2</sub> "	FF	(1)
	6)	BL 10106		Elbow <sup>1</sup> / <sub>2</sub> "		(1)
	7)	BL 10207	RCV-1	Remote control valve		(1)
	8)	BL 10208		Silencer		(1)
	9)	BL 10209		Moisture separator 1/2"		(1)
	10)	BL 10117		Coupling 1/2"		(1)
	11)	BL 10118	CQG	Rubber coupling gasket		(1)



#### SINGLE CHAMBER BLAST MACHINES MODEL: BL 14160 - BL 24800







# SINGLE CHAMBER BLAST MACHINES MODEL: BL 14160 - BL 24800

ART	ΓNO.	Model	DESCRIPTION		
1)	BL14101		Cover for BL 14160 (50 L)		(1)
	BL20101		Cover for BL 20300(100 L)		(1)
	BL24101		Cover for BL 24650(200 L)		(1)
	BL25101		Cover for BL 24800(300 L)		(1)
2)	BL14102		Screen for BL 14160 (50 L)		(1)
	BL20102		Screen for BL 20300(100 L)		(1)
	BL24102		Screen for BL 24650(200 L)		(1)
	BL25102		Screen for BL 24800(300 L)		(1)
3)	BL14103	OR-1	Pop-up valve O ring		(1)
4)	BL14104		Pop-up valve with shaft		(1)
5)	BL14105		Inner pipe $1^{1}/_{4}$ " for BL 14160 (50 L)		(1)
	BL20105		Inner pipe $1^{1}/_{4}$ " for BL 20300 (100 L)		(1)
	BL24105		Inner pipe $1^{1}/_{4}$ " for BL 24650(200 L)		(1)
	BL25105		Inner pipe $1^{1}/_{4}$ " for BL 24800(300 L)		(1)
6)	BL14106		90° Threaded Elbow 1¹/₄"	FF	(1)
7)	BL14107		Inner pipe $1^{1}/_{4}$ " for BL 14160 (50 L)		(1)
	BL20107		Inner pipe $1^{1}/_{4}$ " for BL 20300(100 L)		(1)
	BL24107		Inner pipe $1^{1}/_{4}$ " for BL 24650(200 L)		(1)
	BL25107		Inner pipe $1^{1}/_{4}$ " for BL 24800(300 L)		(1)
8)	BL14108		Inspection door gasket		(1)
9)	BL14109		Inspection door assy		(1)
10)	BL14110		Hex nipple $1^1/_4$ " rubber lined		(1)
11)	BL14111		Wheel for BL 14160 (50 L)		(2)
	BL20111		Wheel for BL 20300(100 L)		(2)
	BL20111		Wheel for BL 24650(200 L)		(2)
	BL20111		Wheel for BL 24800(300 L)		(2)
12)	BL14112		Hex nipple $1^1/_4$ "	MM	(4)
13)	BL14113		Threaded equal Tee $1^1/_4$ "	FFF	(1)
14)	BL14114		Air valve $1^1/_4$ "		(2)
15)	BL14115		Threaded Union 1 <sup>1</sup> / <sub>4</sub> ", Flat seat	MF	(2)
16)	BL14116		Pipe 1 <sup>1</sup> / <sub>4</sub> " for BL 14160 (50 L)		(1)
	BL20116		Pipe $1^{1}/_{4}$ " for BL 20300(100 L)		(1)
	BL24116		Pipe 1 <sup>1</sup> / <sub>4</sub> " for BL 24650(200 L)		(1)
	BL25116		Pipe 1 <sup>1</sup> / <sub>4</sub> " for BL 24800(300 L)		(1)
17)	BL14117		$45^{0}$ Threaded Elbow $1^{1}/_{4}$ " (Long radius)	FF	(1)

BLASTLINE

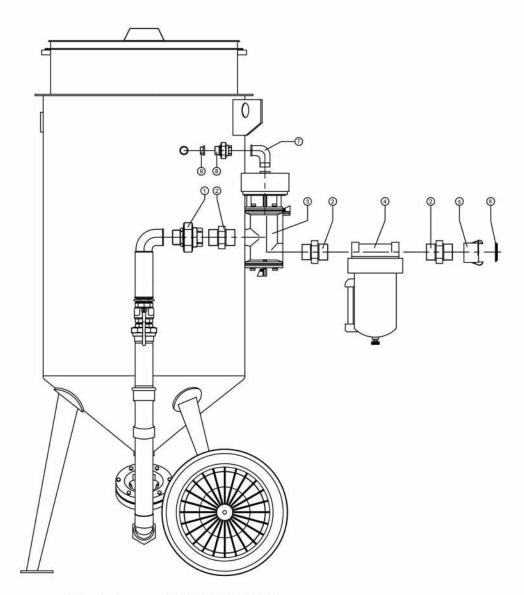
# SINGLE CHAMBER BLAST MACHINES MODEL: BL 14160 - BL 24800

16

18)	BL14118		Pipe 1 <sup>1</sup> / <sub>4</sub> " for BL 14160 (50 L)		(1)
	BL20118		Pipe 1 <sup>1</sup> / <sub>4</sub> " for BL 20300(100 L)		(1)
	BL24118		Pipe 1 <sup>1</sup> / <sub>4</sub> " for BL 24650(200 L)		(1)
	BL25118		Pipe 1 <sup>1</sup> / <sub>4</sub> " for BL 24800(300 L)		(1)
19)	BL14119		$45^{0}$ Threaded Elbow $1^{1}/_{4}$ " (Long radius)	MF	(1)
20)	BL14120	FSV-1A	Abrasive valve $1^1/4$ "		(1)
21)	BL14121		Pipe $1^{1}/_{4}$ " x 100mm, rubber lined		(1)
22)	BL14122		$45^{0}$ Threaded Lateral Tee $1^{1}/_{4}$ " , rubber lined		(1)
			(Y branch)		
23)	BL14123		Pipe nipple $1^1/_4$ "	MM	(1)
24)	BL14124	CFT	Coupling $1^1/_4$ " , including gasket		(2)
25)	BL14125	CQG	Rubber coupling gasket		(2)
26)	BL14126		$90^0$ Threaded Street Elbow $1^1/_4$ "	MF	(1)
27)	BL14127		90 <sup>0</sup> Threaded Street Elbow <sup>3</sup> / <sub>4</sub> "	MF	(2)
28)	BL14128		Hex nipple $^{3}/_{4}$ "	MM	(1)
29)	BL14129		Air valve <sup>3</sup> / <sub>4</sub> "		(1)



# SINGLE CHAMBER BLAST MACHINES MODEL: BL 14160 - BL 24800



ART NO.		Model	DESCRIPTION		
1)	BL 14115		Union 1 <sup>1</sup> / <sub>4</sub> "	FM	(1)
2)	BL 14112		Hex nipple $1^1/_4$ "	MM	(3)
3)	BL 14203	RCV 125	Remote control valve		(1)
4)	BL 14204		Moisture separator		(1)
5)	BL 14124	CFT	Coupling 1 <sup>1</sup> / <sub>4</sub> "		(1)
6)	BL 14125	CQG	Rubber coupling gasket		(1)
7)	BL 14207		Elbow <sup>3</sup> / <sub>4</sub> "		(1)
8)	BL 14208		Union $^3/_4$ "		(1)
9)	BL 14209		Reduction ring <sup>3</sup> / <sub>4</sub> "		(1)

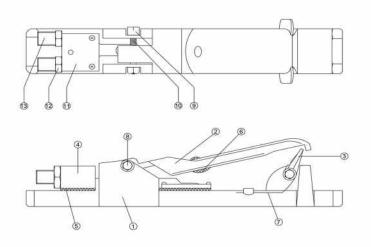


(1)

(2)



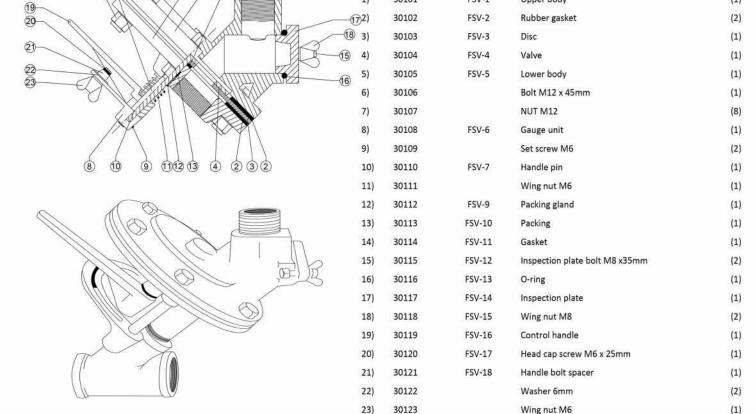
#### SINGLE CHAMBER BLAST MACHINES MODEL: BL 14160 - BL 24800



ART I	NO.	Model	DESCRIPTION	
1)	40201		Handle Body	(1)
2)	40202		Lever	(1)
3)	40203		Lever safety lock	(1)
4)	40204		Pneumatic manifold	(1)
5)	40205		Gasket	(1)
6)	40206		Rubber insert	(1)
7)	40207		Spring	(2)
8)	40208		Locknut	(2)
9)	40209		Screw 5 x 40	(2)
10)	40210		Screw 4 x 25	(1)
11)	40211		Reduction nipple <sup>1</sup> / <sub>4</sub> " x <sup>1</sup> / <sub>8</sub> " (restricted)	(1)
12)	40212		Reduction nipple 1/4" x 1/8"	(2)

#### Flat Sand Valve

7 24



24)

30124

FSV-19

**FSV Bolt** 

ART NO.

30101

1)

Model

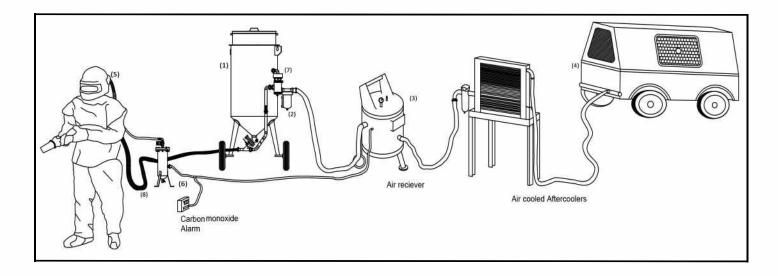
FSV-1

DESCRIPTION

Upper body



#### **BLAST SYSTEM ASSEMBLY**



PRIOR TO STARTING EACH WORK SHIFT, THE FOLLOWING STEPS SHOULD BE COMPLETED BEFORE BEGINNING THE BLAST CLEANING OPERATION. Read all instructions, literature, labels, specifications and warnings sent with and affixed to all the equipment.

- INSPECT THE CONDITION OF THE BLAST MACHINE: Check the pop-op valve, valve seat gasket, remote control components, and door components. Always use a blast machine screen and cover to prevent entry of debris and moisture in blast machine.
- CHECK THE AIR LINE MOISTURE SEPARATOR: Install the unit as close as possible to blast machine inlet. Drain moisture separator daily and keep the filter clean.
- CHECK THE BREATHING AIR SOURCE: The source of breathing air must meet the requirements. The source air must be in dust free and contaminant free. If an oillubricated compressor is used for supplying air then it must be equipped with high temperature air monitor and carbon monoxide alarm.
- CHECK THE AIR COMPRESSOR: For productive blasting, the compressor must produce enough pressure at the nozzle.

- INSPECT THE NIOSH APPROVED AIR RESPIRATOR (HELMET): Replace the damaged or dirty components. Be ensuring that all the components are in working condition.
- INSPECT BREATHING AIR FILTER AND CATRIDGE.
- INSPECT THE REMOTE CONTROL SYSTEM
- INSPECT THE BLAST HOSE: For productive blasting, blast hose should have no sharp bends and be aligned straight as possible. Should be free of damage, soft spots or excessive internal wear.
- CHECK BLAST HOSE COUPLINGS AND NOZZLE HOLDER
- USE ONLY ABRASIVE manufactured, processed and approved for abrasive blast cleaning.
- 11. CHECK THE SURFACE COATING to be blast clean for toxic substances.