# NC 2.1 Shipboard Nitrogen **PRODU**System



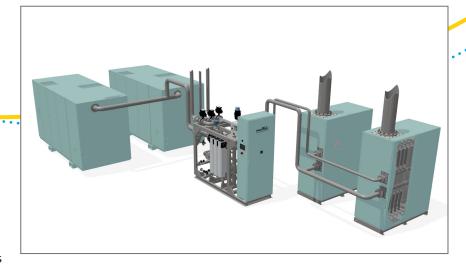
# Nitrogen Membrane Systems for 420 to 6000 Nm<sup>3</sup>/h



- Marine-specific design.
- Easy integration with existing ship Control Systems.
- Choice of shipyards and shipowners globally.
- Made for Safe Area ship machinery space requirements.
- Available as individual units or as complete system, with compressor, receivers, double block double bleed, deck valves and controls.
- More than 400 units in operation sold since 2004.
- · Short delivery time.
- Footprint reduced by 33% over competitive products

### **Unprecedented Experience**

- Air Products a Specialist Marine Systems supplier since 1970.
- Market Leader on inert nitrogen
- Dedicated Lifecycle Solutions Team, with global port-to-port service network.



The NC 2.1 Shipboard Nitrogen System is a PRISM® membrane-based nitrogen generator which is designed specifically for shipboard use. This robust skid-mounted system has the capacity to supply up to 6000 cubic meters (6000 Nm³/h) of nitrogen per hour, and meets demanding international marine standards.

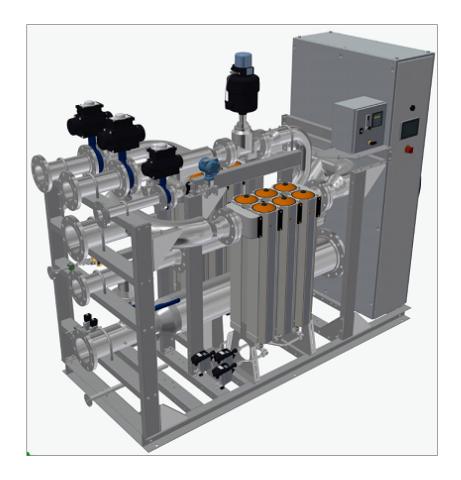
The system delivers nitrogen quickly while automatically adjusting the purity even with variable feed inlet pressure. The compact design makes installation easy and all components are protected by the rugged enclosure.

An easy-to-understand, HMI is integrated into the front panel where the operator can access all status signals, process parameters and alarms. There is also the option to interface the unit directly into ships IAS using a standard serial communication (MODBUS\*) connection which eliminates multicore cables. The NC 2.1 system will even remind you about routine maintenance and provide instant access to our Lifecycle Solutions Team for simplified ordering.

•Other serial or ethernet protocols available on request



Each membrane separator contains thousand of tiny hollow fiber membranes which use selective permeation to separate nitrogen and oxygen molecules and route them into individual streams.



# Specifications

El. Power consumption [kW]	24 –110	
Inlet air pressure [barg]	5.0 — 13.0	
N <sub>2</sub> product pressure [barg]	≤ 10.0	
Nitrogen purity [% N <sub>2</sub> ]	95.0 – 99.9	

## **Maximum capacities**

At 95% nitrogen purity :	6,000 Nm³/h
At 97% nitrogen purity :	4,000 Nm³/h
At 99% nitrogen purity :	2,000 Nm³ /h
At 99.9% nitrogen purity :	750 Nm³/h

## **Dimensions/Connections:**

Nitrogen gen, LxWxH [mm]	(2800-3800) x 1100 x (2160-2360
Membrane bank, LxWxH [mm]	(900-3135) x 810 x 2170
Max. weight N <sub>2</sub> Gen [kg]	1100 – 2300
Max. weight Membrane Bank [kg]	600 – 1000
Flange connections	DIN /JIS standard

The NC 2.1 Shipboard Nitrogen System incorporates PRISM® Membrane separation technology to generate nitrogen.

PRISM Membranes are lightweight, durable, and efficient molecular separators.



#### PRISM PA4050 membrane separator

PRISM® is a registered trademark of Air Products and Chemicals, Inc.

# For more information, please contact us at:

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