

# AIR INITIATIVE

Alternative Industrial Refrigerants

Master-Bilt is dedicated to providing the most environmentally friendly equipment while still providing optimum energy efficiency. In answering this challenge, we developed the AIR Initiative to outline our refrigerant plans. Under this program, we will utilize a combination of HFO blended refrigerants and foaming agents as well as natural refrigerants such as R290 (propane). The AIR Initiative will allow us to provide our customers with the most complete product line in the industry including remote and self-contained cabinets, walk-ins, single compressor condensing units, and multi-compressor rack refrigeration systems.

## BLENDING REFRIGERANTS

A blended refrigerant is a combination of two or more single component refrigerants. Blends provide many advantages including:

- Up to 84% reduction in global warming potential when compared to traditional HFCs
- Increased energy efficiency and similar performance characteristics compared to HFCs
- Approved and supported by major component manufacturers
- No charge limitations
- Continue to use current standard thermostatic expansion valves, filter driers and solenoid valves
- They are extensively field tested as drop-in replacements with no equipment, lubricant or seal changes
- No special aftermarket service requirements

## NATURAL REFRIGERANTS

Natural refrigerants are chemicals which occur in nature's bio-chemical process. There is a large range of natural refrigerants including ammonia, CO<sub>2</sub>, and the most common of which are hydrocarbons, propane and isobutane.

- Zero ozone depletion potential (ODP)
- Very low global warming potential (GWP)
- Highly energy efficient in small systems
- Excellent thermodynamic properties and no refrigeration glide
- Large installed base for commercial application across Europe