# **E-STAR® HIPERFORM®**





THE MILK COOLING SYSTEMS SPECIALISTS<sup>™</sup>

## **Mueller® E-Star® HiPerForm® Refrigeration Units**

#### Specifically Engineered and Designed for Cooling Milk!

The proprietary technology of the Mueller<sup>®</sup> E-Star<sup>®</sup> HiPerForm<sup>®</sup> refrigeration system makes it the most energy-efficient milk cooling system in the world.



The E-Star HiPerForm features a proprietary subcooling valve designed to flood the entire milk cooler evaporator with subcooled liquid refrigerant. This process maximizes efficiency by utilizing the entire evaporator surface for cooling and eliminating the inefficient superheated vapor refrigerant found in conventional refrigeration systems.

Additionally, the E-Star HiPerForm refrigeration system enables the compressor to operate at significantly cooler temperatures for longer compressor life, less maintenance, less energy consumption, and incomparable refrigeration efficiency.

The HiPerForm is the most cost-effective way to cool milk with a scroll refrigeration unit. A variety of upgraded features — including a Copeland® scroll compressor with an oil sight glass and fill port, a variablespeed fan, rifled tubing, and a subcooling coil — makes HiPerForm the most energy-efficient refrigeration unit available for the dairy industry.

The Mueller E-Star HiPerForm outperforms all other milk cooling units in terms of reliability, efficiency, and value. It's what you'd expect from The Milk Cooling Systems Specialists<sup>™</sup>.



#### **Features and Benefits**

- Most energy-efficient system in the world. Factory installed, proprietary subcooling valve completely floods milk cooler evaporator for maximum operating efficiency.
- Copeland scroll compressor design. A refrigeration compressor that is designed to handle the large temperature changes required to cool milk. Scroll technology is more energy efficient and has fewer moving parts than reciprocating compressors.
- Maximum evaporator efficiency. A condenser subcooling coil maintains liquid refrigerant, ensuring maximum evaporator efficiency.
- Enhanced heat transfer surface. Enlarged tube-andfin condenser with rifled tubing results in greater refrigeration capacity and efficiency.
- Suction line accumulator heat exchanger. Increases system efficiency and protects compressor during low-load conditions.
- **Reliability.** System design is forgiving of a variety of operating conditions.

- Single, variable-speed fan with high-efficiency motor. Maintains proper air flow to increase capacity and efficiency of the compressor and condenser.
- **Greater serviceability.** Electrical compartments located in the upper front portion of the unit permits easy access.
- **Refrigerant type.** HiPerForm is available for use with environmentally friendly HFC R507 refrigerant.
- **Oil sight glass and fill port.** Allows refrigerant oil to be easily changed for future HFC requirements.
- **Rust-resistant brass high- and low-side valves.** Located in front of the unit for easy access without removing the cover.
- Galvanized three-piece cover. Heavy-duty metal encloses and protects the unit for safe operation while three-piece construction provides easy access.
- **Quality assured.** Meets worldwide standards such as CSA and CE (certain models only).

Mueller E-Star HiPerForm Specifications					
Length (in)	Width (in)	Height (in)	Approximate Weight (lb)	Horsepower Available (hp)	Electrical Characteristics*
40	30	311⁄2	390	3.5	208–230/60/1, 200–230/60/3, 460/60/3
				5	200-240/50/1, 380/50/3
461/2	331/2	421/2	450	7.5	208–230/60/3, 460/60/3, 380/50/3
				10	

\*Contact your Mueller representative for electrical characteristics available for each model.



### MUELLER

1600 West Phelps Street • Springfield, Missouri 65802, U.S.A. DFE Internal Sales: 1-888-645-5826 • Phone: 417-575-9000 • 1-800-MUELLER Fax: 417-575-9887 • 1-800-436-2466 • www.paulmueller.com • E-mail: dairyfarm@paulmueller.com

Visit our Web site at www.paulmueller.com to see all of our *COOL* products!