

INSTALLATION & MAINTENANCE MANUAL

IntelliBlast Lite



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WARNING

Do not attempt to operate this equipment without first reading and understanding the manual enclosed with this device. Suitability for use of this device lies solely with user.

Fill in your model and serial number in the blank spaces below. These can be used for reference whenever service or maintenance is required.

Unit Serial Number _____

Date Of Issue _____

INTRODUCTION

Congratulations on the purchase of your new BlastOne product! This product was carefully designed and manufactured to give you many years of dependable service. Only minor maintenance is required to keep it in top working condition. Be sure to observe all maintenance procedures and safety precautions in this manual and on any safety decals located on the product and on any equipment on which the attachment is mounted.

This manual has been designed to help you do a better, safer job. Read this manual carefully and become familiar with its contents.

BEFORE OPERATION

The primary responsibility for safety with this equipment falls to the operator. Make sure the equipment is operated only by trained individuals that have read and understand this manual. If there is any portion of this manual or function you do not understand, contact BlastOne International to obtain further assistance. Keep this manual available for reference.

NOTE

This equipment is only designed to be used with air blast surface preparation equipment

SERVICE

Use only BlastOne replacement parts. Warranty and Safety compliance is obviated if non-conforming parts are used. Substitute parts may not meet the required standards.

Provide the manual to any new owners and/or operators.

DESCRIPTION

The IntelliBlast Lite is designed to be used on an abrasive blasting system as a device that monitors pressure relative to time and transmits this data to a cloud-based solution. This data can be viewed via a dashboard on the BlastOne portal.

To function optimally, the system requires a constant 10VDC to 75VDC supply but does have backup batteries to prevent data loss during short intervals of power loss.

Please contact Intelliblast team (listed below) following installation to verify operation and configure systems.

FEATURES

- Total active time.
- Pot angle.
- Pot location.
- Pusher line pressure.
- Nozzle Pressure
- Number of activations.
- Active time per shift / day.
- Time remaining to service.
- Pressure warning when operating below recommended pressure.
- Fatigue warning.
- Pot service date notification.
- Pot certification renewal date notification.
- Suitable for all types of blast pots, pressure release or pressure hold systems.
- Easy Installation.

SYSTEM SET UP

INSTALLATION - PRESSURE HOLD SYSTEMS

⚠ WARNING ⚠

Ensure that the Blast System is totally depressurised before commencing the installation procedure.

The pressure transducer needs to be installed into the pusher line after the auto air valve, this can be done by drilling and tapping a port into the exit side of the auto air valve body. A $\frac{1}{4}$ " x **18 NPT** tap is required.

The recommended drill bit for this is **7/16"**.

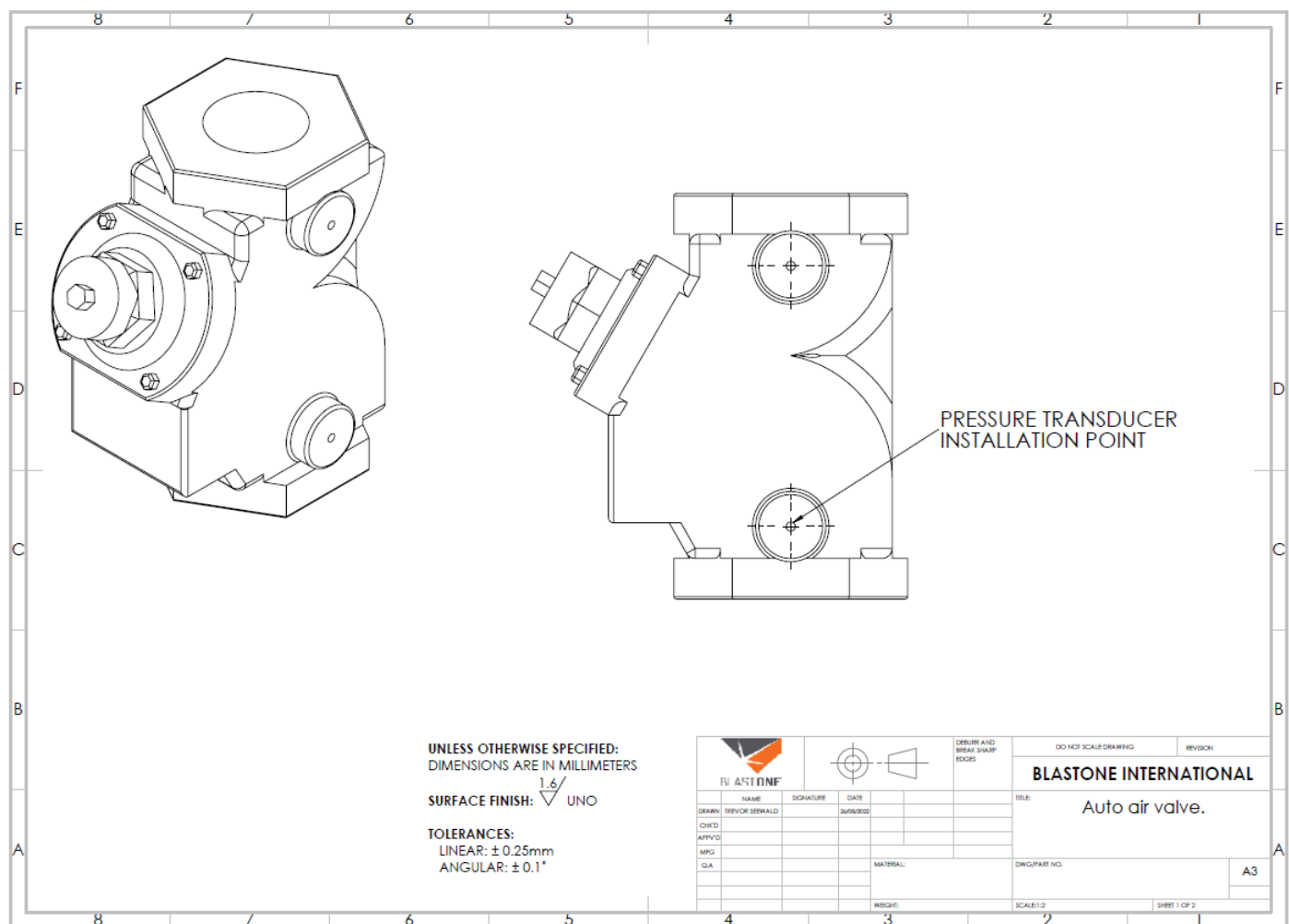


Figure 1. Auto-air valve with tap drill and tap point identified

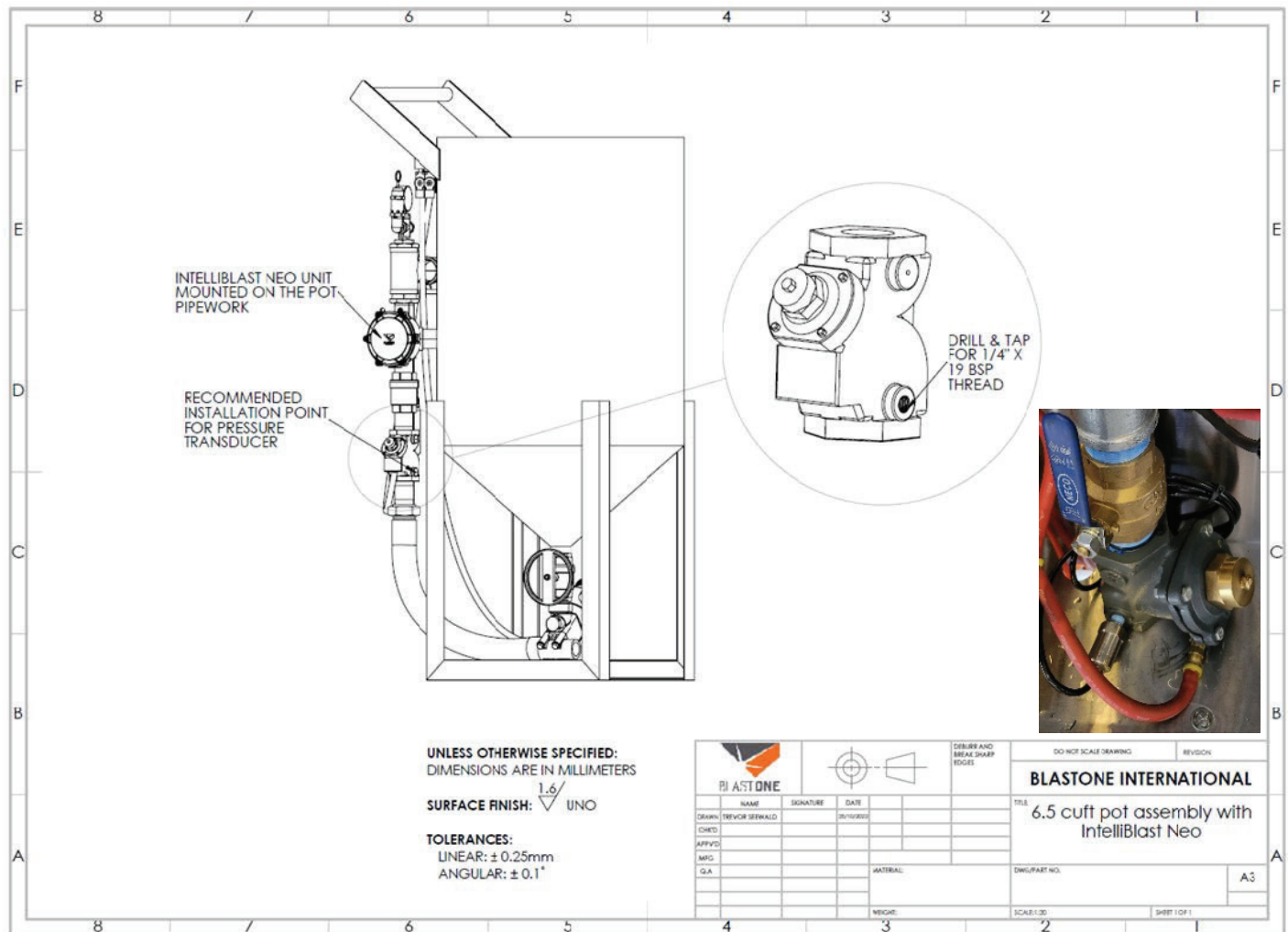
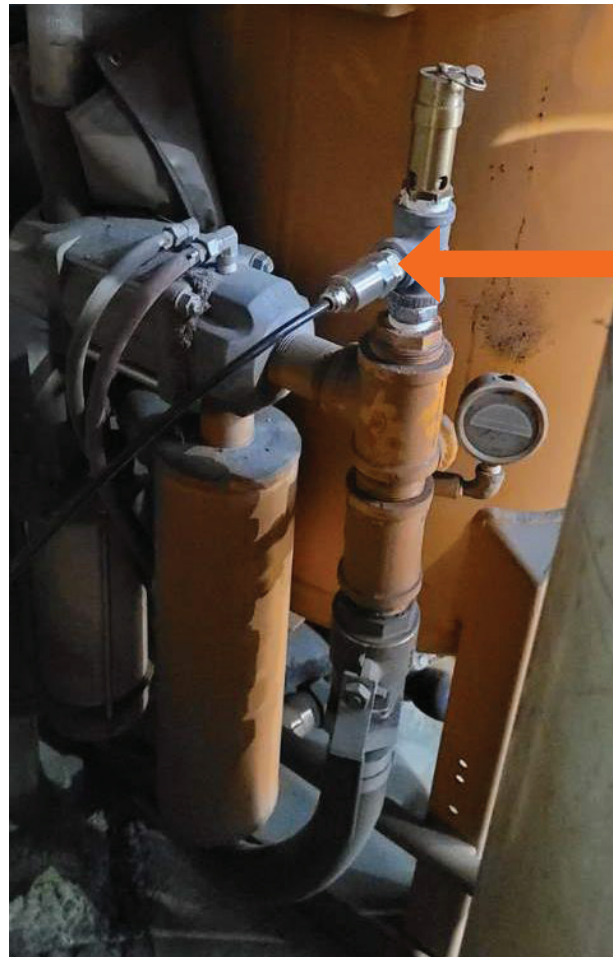


Figure 2. Fit of IntelliBlast LITE to a 6.5 cuft blast pot with callout for pressure sensor installation point

SYSTEM SET UP

INSTALLATION - PRESSURE RELEASE SYSTEMS

The pressure transducer needs to be installed in the compressed air supply line between the combo valve and the pusher line; this can be done by adding a T-Piece as depicted below.



Pressure
Transducer

Figure 3. T-Piece installation point on blast pot without an auto-air valve.

Once the pressure transducer has been installed into the system, it can be connected to the IntelliBlast Lite unit via the fitted Deutsch connector.

There are two Deutsch connectors coming out of the IntelliBlast Lite unit, one is a female connector and the other is a male connector, these are for the 12v power supply the pressure transducer.

INTELLIBLAST LITE ORB MOUNTING

The LITE comes with two mounting plates which attach to the back of the device to assist with securing the device to or near the blasting system.



Figure 4. IntelliBlast Lite with mounting plates secured to the back of device

The IntelliBlast Lite can either be mounted with screws/nuts and bolts, or by using the slots at the ends of the mounting plates to attach the device using either string, zip ties, or another similar mounting method.



Figure 5. IntelliBlast Lite mounted to MEGA blast pot using zip-ties

SYSTEM SET UP

When the LITE is mounted on the pot there is an option to make use of the pot angle facility, however it can also be mounted to a wall for a fixed installation. Please note, to get a reliable GPS signal and data feed, the LITE should be mounted in an outside location with a clear line of sight to the sky.

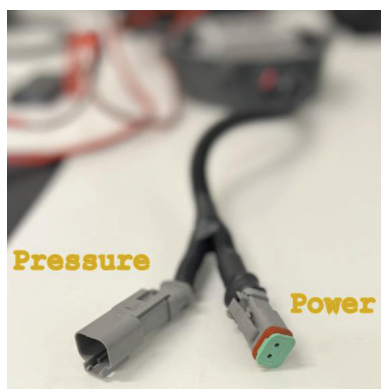
INSTALLATION - POWER CONNECTION

The LITE systems are externally powered from 10VDC to 75VDC, 4AA batteries, or internally by an internal rechargeable battery which is for storing LITE operation parameters. The operational time of the 4AA batteries can be as short as 48 hours if the systems is operated at a high acquisition and transmit rate and as long as 5 years if the system is operated at a rate of twice per day. Blastone recommends using external 12VDC power from either a system battery or a 240VAC to 12VDC plug pack. The plug pack and DC cables are both supplied.

To permit a range of installation options the user is supplied with a 2m DC cable with a Deutsch DT06-2S connector at one end, to connect to the LITE, and two crimp connectors at the other end for battery connection. The cable and connectors are shown in [Figure 6](#). If another connection to the 12VDC supply is required, such as the screw terminal supply (see [Figure 8](#)) then the crimp connectors can be removed and the bare wires connected to a screw terminal.



Figure 6. LITE Power Supply Cable for DC supply



*Figure 7.
Connectors on LITE
device for Pressure
and Power Inputs*



*Figure 8.
12VDC Power Supply*

VERIFYING INSTALLATION

Following installation of the LITE device contact the following BlastOne team members to verify correct operation of the equipment and to provide serial numbers for installation in the Intelliblast portal. The details of the LITE that are required for install.

REQUIRED DETAILS

- Two company asset number
- LITE Serial number
- Location

CONTACT DETAILS

Paul Goble – Intelliblast Applications Manager

Email: paul.goble@blastone.com

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RULES FOR SAFE OPERATION

Know your equipment

Do Not operate this equipment in a manner other than its intended application.

Do Not operate this equipment without following the Rules for Safer Operation and all the operating procedures. Failure to do so could result in serious injury or death.

Receive proper training

Do Not operate or perform maintenance on this equipment unless you have received operational and maintenance training. Begin by thoroughly reading and understanding this document and any operational and maintenance manual or instructions for the equipment that will be used in conjunction with the IntelliBlast Lite.

Should you require assistance with training, consult an authorized BlastOne representative.

Use proper personal protective equipment (PPE)

Do Not operate or perform maintenance on this equipment without wearing OSHA approved eye, ear, foot, and lung protection.

Adhere to all regulations

Do Not operate or perform maintenance on this equipment without observing all local, state, and federal safety regulations including, but not limited to, OSHA (Occupational Health and Safety Administration).

Use correct replacement parts

Do Not use replacement parts that are not manufactured and furnished by an authorized distributor.

Incorrect replacement parts can result in equipment failure and cause serious injury or death.



Save this operation and maintenance manual

Refer to this operation and maintenance manual as well as any other manufacturers information included for equipment that is used in conjunction with the IntelliBlast Lite.

Never permit anyone to operate this equipment without having him/her first read this manual and receive proper training. Provisions should be made to have this manual readily available to the operating and maintenance personnel. If for any reason the manual becomes lost or illegible, have it replaced immediately.

This operation and maintenance manual should be read periodically to maintain the highest skill level; it may prevent a serious accident.

LED STATUS GUIDE

STATUS 	NETWORK 	Description
Off	Off	Device is sleeping
Flash (1Hz)	Off	Setup Mode
On	Flash (1Hz)	No internet connection
On	On	Internet connection
Fast Flash	Fast Flash	Factory Reset
Off	Fast Flash	Firmware Update
Slow Flash	Off	Pre-charge mode

WARNING

When maintaining the unit, the trained and qualified technician must use the appropriate PPE before performing maintenance.



www.BlastOne.com

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DISCLAIMER: It is the sole responsibility of the user of this equipment to ensure that the equipment is operated, maintained, and used in strict accordance with these instructions.

Do not use titration tubes beyond their expiration date or that have a colour different than referred to under performance. The manufacturer and manufacturer's distributor shall not be otherwise liable for an incorrect measurement or any damages, whether damages result from negligence or otherwise.