

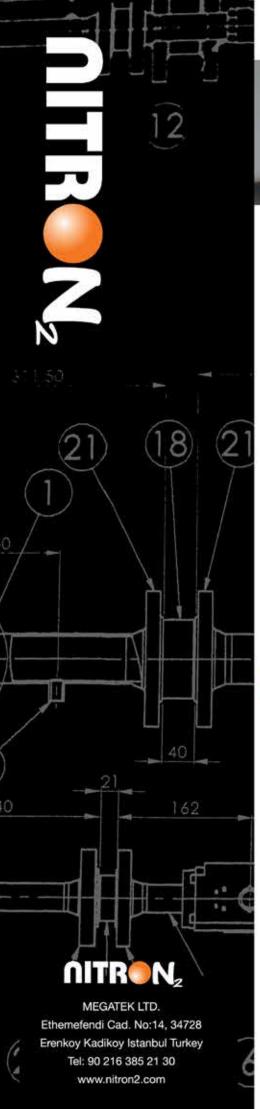
NITRON NITROGEN GENERATORS SHORE 1328

114-SS-ORG-100mm

3"X13"

MEMBRANE MODULES

NOTE 8





NITRON MMP SERIES

New developed Nitron MMP series nitrogen generators are the most reliable, high efficient and economic solution for marine and offshore applications





Nitron MMP Series Nitrogen Generator, 600 Nm³/h

PRODUCTION CAPACITIES

NITRON MMP SERIES NITROGEN GENERATORS												
Model	MMP 200	MMP 400	MMP 600	MMP 800	MMP 1000	MMP 1200	the state of the s	MMP 1600	MMP 1800	MMP 2000	MMP 3000	MMP 4000
Capacity, Nm ³ /hr	200	400	600	800	1000	1200	1400	1600	1800	2000	3000	4000

^{*}Above data is for standard products. Please call manufacturer for different capacities.



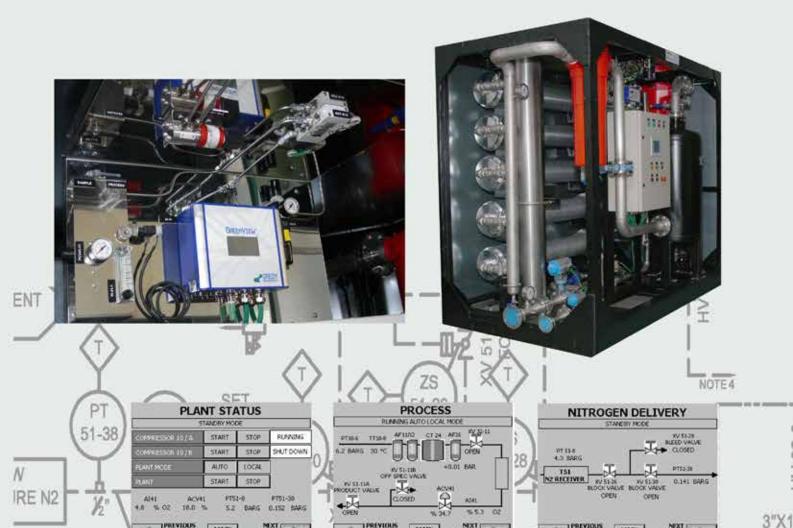




NITRON NITROGEN GENERATORS IN OIL AND GAS INDUSTRY

- Nitrogen is the most convenient gas for blanketing and inerting applications
- Nitrogen is used for inertization of pipe lines, compressors, reactors and all important equipments.
- Nitrogen is used for product transfer.
- Production improvement by nitrogen injection, from existing or older reservoirs.
- Enhanching oil recovery rate on existing reservoirs.
- Minimize risk of down-hole fires.
- Better underbalanced drilling, by means of injection of nitrogen to the drilling fluid.
- Lower drilling fluid density, makes lower downhole hydrostatic pressure

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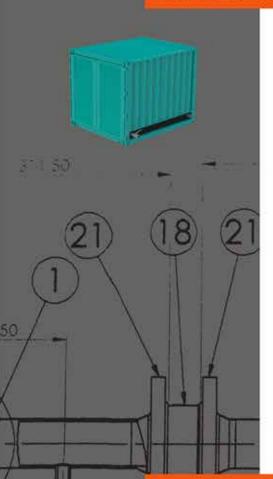




NITRON NITROGEN GENERATORS work on the principles of separation of air gases specially designed with high technology and efficiency.

NITRON NITROGEN GENERATORS are everywhere in many fields of industry such as marine, oil and gas, chemical, metalurgical, material handling/storage, food storage, and many more.

BEST SOLUTION



We are proud to produce NITRON NITROGEN GENERATORS knowing which is the most cost effective and flexible way to produce continious supply of gaseous nitrogen for a variety of applications. We are on your side with our custom made systems built up with latest technology and proven reliability.

NITRON NITROGEN GENERATORS offer the stand alone units or completely integrated turnkey systems pursuant to your needs.

Being the leading supplier of nitrogen generator plants, we are fully equipped with technology, know how and the devoted Process Development Department with the pursuit of rendering service to Maritime Industry with the highest standards for blanketing, purging and other purposes.



Nitron MMP- C Containerised Nitrogen Generator, 1000 Nm³/h

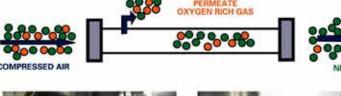


Nitron MMP Series Nitrogen Generator, 1000 Nm³/h

AIR SEPARATION WITH MEMBRANES

The membrane system uses hollow - fiber membranes to separate air into nitrogen and oxygen. The principle of separation is based on the selective permeation of different gases. For each type of gas, different permeation speeds exist. Nitrogen permeates slowly through the membrane, oxygen and water vapour quickly. Compressed air fed into a bundle of membranes, leaves this bundle almost as pure nitrogen, the oxygen being vented.









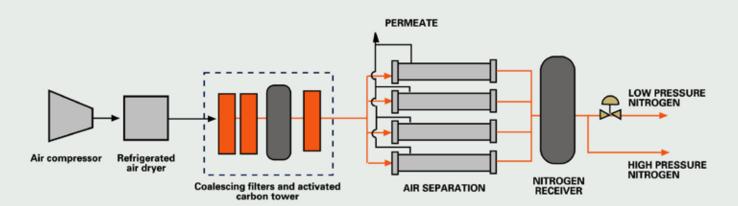


NITRON NITROGEN GENERATORS IN MARITIME INDUSTRY

NITRON NITROGEN GENERATORS offer not only on - board independent nitrogen but also various advantages.

FEATURES

- Lay out: Compact designed and portable.
- Air compressor: Require low feed air pressure so brings about lower compressor maintenance costs, silent operation, lower power consumption and safe operation.
- No heater: Requires no process gas heater.
- Operator panel. Electronic control and monitoring of process parameters with user friendly touch screen operator panel.
- Nitrogen purity: Can be set by operator and nitrogen can be produced at required purity.
- Cooling system: Compressor cooling system is water cooled.
- Air Treatment Unit: Inlet air quality is assured by refrigerant drier unit. Condensed water and oil droplets are drained out via auto drain mechanism.
- Filter system: 3 stages of coalescing filter system separate the aerosols and oil vapour. Pressure
 drop through final dust filter and auto drain mechanism are continuously monitored and
 controlled by PLC. Have perfect designed carbon adsorption tower to prevent bed movement
 and carbon fluidisation on maximum flow conditions.
- Membrane system: Since aging of membranes are completed at factory and there is no electrical heater in the process, membrane modules keep their high performance for long years.



Usage of NITRON NITROGEN GENERATORS in the maritime applications:

Inerting and oxidation control

The best way to deliver the cargo to its destination with the highest level of security, makes no difference whether the cargo is flammable, explosive or oxidizing. You are always safe with NITRON NITROGEN GENERATORS.









NITRON NITROGEN GENERATORS

BUDGET FRIENDLY as the most economic way to produce nitrogen on board.

RELIABLE as hollow fiber membrane modules of highest quality are used.

ADAPTABLE for your needs as it is designed for special nitrogen flow, purity and delivery pressure.

PRACTICAL as combined with fully automated nitrogen production allowing simple daily maintenance checks, which are enough for plant operation.

ROBUST as simple designs and durable materials are offered.

We are on your side offering compact, fully automated NITRON NITROGEN GENERATORS producing nitrogen whenever you need it.





