



# Nitrogen System Safety

## Nitrogen Gas



### About Nitrogen Gas

Compressed nitrogen gas is the primary component in all Teledyne Hyson nitrogen cylinder systems. It is used for several reasons:

#### 1. Safe

Nitrogen is a non-toxic, inert gas. In fact, the air we breathe contains 78% nitrogen.

#### 2. Non-Flammable

Nitrogen gas will not support combustion; it will not ignite under high pressure or near an open flame.

#### 3. Clean

Nitrogen is a clean gas. It contains no dirt or moisture and has virtually no leakage.

#### 4. Economical

Nitrogen gas is relatively inexpensive. In fact, it is the least expensive of all inert gases.

Nitrogen gas is the only approved pressure medium for Teledyne Hyson nitrogen systems. The use of air and other gases may result in serious injury.

### How To Purchase Nitrogen Gas

Most industrial gas suppliers have commercial grades of nitrogen in stock. It is important to specify nitrogen gas. Request the proper nitrogen bottle fitting when placing an order.

The Compressed Gas Association (CGA) has developed a set of standard nitrogen bottle fittings. They are:

<u>Bottle Pressure Range</u>	<u>Bottle Fitting</u>
0-3000 psi	CGA-580 (Standard)
3001-5500 psi	CGA-680

Please note that these are standard nitrogen bottle fittings in the United States and may vary in foreign countries. Outside of the U.S., check with your domestic compressed gas authority, before purchasing a bottle fitting.

These fitting designations may be subject to change without notification. Please contact the Compressed Gas Association to verify current bottle fitting standards.

A standard nitrogen bottle is usually charged to 2400 psi and includes a CGA-580 fitting. It should also contain the proper labeling. (Refer to Figure 1).

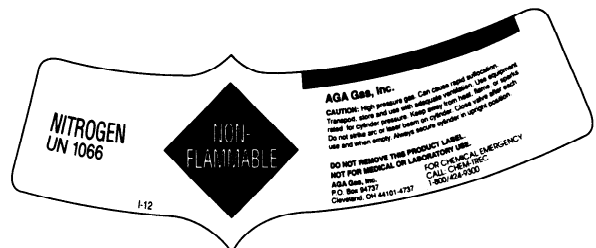


Figure 1

All nitrogen bottles should be capped when not in use in order to protect the bottle fitting. Do not accept any nitrogen bottles that do not conform to these specifications.

### Nitrogen Bottle Storage

Nitrogen bottles should be properly stored. Clear an area in the plant and designate it "For Nitrogen Gas Bottles Only". (Refer to Figure 2).

Nitrogen bottles should be capped and stored in an upright position. They should be chained in order to prevent falling.



Figure 2