



www.bulldogheatpump.com

Quality Testing at the CGC Group Manufacturing Facility

Head office: 1-150 Britannia Road East, Mississauga, Ontario, Canada, 1-888-220-5551 CGC Group Manufacturing Facility: 850 Gartshore St, Fergus, Ontario, Canada, 1-866-443-5411

Manufacturers of the BULLDOG Heat Pump











Seven steps of production testing that gives our CLIENTS the advantage

1. Gross Test in Brazing

Once the plumbing assembly of the unit is completed, the Brazer performs a pressure test on both the gas and water systems to visually and audibly test for leaks.

Why Glycol?

During Winter's cold months, units are shipped and the residual glycol will prevent damage caused by freezing temperatures.

2. High Pressure Test

A high pressure test with Nitrogren is performed on the unit. To measure pressure decay, the system must hold the pressure of +/- 1 psi for 60 seconds. Failure to meet this requirement indicates a leak and the unit is sent back to Brazing for repair.



3. Leak Test Station

Utilizing a Helium detection probe, the unit is 'sniffed' with a Mass Spectrometer to check all potential leak sites on both the water and refrigerant side.



4. Vacuum System

Units are attached to the vacuum system for at least 2 hours and monitored. The fill equipment then draws a vacuum (500 microns) on the refrigerant system which needs to be held for a preset time. If it cannot be held, the unit will trigger an alarm and be rejected as having a leak.



5. Automatic Fill Station

If the unit passes, then the preset amount of environmentally friendly R410A refrigerant is added automatically. A complete database record of all units tested is stored electronically.



Every BULLDOG product is fully tested so **you** won't have to spend extra time, or money when installed!

6. Testing Lab

Every single unit is tested in the factory for a minimum of 15 minutes with a water/glycol solution to ensure 100% functionality in all modes of operation. On a batch basis, some units are made to operate for approximately 2 hours.



Every single **BULLDOG** is tested for refrigerant leaks 6 times and undergoes a factory run test.

7. High Pressure Refrigerant Test

Each unit is then allowed to operate without fluid flow until the unit's high pressure limit is reached (600) psi. A refrigerant leak detection test is performed to ensure no refrigerant has leaked.