Technical data

Minimum nitrogen production capacity
Capacity [Nm3/hr] at nominal conditions: feed pressure at inlet of Nitro Source 7 bar(g)/101 psig, ambient temperature 20 ºC, ambient pressure 1013 mbar(a)

nitrogen purity in %	99.5	99	98	97	96	95
Capacity per unit in Nm^3/hr	**6,0**	**9,4**	**16,2**	**22**	**28**	**34**
Main-unit	**6,0**	**9,4**	**16,2**	**22**	**28**	**34**
Main-unit+1 sub-unit	12	18,8	32,4	44	56	68
Main-unit+2 sub-units	18	28,2	48,6	66	84	102
Main-unit+3 sub-units	24	37,6	64,8	88	112	136
Main-unit+4 sub-units	30	47	81,0	110	140	170
Main-unit+5 sub-units	36	56,4	97,2	132	168	204

nitrogen purity in %	99.5	99	98	97	96	95
Capacity per unit in SCFM	**3,5**	**5,5**	**9,5**	**13**	**16,5**	**20**
Main-unit	**3,5**	**5,5**	**9,5**	**13**	**16,5**	**20**
Main-unit+1 sub-unit	7,0	11,0	19,0	26,0	33,0	40
Main-unit+2 sub-units	10,5	16,5	28,5	39	49,5	60
Main-unit+3 sub-units	14,0	22,0	38,0	52,0	66,0	80,0
Main-unit+4 sub-units	17,5	27,5	47,5	65,0	82,5	100
Main-unit+5 sub-units	21,0	33,0	57,0	78,0	99,0	120

For calculation of the capacity at feed pressure other than the nominal feed pressure: multiply the nominal capacity by the correction factor for the pressure at the inlet of the Nitro Source

Inlet pressurek bar(g)/psi	4/58	5/73	6/87	7/10	8/11	9/13	10/14	11/16	12/17	13/190
Correction factor	0.35	0.51	0,76	1,00	1,20	1,40	1,60	1,90	2,10	2,40

Technical data:

Max. delivery pressure	Inlet pressure minus pressure drop (2 bar/29 psi at 97% purity)	
Compressed Air Specifications	Max. feed pressure: 13 bar(g) /190psig Compressed air temperature range: 10-40°C / 50-140°F Residual oil content: < 3,0 mg/m^3 Pressure dewpoint: < 5°C / < 41°F	
Ambient temperature	10 - 40 ºC / 50-140 °F	
Connections	Inlet G 1 1/4 outlet G1“	
Electrical Power	90-250 Vac / 50-60 Hz	
Output signals	analogue signals0-10 Volt: oxygen, inlet pressure, flow rate Option: RS232: datalogging	
Input signals	Digital input: switch on/off	
Dimensions (HxBxT)	Main unit: 1224 x 725 x 540 mm Sub unit1224 x 725 x 270 mm	
Weight	Main unit: 180 kg / 400 lbs	Sub unit:95 kg / 210 lbs

BEST Fire Systems GmbH, A 3423 St. Andrae Woerdern, Ed. Klinger Str.21

Phone +43 (0) 2242 / 33 990-0
e-mail office@best-fs.com
Internet www.best-fs.com

Managing Director:
Ing. Hannes Oberndorfer

Firmenbuch Nr:292162a
UID Nr.:ATU63338409
Amtsgericht:St. Pölten

Bank:
Tullnerfelder Volksbank
BLZ: 40630
Konto: 42020650000

B·E·S·T Fire Systems GmbH

NitroSource unit

Features

- Produces nitrogen from compressed air
- Can operate with existing central compressed air system
- Nitrogen purity up to 99.5%
- Capacity up to 5000 Nm3/hr / 3100 scfm
- Compressed air pre-treatment section included
- Minimum maintenance
- Digital data management
- Easy to expand
- Modular design

Product description

The nitrogen generators are based on the hollow fibre membrane technology, which makes it possible to separate air into nitrogen and an oxygen-enriched air stream. The NitroSource industrial nitrogen generator easily enables you to produce nitrogen from compressed air.

The NitroSource consists of a main-unit that can be expanded with a maximum of 5 additional subunits. Thanks to the master/slave feature, up to 11 main-units and their sub-units can be connected and controlled as one generator. The NitroSource includes a high quality compressed air filtration stage. This optimizes the inlet compressed air quality, ensuring long membrane life. The generator is equipped with a digital data management system to monitor, store and communicate parameters such as pressure, flow and residual oxygen concentration.

The installation has virtually no moving parts, resulting in reliable, trouble free operation with almost no maintenance. The generator is ready to operate as soon as the compressed air supply is connected.

The NitroSource offers an unlimited supply of nitrogen and can be connected to an external storage vessel. This will ensure that the system is able to cope with peak demand in applications where the nitrogen demand is variable.

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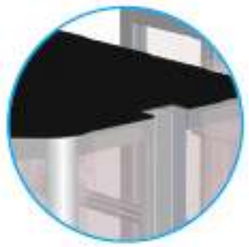
B·E·S·T

Fire Systems GmbH

Digital data management
- Data logging
- Status information
- System set-up information
- Maintenance indication
- Extensive data exchange facilities
- Detailed alarm functions
- Remote control option

Easily expandable
- Modular construction
- Easy to connect
- Up to 5 sub-units per main-unit

Master/slave option
- 11 main-units each with up to 5 sub-units can function as one generator
- Back-up option
- Multiple mainunits equally used
- Data management and control via master unit



Main-unit
- Robust industrial design
- Compact and modern
- High quality pre-filtration stage

Sub-unit
- Nitrogen modules
- Individual filtration
- Easy to add to existing NitroSource

Easy start-up
- Connect air supply
- Connect power
- Vent permeate
- Easy set-up wizard

Global design
- Multi-language operation
- Universal power supply
- Choice of measurement units

Maintenance
- Easy access
- Only occasional filter exchange required
- Fork-lift truck access points

NitroSource®

Capacity up to 5000 Nm^3/hr / 3100scfm