



## Item # SLHE 1/2, Suction Line Heat Exchangers

For enhanced evaporator capacity, system stability, compressor protection and oil return.


Nominal SLHE selections should be based on system horsepower, which will provide a nominal 10°F subcooling and a nominal 20°F suction superheat for R-22, R-502, R-404A, R-507, R-407A, R-504, R-134A, R-407C and R-410A at 110°F condensing and 25°F suction. For example, for a 1-1/2 HP system, select an SLHE 1-1/2. Do not select undersized models to avoid high suction pressure drops and gas whistling.

Selections based on suction and liquid line sizes are appropriate for standard low, medium and high temperature refrigeration systems provided the system HP rating closely matches the SLHE selection.

Selection of oversized models will provide additional liquid subcooling and suction superheat. Oversized models are acceptable only if the suction gas temperature to the compressor is not raised above 65°F for proper compressor performance.

Standard and custom models can be selected by Doucette to meet any performance criteria, up to 60°F subcooling. For exacting subcooling and superheat performance please contact the factory.

### Specifications

HP	1/2
Gas Conn	1/2 "
Liquid Conn	1/4 "
Length	11 1/2 "
DWP	500 psig
Weight	1 lbs
Certification	ISO Certification Intertek 
Other Certifications	All models are U.L. Listed, File SA 5925 and ISO 9001:2015
Installation Recommendation	Mount in vertical suction line close to the evaporator, piped in counterflow with Thermostatic Expansion Valve bulb attached to gas outlet piping of the suction line heat exchanger.

### Increased Performance and System Protection for Minimal Cost

Suction Line Heat Exchangers (SLHE) improve refrigeration system performance and are a proven refrigeration system component for greater efficiency. These heat exchangers protect the compressor and are highly recommended by equipment manufacturers for medium and low temperature, space sensitive applications.



20 Leigh Drive,  
York, Pennsylvania 17406-8474



Website: [www.doucetteindustries.com](http://www.doucetteindustries.com)



Phone: 717-845-8746  
Toll-free: 800-445-7511  
Fax: 717-845-2864



Commercial/Industrial: [AdamM@doucetteindustries.com](mailto:AdamM@doucetteindustries.com)  
Residential/Light Commercial: [AdamM@doucetteindustries.com](mailto:AdamM@doucetteindustries.com)

### **Improves Evaporator Capacity Up To 10%!**

By subcooling the hot refrigerant liquid, evaporator coil capacity is increased and overall refrigeration system reliability improved. As a rule, 1°F refrigerant subcooling results in 0.5% capacity improvement. A nominal SLHE selection will provide 4% to 10% coil capacity improvement along with improved system pull-down time.

### **Protects Compressor From Premature Failure**

Refrigerant droplets can cause serious compressor damage. Doucette Suction Line Heat Exchangers protect the compressor by "vaporizing" droplets as they pass through the heat exchanger, greatly reducing the chance for premature compressor failure.

### **Improves Expansion Valve Operation**

Fluctuation in operating conditions such as low-ambient and low-load can cause a refrigeration system to experience expansion valve "hunting" and liquid line bubbles. Doucette's Suction Line Heat Exchangers help eliminate this problem and provide improved expansion valve operation and proper capillary performance.

### **Reduces Suction Line Sweating and Improves Oil Return**

Doucette Suction Line Heat Exchangers reduce line sweating and frost formation by raising the temperature in the suction piping. This diminishes water and corrosion damage to other equipment. Oil return is improved from the increase in suction gas temperature.

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## **Features**

**Refrigeration Engineers Rely on the Leader in Heat Transfer Technology.** Nobody builds refrigeration heat exchangers like Doucette with high-performance, rigid design, low-pressure drops and reliable application for -40°F to +40°F refrigeration systems. Refrigeration engineers rely on Doucette for suction-to-liquid heat exchangers - both standard and custom designs.

**Improved Heat Transfer.** Fluted design controls pressure drop and gas velocity for quiet operation.

**Rigid Design for Reliability.** Less susceptible to fatigue and premature failure

**Exclusive Design.** Rigid Type L fluted tube rather than flexible hose

**Quality Construction.** High-temperature brass brazing throughout

**Performance Checked.** Leak tested for trouble-free operation

**Choice of Models.** Available in all-copper or steel construction

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## **Standard and Custom Models**

The SLHE Series is available in standard models for use with every brand of refrigeration system. For custom applications and OEM, we offer our HE Series for exacting performance, special fittings and more.

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## **Special Applications**

The Doucette SLHE and HE Series are the most cost effective heat exchangers available for a wide variety of refrigeration and special applications. They can be designed for DX Subcooler Applications, Marine/Military and miniature shell/tube heat exchangers.

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## **Engineering Support**

Performance information and application assistance is just a phone call away. Doucette provides engineering and application support for standard and custom models from 1/2 to 150 HP.

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## **Fast Delivery**

Doucette Delivers the SLHE Series from stock. And if you need a special HE Series Design, we can build it FAST.



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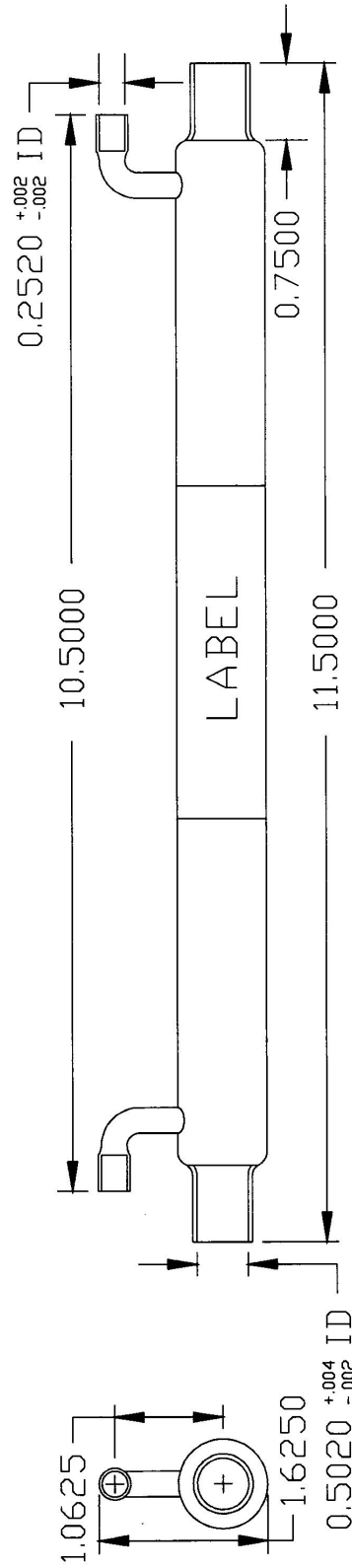
Phone: 717-845-8746  
Toll-free: 800-445-7511  
Fax: 717-845-2864



Commercial/Industrial: [AdamM@doucetteindustries.com](mailto:AdamM@doucetteindustries.com)  
Residential/Light Commercial: [AdamM@doucetteindustries.com](mailto:AdamM@doucetteindustries.com)



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DESIGN PRESSURE: 500PSIG

TOLERANCES	DOUCETTE INDUSTRIES, INC.		
DECIMAL	.125	SCALE	DRAWN BY: MLB
±		.625	APP. BY: RJR
FRACTIONAL		TITLE	SLHE 1/2, BOXED
±		DATE	2/14/05
ANGULAR		DRAWING NUMBER	91001
±		ALL DIMENSIONS INCHES, UNLESS SPECIFIED	
GAUGE			



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