

PROJECT:

Document Title:

Air Driven Gas Booster Data Sheet

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Document Number:

Prj.	Area	Unit	Dis.	Doc.	Seq.	Rev.
B10	10	100	ME	DAS	5013	0

A4

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GENERAL

1 Service	Boron Trifluoride (BF₃) Gas Booster for High Pressure Cylinder Filling				Quantity	1
2 Type	Air Driven Gas Booster		Plant	B10	Duty	<input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Continuous
3 Manufacturer			Model			Mfr Ref. No.
4 Location			Unit	B-10		Plot Plan No.
5 Fluid	Boron Trifluoride (BF₃)		%Solids	0%		PID No. B10-10-100-PR-DWG-0000
6 Characteristics	<input checked="" type="checkbox"/> Corrosive <input type="checkbox"/> Toxic <input type="checkbox"/> Flammable <input type="checkbox"/> Abrasive <input type="checkbox"/> Solids <input type="checkbox"/> Other					Specify: In case of moisture

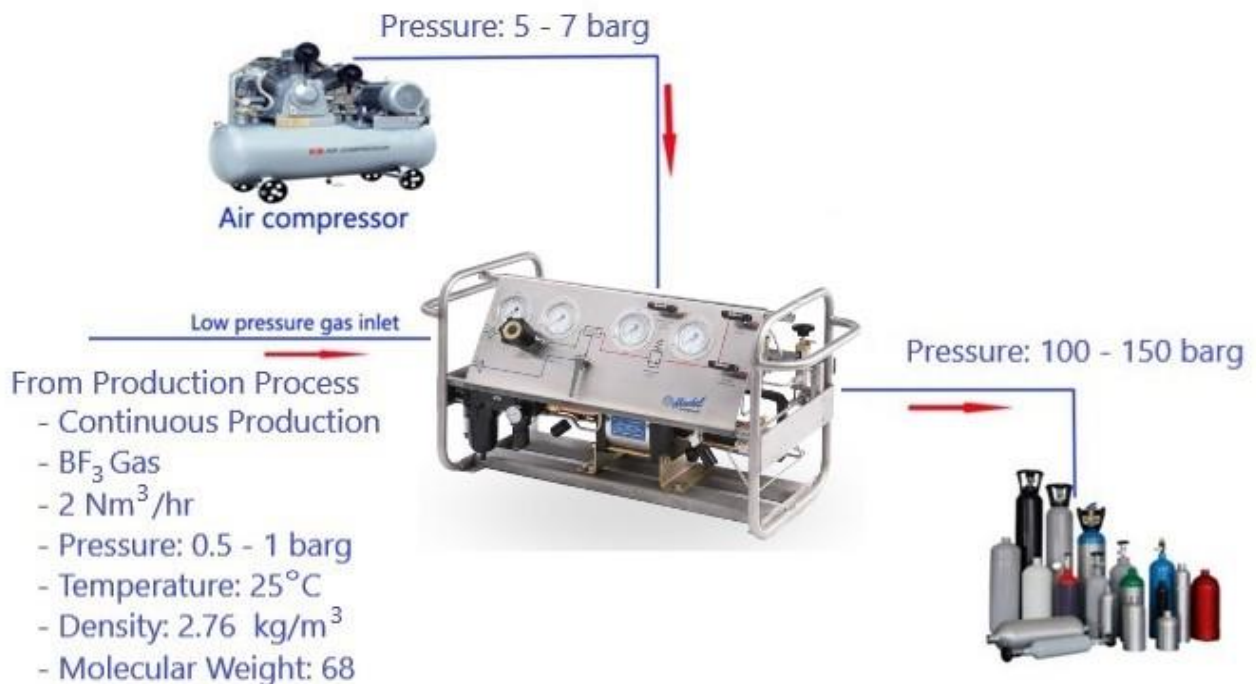
OPERATING CONDITIONS

9 Fluid:	BF₃ Gas		Volumetric Flow:	Nm ³ /hr	2.0
10 Molecular Weight:	68		Mass Flow:	kg/hr	5
INLET GAS CONDITION			DISCHARGE GAS CONDITION		
12 Pressure:	barg	1	Pressure:	barg	100 - 150
13 Temperature:	°C	25	Temperature:	°C	< 40
14 Mass Density:	kg/m ³	2.76	Mass Density:	kg/m ³	
15 Compressibility Factor:	~ 1		Compressibility Factor:	0.47	

SITE CONDITION

UTILITIES

Location <input checked="" type="checkbox"/> Indoor <input checked="" type="checkbox"/> Heated <input type="checkbox"/> Outdoor <input type="checkbox"/> Unheated <input type="checkbox"/> Under Roof		Utility Conditions Electricity Voltage: 380 Drivers Heating Control Shutdown Hertz: 50 Phasde: 3~ 3~ 1~			
Site Data Elevation 1250 m Barometer 0.87 bara Range of Ambient Temperature: Min / Max -15 / 40 °C		Compressed Air Press. barg Max Min 7 5			



Schematic Flow Diagram of BF₃ Gas High Pressure Cylinder Filling