SECTION 114000 - FOODSERVICE EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:
   1. Fabricated equipment.
   2. Food waste machines.
   3. Cooking equipment.
   4. Self-contained refrigeration equipment.
   5. Warewashing equipment.

B. Related Requirements:
   1. Division 23 Section "Commercial-Kitchen Hoods" for ventilation hoods.

1.3 SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: For fabricated equipment. Include plans, elevations, sections, roughing-in dimensions, fabrication details, utility service requirements, and attachments to other work.

C. Operation and maintenance data.

1.4 WARRANTY

A. Refrigeration Compressor Warranty: Manufacturer agrees to repair or replace compressors that fail in materials or workmanship within specified warranty period.
   1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis-of-Design Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include those as listed on the Kitchen
2.2 PERFORMANCE REQUIREMENTS

A. NSF Standards: Provide equipment that bears NSF Certification Mark or UL Classification Mark certifying compliance with applicable NSF standards.

B. BISSC Standards: Provide bakery equipment that complies with BISSC/Z50.2.

2. Provide BISSC-certified equipment.

C. UL Certification: Provide electric and fuel-burning equipment and components that are evaluated by UL for fire, electric shock, and casualty hazards according to applicable safety standards, and that are UL certified for compliance and labeled for intended use.

D. Steam Equipment: Provide steam-generating and direct-steam heating equipment that is fabricated and labeled to comply with 2013 ASME Boiler and Pressure Vessel Code.

E. Regulatory Requirements: Install equipment to comply with the following:

2. NFPA 70, "National Electrical Code."


2.3 FABRICATED EQUIPMENT

A. Stainless Steel Sinks:

1. Description: One and three-compartment sink(s). Fabricate units of welded stainless steel, sound deadened.

   a. Bowls: Stainless steel, Type 304, 0.078 inch thick.
   a. Integral Drainboards: Stainless steel, Type 304, 0.078 inch thick.
   b. Body: Stainless steel, Type 304, 0.078 inch thick.

   1) Back Splash: Manufacturer's standard height.

   b. Legs and Feet: Stainless steel tubing legs with adjustable bullet feet.
   c. Accessories: Faucets and Spouts.

2. Stainless Steel Sheet: ASTM A 240, austenitic stainless steel, type as indicated.

3. Fabrication: Prepare sink for installation of the following equipment items:

   c. Water heater.
   a. Undercounter dishwasher.
4. Stainless Steel Finish: Directional satin finish, ASTM A 480, No. 4.

B. Stainless Steel Tables Insert drawing designation:
1. Description: Prep. Equipment-stand and Dish tables.
   a. Tops: Stainless steel, Type 304, 0.078 inch thick, reinforced and sound deadened.
      1) Back Splash: Manufacturer's standard height.
      1) Edge: Bullnose on front edge, straight on sides and back.
   b. Adjustable Underself: Stainless steel, Type 304, 0.050 inch thick.
   c. Cabinet:
      1) Body: Stainless steel, Type 430, 0.050 inch thick.
      2) Drawers: Stainless-steel drawer and faceplate.
   d. Sink: Stainless steel, Type 304, 0.078 inch thick, welded into tabletop and including the following:
      1) Faucet and Spout.
      2) Vacuum breaker.
      3) Basket strainer.
      4) Tail piece.
   e. Legs: Stainless steel tubing.
   b. Feet: Stainless steel adjustable bullets.

2. Materials:
   f. Stainless Steel Sheet: ASTM A 240, austenitic stainless steel, type as indicated.
      a. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B, with minimum G90 coating.

3. Fabrication: Prepare table for installation of the following equipment items:
4. Stainless Steel Finish: Directional satin finish, ASTM A 480, No. 4.

C. Stainless-Steel Shelf Units: Dish rack shelves and wire shelving. Refer to Kitchen Equipment Schedule.

1. Description: Mount type per manufacturer’s standard. Fabricate units of stainless steel, Type 304, 0.062 inch thick.
2. Stainless-Steel Sheet: ASTM A 240, austenitic stainless steel, type as indicated.
3. Stainless-Steel Finish: Directional satin finish, No. 4.

2.4 COOKING EQUIPMENT

A. Ranges:
   1. Description: Electric Resistant Range
      a. Top Configuration:
      1) Open-Burner Unit
      2) Griddle: Flat.
      3) Radiant Broiler: Manufacturer’s standard.
b. Base Configuration:
   1) Standard Oven(s): One.

c. Accessories: Refer to Kitchen Equipment Schedule
   1) High back shelf.
   2) Stainless-steel sides.
   3) Stainless-steel back.
   4) Legs for curb base.
   5) Casters
   6) Oven Rack(s): One for each oven.

d. Electrical Service: Equip unit for connection to service indicated on Drawings.

B. Food Warmer:
   1. Description: 800-W infrared warming power.
      a. Electrical Service: Equip unit with plug and cord for 120-V service.

2.5 SELF-CONTAINED REFRIGERATION EQUIPMENT

A. Refrigeration Equipment: Refrigerators and Freezers.
   1. Description: Reach-in type.
      c. Doors: In configuration shown on Drawings per manufacturer’s designations.
      d. Accessories: Casters.
      e. Electrical Service: Equip unit with plug and cord for service indicated on Drawings.

B. Undercounter Refrigeration Equipment: Refrigerators and Freezers
   1. Description: Compact unit with rear-mounted, self-contained refrigeration system.
      a. Accessories:
         1) Stainless-steel top with backsplash.
         2) Stainless-steel back panel.
         3) Casters: 6 inches high.
         4) Shelves: .
      b. Electrical Service: Equip unit with plug and cord for service indicated on Drawings.

C. Ice-Making Machine
   1. Description: Freestanding unit.
      a. Production: Ice cubes.
      b. Capacity: 335 lbs. per 24-hour period.
      c. Electrical Service: Equip unit for connection to service indicated on Drawings.
      d. Accessories
         1) Storage Bin: Storage Capacity: 300 lb.
         2) Stainless-steel stand and legs.
         3) Water filter.
2.6 WAREWASHING EQUIPMENT

B. Warewashing Machines:
   1. Description: Dishwashing, single tank.
      a. Capacity: 55 racks per hour.
      b. Accessories: Refer to Kitchen Equipment schedule.
      c. Electrical Service: Equip unit for connection to service indicated on Drawings.

2.7 MISCELLANEOUS MATERIALS

A. Installation Accessories, General: NSF certified for end-use application indicated.

B. Elastomeric Joint Sealant: ASTM C 920; silicone. Type S (single component), Grade NS (nonsag), Class 25, Use NT (nontraffic) related to exposure, and Use M, G, A, or O as applicable to joint substrates indicated.
   1. Public Health and Safety Requirements:
      a. Sealant is certified for compliance with NSF standards for end-use application indicated.
      b. Washed and cured sealant complies with the FDA's regulations for use in areas that come in contact with food.
   2. Cylindrical Sealant Backing: ASTM C 1330, Type C, closed-cell polyethylene, in diameter greater than joint width.

2.8 FINISHES

A. Stainless-Steel Finishes:
   1. Surface Preparation: Remove tool and die marks and stretch lines, or blend into finish.
   2. Polished Finishes: Grind and polish surfaces to produce uniform finish, free of cross scratches.
      a. Run grain of directional finishes with long dimension of each piece.
      b. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.

B. Powder-Coat Finishes: Immediately after cleaning and pretreating, electrostatically apply manufacturer's standard, baked-polymer, thermosetting powder finish. Comply with resin manufacturer's written instructions for application, baking, and minimum dry film thickness.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install foodservice equipment level and plumb, according to manufacturer's written instructions.
   1. Connect equipment to utilities.
   2. Provide cutouts in equipment, neatly formed, where required to run service lines through equipment to make final connections.
B. Complete equipment assembly where field assembly is required.

1. Provide closed butt and contact joints that do not require a filler.
2. Grind field welds on stainless-steel equipment until smooth and polish to match adjacent finish.

C. Install equipment with access and maintenance clearances that comply with manufacturer’s written installation instructions and with requirements of authorities having jurisdiction.

D. Install cabinets and similar equipment on bases in a bed of sealant.

E. Install closure-trim strips and similar items requiring fasteners in a bed of sealant.

F. Install joint sealant in joints between equipment and abutting surfaces with continuous joint backing unless otherwise indicated. Produce airtight, watertight, vermin-proof, sanitary joints.

3.2 CLEANING AND PROTECTING

A. After completing installation of equipment, repair damaged finishes.

B. Clean and adjust equipment as required to produce ready-for-use condition.

C. Protect equipment from damage during remainder of the construction period.

3.3 DEMONSTRATION

A. Train Owner’s maintenance personnel to adjust, operate, and maintain foodservice equipment.

END OF SECTION 114000