

# AirBlast 1070 Blast & Vac

## AIRBLAST 1070 PN Vacuum blasting machine (Fully pneumatic driven)



### **Special features :**

- Pressure vessel :** Double chamber pressure vessel for continuous blasting action (up till 20-25 hrs. using steel grit). The pressure vessel is "Lloyds" approved and built according ASME standards. Special hardened, timer controlled, carbon steel pop-up valves allowing the work in the blast pressure range of 1 bar minimum and 8 bar maximum.
- Abrasive valve :** Operation by pneumatic controlled (two ways working) cylinder. Mounted under the pressure vessel with a quick coupling for easy emptying of the pressure vessel if necessary.
- Air filtration :** The filter chamber of the machine contains two long life polyester filter cartridges of 10 m<sup>2</sup> each (BIA Approval) with a manual\* filter cleaning system (push button back flush system).  
\*) a fully automatic filter cleaning system is an option.
- Control panel :** Easy access control panel showing machine inlet pressure, blast pressure and featuring a pneumatic blast pressure regulator and filter back flush button.
- Dust exhaust :** The filter chamber is featured with a funnel for dust storage and containing an easy access dust exhaust valve for filling dust bag without spoiling dust.
- Dust separator :** The dust separator of the machine is featured with three heavy-duty clips and large connection pipes for a wear-less inline connection of the vacuum hoses with special designed hose connectors.
- Transportation :** Integrated forklift sleeves for small forklift forks and integrated sleeves for large forklift forks. Two integrated lifting eyes for hoisting the machine.  
Four heavy duty transport wheels (steel ball bearings) of which are two swivels castors.
- Vacuum Generator :** The fully pneumatic driven vacuum generator of the machine is maintenance free and assures a strong vacuum power for blasting without creating dust at the blast head.

## Dustfree Vacuum Blastmachine type AIRBLAST 1070-PN

### General description of unit

Type	1070 PN
Abrasive capacity	40 ltr.
Empty weight	525 kg
Dimensions	
Width	1565 mm
Length	735 mm
Height	1660 mm
Max. working pressure	8 bar
Needed compressor cap.	10 m <sup>3</sup> /min
Max. abrasive size	1.5 mm
Standard blasting diameter	50 mm
Blasting diameter large blast head	75 – 80 mm

### Standard delivery includes

Complete unit	incl.
Blast head set	incl.
Abrasive supply hose	15 m
Abrasive recovery hose	15 m
Remote control hose	15 m
Air hose	n/a
Electrical cable	n/a
Brush set flat	incl.
Brush set inner corner	incl.
Brush set outer corner	incl.
Manual filter cleaning system	incl.

### Delivery includes the complete unit with:

- 15 meters long, blast hose set existing of a blast hose (1"), an abrasive recovery hose (2½"), a double line control hose with trigger and all necessary hose connectors.
- a hardened aluminium blast head, a blast head inner tube flat, a blast head inner tube 90°, a 6,4 mm. (¼") boron carbide blast nozzle.
- a set of standard brushes (brush flat, brush 90° inner corner and brush 90° outer corner),
- an operator's manual. (technical specs., installation, parts list and drawings, maintenance, trouble shooting list, warranty information).

### Options and accessories:

large blast head incl. Borium Carbide Nozzle  
 floor trolley for large blast head  
 adjustable venturi and pressure gauge for air driven version  
 special designed dust separator for lighter abrasive  
 clockwork mechanism  
 extension for grit supply and grit/dust suction hose till 25 meters  
 extension for grit supply and grit/dust suction hose till 35 meters  
 Automatic filter cleaning system  
 Aftercooler / water separator (Hiross).  
 1070 PN: ACA 008/PN (11 m<sup>3</sup>/min.) air driven  
 Heavy duty transport frame

## Production capacities of the AIRBLAST 1070 Vacuum-blasting machine

Surface	Abrasive type	Abrasive size	Obtained surface quality	Average production capacity per hour
Steel: millscale, coatings and or corrosion	Alu-oxyde Chilled iron Steel grit	0.8-1.2 mm. G17 / G24	SA 2 ½ (SP10)	4 – 6 m <sup>2</sup> 7 - 9 m <sup>2</sup>
Steel: heavy corrosion	Alu-oxyde Chilled iron Steel grit	0.8-1.2 mm. G17 / G24	SA 2 ½ (SP10)	3 - 5 m <sup>2</sup> 6 - 8 m <sup>2</sup>
Steel : blasted with shot primer	Alu-oxyde Chilled iron Steel grit	0.8-1.2 mm. G17 / G24	SA 2 ½ (SP10)	5 - 7 m <sup>2</sup> 7 - 9 m <sup>2</sup>
Steel: Chlorinated rubber coating	Alu-oxyde Chilled iron Steel grit	0.8-1.2 mm. G17 / G24	SA 2 ½ (SP10)	1.5 - 3 m <sup>2</sup> 3 - 5 m <sup>2</sup>
Weld seams: Steel	Alu-oxyde Chilled iron Steel grit	0.8-1.2 mm. G17 / G24	SA 2 ½ (SP10)	80 mtr/hr. (50 mm. Wth) 120 mtr/hr. (50 mm. Wth)
Concrete new	Alu-oxyde	0.8-1.2 mm.	Removal of cement film	8 - 12 m <sup>2</sup> (Walls) 15-18 m <sup>2</sup> (Floors)
Concrete, bricks: Paint Coatings	Alu-oxyde Olivine Sand	0.8-1.2 mm.	Removal of coatings	4-12 m <sup>2</sup> (depending on thickness and type of coating)

### General Information

All mentioned figures in the lists are average values and based on own experiences. Working pressure on steel surfaces is between 5 and 6 bar (or 1 to 8 bar for AIRBLAST 1070). Working pressure on concrete depends on the quality of the surface (hardness) and paint system to be removed. Working pressure varies from 3-6 bar/45-85 PSI and must be selected by the operator. For all other applications the right abrasive, abrasive size and working pressure, must be selected, depending on the work to be carried out. In this case, it is recommended, to do trail before starting the actual work.



## **Abrasive consumption of AIRBLAST VACUUM BLASTING MACHINES**

### **1. Aluminium-Oxide**

Type of machine	Abrasive size (mm)	Obtained surface quality	Blast pressure (bar)	Abrasive consumption*	
				(kg/m <sup>2</sup> )	(kg/hr)
AIRBLAST 1020	0.5 - 1.0	SA 2 ½	6	4	3-5
AIRBLAST 1030	0.5 - 1.0	SA 2 ½	6	4	4-6
AIRBLAST 1050	0.8 - 1.2	SA 2 ½	6	4	6-8
AIRBLAST 1060	0.8 - 1.2	SA 2 ½	5.5	4	20-25
AIRBLAST 1070	0.8 - 1.2	SA 2 ½	5.5	4	20-25

### **2. Glass beads (Stainless steel)**

Type machine	Abrasive size (mm)	Obtained surface quality	Blast pressure (bar)	Abrasive consumption*	
				(kg/m <sup>2</sup> )	(kg/hr)
AIRBLAST 1020	0.1 - 0.2	Polished	6	5	4-6
AIRBLAST 1030	0.1 - 0.2	Polished	6	5	5-7
AIRBLAST 1050	0.1 - 0.2	Polished	6	5	8-10
AIRBLAST 1060	0.1 - 0.2	Polished	5	5	25-30

### **3. Olivine sand**

Type machine	Abrasive size (mm)	Obtained surface quality	Blast pressure (bar)	Abrasive consumption*	
				(kg/m <sup>2</sup> )	(kg/hr)
AIRBLAST 1020	0.2 - 1.0	SA 2 ½	6	5	4-6
AIRBLAST 1030	0.2 - 1.0	SA 2 ½	6	5	5-7
AIRBLAST 1050	0.2 - 1.0	SA 2 ½	6	5	7-9
AIRBLAST 1060	0.2 - 1.0	SA 2 ½	5.5	5	25-30
AIRBLAST 1070	0.2 - 1.0	SA 2 ½	5.5	5	25-30

### **4. Grit (cast iron)**

Type machine	Abrasive size (mm)	Obtained surface quality	Blast pressure (bar)	Abrasive consumption*	
				(kg/m <sup>2</sup> )	(kg/hr)
AIRBLAST 1060	0.5	SA 2 ½	5	0.5	1-3
AIRBLAST 1070	0.5	SA 2 ½	7.5	0.5	2-4

\*) All above given values are averages and may vary. The abrasive consumption also depends on the quality of the abrasive, the hardness of the surface, the setting of the blasting machine and the state of the surface to be cleaned.

Delivery complete with standard hose set consisting: 15 mtrs. grit supply hose (1"), 15 mtrs. grit/dust suction hose (2" - 2 ½"), 15 mtrs. twin-line pilot hose with pneumatic on/off switch, hose couplings, blast head with ¼" Borium Carbide nozzle, two inner pipes, standard brush set (flat brush, inner corner brush and outer corner brush) and operators manual.