## **AMMONIA DISSOCIATORS**



### **COST EFFECTIVE & ECOLOGICALLY FRIENDLY**



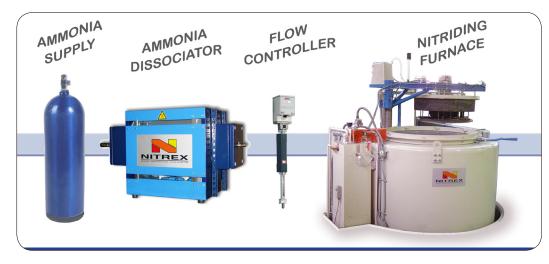


Since 1984, **Nitrex Metal** has been involved in the development of heat treatment technologies and a range of process equipment. Included in this range is our line of **Ammonia Dissociators** designed to generate process atmospheres.

### **COST-EFFECTIVE PROCESS DISSOCIATOR**

The Nitrex Dissociator produces gases for processes requiring hydrogen by dissociating anhydrous ammonia. When dissociated ammonia is used as an additive gas for nitriding processes or as a principal component for protective and bright atmospheres, the Nitrex Dissociator provides high quality atmospheres at a low cost.

The Nitrex ammonia dissociator as a part of a nitriding installation



### **FEATURES**

The Nitrex Dissociator is designed to function in a completely automatic mode. The dissociation retort, which houses the catalyst, is made of refractory alloy to effectively sustain service longevity.

- Compact, self-contained design
- High efficiency catalyst
- Embedded Kanthal elements
- Overheat protection
- PID heating control
- Light ceramic Insulation for high energy efficiency

### **IDEAL APPLICATIONS**

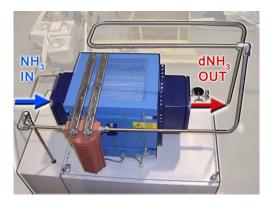
- Nitriding
- Bright copper and silver brazing
- Bright annealing
- Sintering

### **DESIGN & OPERATION**

Anhydrous ammonia cracks into 75% hydrogen and 25% nitrogen when it passes through the retort and comes into contact with the catalyst heated between 1700-1740°F (925-950°C).

### **MOUNTING OPTIONS**

The Nitrex dissociator can be mounted horizontally on top of a cabinet or vertically inside a cabinet.



Example of a Model DP-40 with a horizontally mounted retort on a free standing gas control cabinet.



Example of a Model DP-80 with a vertically mounted retort in a free standing gas control cabinet.



# **AMMONIA DISSOCIATORS**

### **MODELS & SPECIFICATIONS**

CHARACTERISTICS	DP-40	
Max process gas flow output	85 cfh (40 l/min)	
Working temperature	1700-1740 °F (925-950 °C)	
Maximum temperature	1830 °F (1000 °C)	
Supply voltage/frequency	220 - 240 VAC / 1 or 2 Phase / 50 - 60 Hz	
Installed power	4 kW	
Weight	42 kg / 93 lbs.	
DIMENSIONS		
Α	420 mm / 16.5"	
В	650 mm / 25.5"	

CHARACTERISTICS	DP-80
Max process gas flow output	170 cfh (80 l/min)
Working temperature	1700-1740 °F (925-950 °C)
Maximum temperature	1830 °F (1000 °C)
Supply voltage/frequency	400 VAC / 1 or 2 Phase / 50 - 60 Hz
Installed power	9 kW
Weight	55 kg / 121 lbs.

DIMENSIONS	
A	420 mm / 16.5"
В	1200 mm / 47.25"
С	950 mm / 37.5"
D	350 mm / 14"
E	1360 mm / 53.5"

Note: Other sizes available upon request. Please contact Nitrex for details.

400 mm / 15.75"

350 mm / 14"

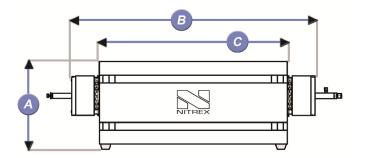
810 mm / 32"

### **SIDE VIEW**

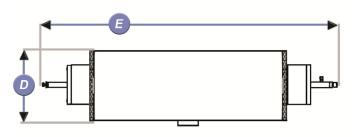
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### **TOP VIEW**





Solutions that minimize emissions and energy usage and limit harmful waste products.

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