

Louisiana State Penitentiary
17544 Tunica Trace (Hwy 66)
Vegetable Processing Plant Blast Freezers
Angola, LA 70712

Scope of Work:

Vendor to furnish all labor, materials, tools, equipment, and supplies necessary to perform the attached job at Louisiana State Penitentiary (LSP).

Vendor is to remove the existing equipment and install a new refrigeration system consisting of two (2) Condensing units and two (2) unit coolers. Agency will remove the existing condensers, supply crane to install the new condensing units, and supply the use of a forklift for removal and installation of the evaporator coils. All existing equipment to be left on site.

Specifications:

40 HP Low Temperature Refrigeration System:

- Includes new line sets with one (1) inch pipe insulation.
- New system will operate independent of each other and each will have capacity of approximately sixty percent (60%) of recommended British Thermal Unit (BTU) for the room.

Refrigeration System includes:

- Condensing Unit, Unit Cooler, and R404A equipment match

General Requirements:

- Room temperature: negative fifteen (-15) degrees Fahrenheit.
- Ambient temperature: One hundred (100) degrees Fahrenheit.
- Design run time: Eighteen (18) hours.
- Required capacity: 246,000 British Thermal Unit per Hour (BTUH).

System Balance:

- Balanced capacity: 254,622.8 BTUH
- Evap. T.D.: Eight and nine tenths (8.9) degrees Fahrenheit.
- Line loss: Two (2) degrees Fahrenheit.
- Suction temp: Negative twenty-five and nine tenths (-25.9) degrees Fahrenheit.
- Calc. Run time: Seventeen and four tenths (17.4) hours.

Condensing Unit:

Brand – Russell

Model # RFDV040L4SGA, or Equal

- Refrigerant: R-404A
- Voltage: 460/3/60
- Compressor type: Discus
- Flooded: yes
- Air cooled
- Capacity: 116,540 BTUH
- Electrical data: compressor RLA: 60.9
- Compressor Locked Rotor Amperage (LRA): 367
- Total condenser fan Full Load Amperage (FLA): 6.6
- Minimum Circuit Amp (MCA): 98.7
- Maximum Overcurrent Protection Device (MOPD): 150
- Number of compressor: One (1)
- Number of condenser fans: Two (2)
- Liquid line: One and one eighths inch (1-1/8")
- Suction line: Two and five eighths inch (2-5/8")
- Compressor HP: 040
- All weather galvanized steel painted housing
- Floating coil design
- Integral liquid sub-cooling circuit provides subcooled liquid to the expansion device
- Mechanically formed pre bent tubing
- Swept wing fan
- Crankcase heater
- Flip top hinged panels
- Hinged and removable access panels
- Floored compressor cabinet with removable compressor tray
- Led control panel lighting
- 110V service convenience outlet
- Separate high and low voltage control panels
- Service gauge hooks
- Color coded control wiring diagram and color coded high and low pressure hoses
- Flooded model include an adjustable head pressure control valve
- Temperature range: low temp.
- Must include the following options:
 - o Defrost kit, fan cycling, head cooling fan, oil separator with check valve and oil return service kit, phase loss monitor, replaceable core liquid line filter, standard receiver, suction accumulator- heat exchanger, suction line components: replaceable core filter, thru the door- main breaker

Warehouse Unit Cooler:

Brand – Russell

Model # RW4E145GHA, or Equal

- Three phase motor with high static pressure prop fan blades
- Voltage: 460/3/60
- Defrost type: electric defrost
- Refrigerant: R-404A
- Fins per inch: Four (4)
- Number of fans: Three (3)
- Suction temp: Negative twenty-five (-25) degrees Fahrenheit.
- Temperature Difference (T.D.): Eight and nine tenths (8.9) degrees Fahrenheit.
- Capacity: 127,311 BTUH
- Cubic Feet per Minute (CFM): 20625
- Total unit fan motor amps: Nine and six tenths (9.6)
- Number of heater circuits: 1 (one)
- Heater amps: Twenty-two and six tenths (22.6)
- Heater watts: 18000
- Minimum Circuit Amp (MCA): Fifteen (15)
- Maximum Overcurrent Protection Device (MOPS): Twenty (20)
- Liquid line: One and one half inch (1-1/2")
- Suction line: Three and one eighths inch (3-1/8")
- Rail mount three phase motors
- Embossed aluminum housing
- Copper tube and aluminum fin coil construction
- Sweat connections
- Thermal overload protection
- High efficiency deep draw venturi
- Vibration free fans
- Fan sections are baffled
- Slide out end panels
- Hinged drain pan
- Pre drilled hanger holes
- NSF approved for use in food areas
- Approximate dimensions: One hundred thirty-nine and seven eighths inches in length (139-7/8" L) x twenty-seven and three eighths inches wide (27-3/8" W) x forty-nine and one fourth inches in height (49-1/4" H)
- Must include the following options:
 - o Fixed defrost control / fan delay switch, insulated drain pan, liquid line solenoid valve, thermostatic expansion valve, electronic thermostat.