

Existing Building Products and Services  
15500/TRA BuyLine 5344

The Trane Company  
3600 Pammel Creek Road  
La Crosse, WI 54601-7599  
608-787-2000

## **EXISTING BUILDING PRODUCTS AND SERVICES**

The Trane Company has developed a variety of products and services designed to help you deal with the challenges presented by the existing building market. They help address issues like refrigerant management, energy management and indoor air quality.

### **THE PURIFIER PURGE**

Increasing environmental concern has prompted Trane to make the Purifier Purge standard on all Trane chillers sold today. The state-of-the-art high efficiency purge system is also available as an upgrade kit for Trane (and other) chillers using low pressure refrigerants. The Purifier Purge reduces CFC refrigerant losses during normal purge operation by up to 90 percent.

- Conserves CFC refrigerants.
- The unit may generate a payback by reducing the need for replacing refrigerant lost through normal operation or inadvertent operator error.
- The unit can operate with the chiller off, an important advantage during spring start-up.
- Separates water and acid from the refrigerant before it can damage the chiller.

### **PREVAC CONTROL SYSTEM**

The PREVAC control system enhances chiller reliability, minimizes refrigerant loss and simplifies chiller leak testing through the control of the chiller's refrigerant pressure. This system is suitable for Trane and other centrifugal chillers using CFC-11 and HCFC-123. It is available for use with existing chillers as well as factory installed on new equipment.

- For all CFC-11 and HCFC-123 chillers 100 to 1500+ tons.
- Prevents refrigerant loss resulting from excessive purging.
- Allows easy leak testing of chiller.

### **INTERCLEAN**

Today's need to conserve and manage refrigerant has produced new, innovative products such as Interclean. Interclean recycles the chiller's refrigerant charge as the chiller is operating. It is a permanently installed refrigerant cleansing system that continuously removes oil, contaminants and moisture. This increases chiller efficiency and helps to detect oil leaks and

other problems before they become critical.

- Works on all low pressure chillers using CFC-11, CFC-113 and HCFC-123.
- Thirty gallon storage capacity.

### **REFRIGERANT MONITOR**

The Trane refrigerant monitor offers two important benefits: refrigerant conservation and safety. The refrigerant monitor employs non-dispersing infrared sensor technology to provide sensing capability down to one part per million (ppm), plus the ability to differentiate between various compounds. The ability to selectively monitor for a specific refrigerant and/or chemical is the key to eliminating nuisance alarms. The Trane refrigerant monitor is intended to help meet ASHRAE 15-1992 mechanical room requirements for Class B1 refrigerants, as well as any other refrigerants (Class A1) desired.

### **MAX RECYCLE/RECOVERY SYSTEM**

The Trane recycle/recovery system is designed for safe, efficient handling of refrigerant. The recovery unit is constructed of welded plate steel and factory tested to 45 psig. Easy-to-operate configuration valves minimize the number of refrigerant wasting hose changes necessary during the recovery sequence, and the high-volume Trane vacuum pump evacuates the chiller in as little as one fourth the time required by other systems. The Trane pump also removes 98.5 percent of the vapor compared to an approximate 84 percent removal efficiency rating for competitive units.

- Sizes include 3400 and 5000 pounds of refrigerant storage capacity.
- Designed for use with CFC-11, CFC-113 and HCFC-123 refrigerants.
- High volume/capacity vacuum pump capable of pulling a 29.8-inch mercury or greater.

### **EVACUPAC LP**

Evacupac LP is a portable service tool for the recovery and cleaning of low pressure refrigerants. It uses a modular design which includes separate storage tanks for the refrigerant. Multiple tanks can be used to accommodate large refrigerant charges. Transportation and setup can be accomplished by a single technician. The Evacupac LP has a high volume vacuum pump that evacuates the chiller in as little as one fourth the time required by other systems.

- UL tested and ARI rated.
- Tank sizes include 600, 1600 and 3400 pound refrigerant charge capacity.
- Designed for use with CFC-11, CFC-113 and HCFC-123 refrigerants.
- High volume/capacity vacuum pump. Up to 10.6 scfm rating and capability to pull 29.95- inch vacuum or greater.

### **HP REFRIGERANT RECOVERY LINE**

The HP refrigerant recovery line is designed to recover refrigerant from units using R-12, R-22, R-500 and R-502. All three models -- the Toter HP, Evacupac HP and HP Cart -- feature internal safety controls like low and high pressure controls, as well as an automatic tank flow switch. The compressors are hermetic with serviceable oil reservoirs and oil separators. Four different size refrigerant tanks are available.

## **ENGINEERED CONVERSIONS**

- Environmentally responsible.
- Allows reapplication of chiller.
- Provides accurate data and true optimization.
- Factory support assures reliable and efficient chiller.

The Trane Engineered Conversion to HCFC-123 is a package of materials and services for customers to reduce risk when upgrading an existing CFC-11 centrifugal chiller to be compared with and capable of operating on HCFC-123. The package includes compatible motor, gasket, o-ring material, impeller modifications, and orifice modifications as determined by the engineering optimization.

In Engineered Conversions, Trane surveys the system's needs to provide an economically attractive and functional solution. This method of problem solving takes into account several factors and relies heavily on communication between owner/facility manager, consultant and original equipment manufacturer to provide accurate and workable solutions. It is NOT a simple parts exchange which could lead to significant equipment shortcomings in performance and reliability.

## **COMPREHENSIVE CONVERSION PROGRAM**

A Comprehensive Conversion Program works like this:

### **1. Commitment**

The Trane Company commits to the owner a multiyear parts, labor and refrigerant total maintenance agreement for the Trane machines on the project involved. This agreement will be under Trane's long established Extended Service Program wherein the services to be provided, beyond certain items basic to the program, may be tailored to the owner's requirements. This agreement is normally three to five years. All labor under the agreement is provided by the local Trane service company.

### **2. Conversion**

In addition, during the term of the agreement, Trane will conduct an Engineered Conversion of the equipment to HCFC-123. The timing of the conversion will be completed in the owner's best interest. In the course of the conversion, the machine(s) will be completely overhauled. Labor involved in the conversion will be supplied by the Trane service company, backed by Trane.

### 3. Easy Pay Plan

The cost of the Comprehensive Conversion will be a fixed amount payable in annual installments over the life of the agreement.

### **TRISTAR COMPRESSOR REPLACEMENT PACKAGE**

The TriStar package upgrades existing chiller(s) to the latest in compressor and control technologies. The features include higher efficiency, enhancements to part load performance control, soft loading, chiller water reset, HCFC-123 compatibility and usually quieter operation when compared to open compressor designs.

The TriStar package is available in several different configurations which allow flexibility when applying it to existing centrifugal chiller heat exchanger shells. The motor compressor assembly can either be mounted on top of the shells or be free standing next to the heat exchanger shells. This conversion of existing R-11 centrifugal chillers to an up-to-date highly efficient chiller with extended service life is at a cost much less than the cost of a new chiller installed.

- Available from 200 to 1250 tons.
- Performance from .5 to .75 kw/ton.
- HCFC-123 or CFC-11 compatible.

### **CHILLERSOURCE RENTAL AND RECONDITIONED CHILLERS**

All ChillerSource rental and reconditioned chillers are manufactured and backed by Trane. Trane is the only chiller OEM to offer rentals. ChillerSource units are either new or reconditioned Trane chillers. Air-cooled units are available from 10 to 400 tons; water-cooled units from 200 to 1000 tons. ChillerSource rental chillers can typically be on the job and operating in 24 hours or less.

- Units delivered from regional inventories.
- Centrifugal, reciprocating and Series R chillers.
- CFC responsive.
- Serviced by Trane service companies anywhere.

ChillerSource reconditioned chillers are fully reconditioned and backed by Trane, the world's leading chiller manufacturer. The equipment has been completely disassembled, upgraded with Trane parts, reassembled by Trane professionals and then tested to assure peak performance. The reconditioning process includes:

- Rebuilding compressor and motor.
- Cleaning and conducting an eddy current test to assure tube quality.
- Running the unit and testing for vibration to assure balance.
- Replacing all bearings and gaskets.
- Updating unit controls.
- Centrifugal, reciprocating and Series R chillers with full standard warranty.

## **CPR SYSTEM**

The CPR System is a complete control package which replaces the traditional pneumatic controls shipped on all older centrifugal chillers. Existing pneumatic controls are often inaccurate, resulting in wasted energy and comfort problems in a building. The Trane CPR System is a microelectronic-based control module which provides precise start/stop control, current limit control, chilled water temperature control, chilled water reset and generic building automation system interface. Affordably priced, the CPR System requires minimal "downtime" for installation.

## **INDOOR AIR QUALITY APPRAISAL SERVICE**

Trane offers an indoor air quality appraisal service. The intent of this service is to assist in the management of the indoor air quality issue for an existing building. Typical situations in which an appraisal is appropriate include: as a proactive measure to address indoor air quality, if a perceived problem exists; or during a due diligence study.

- Trane has formed an alliance with the oldest indoor air quality firm in the nation whose founder discovered the etiology of a disease that is known as Legionnaires' disease.
- Hundreds of indoor air quality appraisals have been completed on all types of commercial, institutional and industrial buildings.
- Work is performed by indoor air quality specialists with academic and field experience in both HVAC engineering and microbiology.