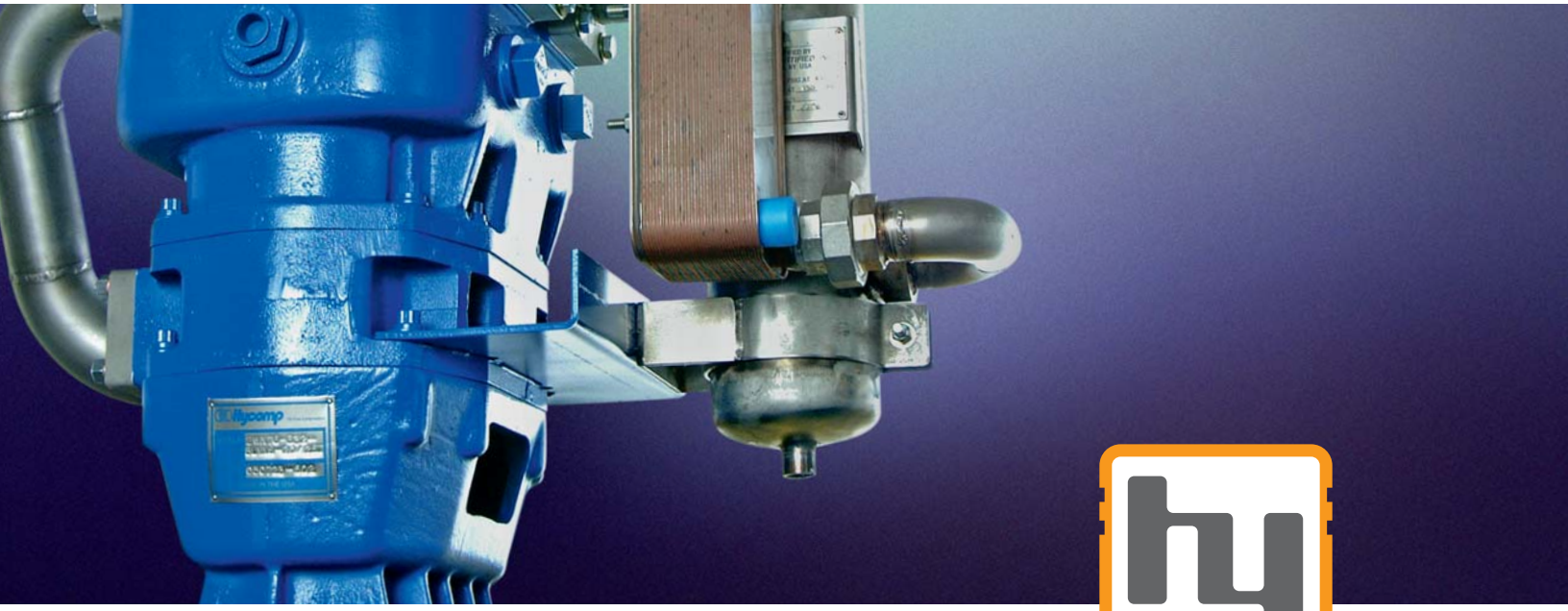

hycomp

Performance Under Pressure™

When you need to compress any gas other than air, call Hycomp.

CAPABILITIES

Up to 1200 psig standard, higher pressures available

Up to 75 HP

1, 2 and 3 stage units available

Flows to 500 scfm limited by HP

Gases including Nitrogen, Argon, Helium, Natural Gas, Carbon Dioxide, LPG, Sulfur Hexaflouride, refrigerant gases, landfill reclamation gases, and many other compressible gases.

BENEFITS

- **MODULAR DESIGN:** allows for interchangeability of bore sizes and strokes, giving a wide range of capabilities with limited expense
- Compressor seals designed to positively contain harmful gases
- Six different Piston Ring and Gas Packing materials are available for specific gas applications
- Gas Packings are full floating segmented type, for extra long life and positive sealing
- Piston rings are of extra thick, engineered polymers designed for specific applications
- Air and water cooling available
- Pressure lubricated lower end for long bearing life, utilizing oversized bearings
- Oil Free upper end prevents the addition of oil vapor to the gas stream and subsequent cleanup & removal
- Thick cast iron cylinders and heads decrease warpage and provide vibration dampening
- Large, low lift stainless steel valves give longer life and higher efficiencies, and are quickly accessible without removing the cylinder head
- Units are fully tested at the factory with minimum four hour test time, including testing at customer specific conditions

Safe

reliable

FLEXIBLE

Trust... it's what we build.

Quality Compressors Since 1969.

60 West 3800 North, Hyde Park, UT 84318, USA **ph:** 435.563.3695 **fax:** 435.563.3762 www.hycompusa.com

MODEL AN3A-B301

INLET PRESSURE 200 psig

GAS Nitrogen, 99.99%

DISCHARGE PRESSURE 600 psig

CAPACITY 20 scfm

INSTALLATION LOCATION Irvine, CA, USA

THE USER

A manufacturer of automotive components.

THE APPLICATION

High pressure testing of condenser coils for automotive air conditioning units.

THE PROBLEM

The customer had low pressure nitrogen available in bulk, but was buying high pressure bottled nitrogen to test their coils. They determined it would be far more cost effective to boost a small amount of the low pressure nitrogen rather than continually purchase it in bottled form. But most of the brands they investigated required the nitrogen to first be lowered in pressure before boosting it to the required pressure of 600 psig.

THE SOLUTION

A simplex Hycomp Nitrogen Booster was installed that would make the most use of the existing 200 psig nitrogen. The single stage, air cooled unit was smaller, simpler and required less horsepower than other brands that would need to reduce the inlet to less than 5 psig before compressing to final pressure. Additionally, as the unit is electric driven, no additional air or nitrogen was required to operate the unit. The unit was packaged on a 1000 psig, 80 gallon receiver to provide the storage required. Controls were simple load/unload with user adjustable time out. A high pressure air cooled aftercooler was used to reduce the discharge temperature to a safe storage level.

MODEL 2WN150F-G321

INLET PRESSURE 1.5 psig

GAS Wet CO_2 & N_2

DISCHARGE PRESSURE 110 psig

CAPACITY 141 scfm

INSTALLATION LOCATION Hong Kong, China

THE USER

A Hong Kong based aluminum mill.

THE APPLICATION

Blanketing gas for the annealing of their aluminum sheet product. The gas is provided from an exothermic gas generator producing carbon dioxide, nitrogen and water vapor.

THE PROBLEM

Wet carbon dioxide is an acidic gas, etching piping and valves, and causing excessive ring and gas packing wear. Additional precautions were required to prevent the gas from leaking to the local environment where personnel are working.

THE SOLUTION

A pair of duplicate Hycomp Oil-Free Gas Boosters were installed, with extra precautions taken with the materials of construction. The two stage unit is water cooled to drop as much moisture as possible. All stainless steel piping, valves and heat exchangers were used to prevent corrosion of the system. Proper piston ring and gas packing materials were chosen to work with the wet CO_2, and the piston rods were tungsten-carbide coated for corrosion resistance. The stainless steel aftercoolers were over-sized to drop out as much moisture as possible before the gas entered the process piping.