

## 2. Manufacturer Duties

- i. Review installation drawings prior to arrival of unit
- ii. Inspect site prior to arrival of absorber
- iii. Inspect site prior to arrival of absorber
- iv. Supervise arrival of absorber & opening of packages
- v. Remove and return vibration recorder
- vi. Supervise joining of split absorber & pressure test unit
- vii. Terminate gas train, burner and vacuum pump control panel connections
- viii. Terminate electrical, control, sensor and phone connections
- ix. Draw vacuum Supervise charging of LiBr
- x. Start-up unit, balance flows and tune burner
- xi. Training

### 3.03 START UP AND TRAINING

- A. Absorber will be supplied with initial LiBr solution charge and associated chemicals by the manufacturer.
- B. Provide services of factory trained representative for a minimum of four days to inspect installation and complete start-up to satisfaction of the customer.
- C. A factory-trained technical representative shall be available for two days of training on operation and maintenance at the customer job site.
- D. Provide training to school maintenance staff in the absorber operation, maintenance and system changeover from cooling to heating and heating to cooling.
- E. Training shall be videotaped and submit (2) copies of Training CD and Presentation to the Owner.

### 3.04 FIELD QUALITY CONTROL

- A. Supply initial charge of refrigerant and oil for each refrigeration system. Losses of oil or refrigeration prior to acceptance of equipment or due to defects covered under-guarantee shall be replaced. Supply to the Owner, one complete charge of lubricating oil in addition to that placed in the system.
- B. Charge system with LiBr and test entire system for leaks after completion of installation. Repair leaks, put system into operation, and test equipment performance.
- C. If initial start-up and testing takes place in winter, repeat start-up and testing operation to satisfaction of the customer at beginning of first cooling season.

### 3.05 MAINTENANCE AND START-UP BEYOND INITIAL START-UP

- A. Provide additional cooling and winter season start-up, shutdown operation and testing service during first two year of operation after the initial cooling season start-up noted in 3.04.C above.
- B. Inspect and test for leaks every 3 months during first two (2) year of operation and rectify if any leakage is found.
- C. Provide manufacturer recommended preventive maintenance service (including tube cleaning) during the first two year of operation.

**END OF SECTION 15600**