SITE NEW WORK - MECHANICAL PLAN

GENERATOR ROOM NEW WORK - MECHANICAL PLAN

ITD GENERATOR REPLACEMENT

NEW WORK
MECHANICAL PLAN

1875 N. LAKEWOOD DRIVE, SUITE #201
COEUR D'ALENE, IDAHO  83814
(208) 676-8001   (208) 676-0100
PART 1 - GENERAL

1.0 PERFORMANCE REQUIREMENTS

A. Maximum Operating Pressure Ratings: Syngas (24 in [600 mm]) fuel-oil supply pressure at all fired system sections

1.1 ACTION SUBMITTALS

A. Minimum of one copy of each product indicated. Include construction details, material descriptions, and dimensions of individual components and profiles. Also includes, where applicable, the name of the manufacturer, electrical characteristics, and functional specifications and accessories.

1.2 Installation

A. All pipefitting pressure, capacity, settings, and electrical connection data of selected models.

1.3 Drawings or comparable product by one of the following:

- Stainless steel, bronze woven, PFTE
- Copper, flexible, bellows
- Stainless steel, Forz-Oil Day Tank applications
- Copper, flexible, bellows
- Stainless steel, bronze woven, PFTE

1.4 Test

A. All new systems.

1.5 Air test port.

- Stainless steel, bronze woven, PFTE
- Stainless steel, bronze woven, PFTE

B. Compliance with requirements for equipment specifications in plumbing and HVAC Sections for

1.6 Testing

A. Annunciator Panel: With visual and audible, high-level and low-level alarms, fuel indicator with regulation in operation, and overall alarm. Include gauge range chart that covers fuel vessel storage capacity.

1.7 Color:

A. Electrical, operating on 120V ac.

1.8 Installation

A. Install piping subject to equipment to allow service and maintenance.

2.0 CONNECTIONS

A. Copper piping with low-nickel, copper-plate, solution.

2.1 Piping, Tubing, and Fittings

A. ANSI/ASME B 16.9, Type A, B, Class 150, standard pattern.

2.2 Flexible Steel Flanges and Flanged Fittings

A. ANSI/ASME B 16.5, minimum Class 150, including both, nuts, and gaskets of the manufacturer material group, and connections for service and maintenance.

2.3 Consult

A. Consult drawing plans, schematics, and diagrams indicate general location and arrangement of piping

2.4 Epoxy

A. Field painting of day tank.

2.5 Fittings, Tubing, and Accessories

A. Check for corrosion, cracking, and leakage before assembly.

2.6 Flanges

A. Install leak-detection and monitoring system. Install alarm panel inside building where indicated.

3.0 EXAMINATION

A. Copper fittings with long nuts.

3.1 Piping Inspect

A. Check for corrosion, cracking, and leakage before assembly.

3.2 Process

A. Manual reset dry-run protection. Stop pump if fuel level falls below pump suction.

3.3 Piping Inspection

A. Final pressure test, conducted in accordance with ASME B1.20.3.

3.4 Pump

A. Install piping subject to equipment to allow service and maintenance.

3.5 Pressure Test

A. Final pressure test, conducted in accordance with ASME B1.20.3.

3.6 Rating

A. 10 psig (69 kPa).

3.7 Rated Pressure

A. 3.4 psi (23.5 kPa) FS.

3.8 Test

A. Final pressure test, conducted in accordance with ASME B1.20.3.

3.9 Test Pressure

A. 10 psig (69 kPa).

3.10 Test Rating

A. 3.4 psi (23.5 kPa) FS.

3.11 Test Pressure

A. 10 psig (69 kPa).

3.12 Test Rating

A. 3.4 psi (23.5 kPa) FS.

4.0 INSTALLATION

A. Install piping subject to equipment to allow service and maintenance.

4.1 Piping

A. Install piping subject to equipment to allow service and maintenance.

4.2 Piping Inspect

A. Check for corrosion, cracking, and leakage before assembly.

4.3 Process

A. Manual reset dry-run protection. Stop pump if fuel level falls below pump suction.

4.4 Piping Inspection

A. Final pressure test, conducted in accordance with ASME B1.20.3.

4.5 Pressure Test

A. Final pressure test, conducted in accordance with ASME B1.20.3.

4.6 Rating

A. 10 psig (69 kPa).

4.7 Rated Pressure

A. 3.4 psi (23.5 kPa) FS.

4.8 Test

A. Final pressure test, conducted in accordance with ASME B1.20.3.

4.9 Test Pressure

A. 10 psig (69 kPa).

4.10 Test Rating

A. 3.4 psi (23.5 kPa) FS.

5.0 NIGHT-DRY RUNS

A. Install piping subject to equipment to allow service and maintenance.

5.1 Piping

A. Install piping subject to equipment to allow service and maintenance.

5.2 Piping Inspect

A. Check for corrosion, cracking, and leakage before assembly.

5.3 Process

A. Manual reset dry-run protection. Stop pump if fuel level falls below pump suction.

5.4 Piping Inspection

A. Final pressure test, conducted in accordance with ASME B1.20.3.

5.5 Pressure Test

A. Final pressure test, conducted in accordance with ASME B1.20.3.

5.6 Rating

A. 10 psig (69 kPa).

5.7 Rated Pressure

A. 3.4 psi (23.5 kPa) FS.

5.8 Test

A. Final pressure test, conducted in accordance with ASME B1.20.3.

5.9 Test Pressure

A. 10 psig (69 kPa).

5.10 Test Rating

A. 3.4 psi (23.5 kPa) FS.

6.0 RIOU

A. Install piping subject to equipment to allow service and maintenance.

6.1 Piping

A. Install piping subject to equipment to allow service and maintenance.

6.2 Piping Inspect

A. Check for corrosion, cracking, and leakage before assembly.

6.3 Process

A. Manual reset dry-run protection. Stop pump if fuel level falls below pump suction.

6.4 Piping Inspection

A. Final pressure test, conducted in accordance with ASME B1.20.3.

6.5 Pressure Test

A. Final pressure test, conducted in accordance with ASME B1.20.3.

6.6 Rating

A. 10 psig (69 kPa).

6.7 Rated Pressure

A. 3.4 psi (23.5 kPa) FS.

6.8 Test

A. Final pressure test, conducted in accordance with ASME B1.20.3.

6.9 Test Pressure

A. 10 psig (69 kPa).

6.10 Test Rating

A. 3.4 psi (23.5 kPa) FS.

7.0 SERVICE COMMERCIAL

A. Install piping subject to equipment to allow service and maintenance.

7.1 Piping

A. Install piping subject to equipment to allow service and maintenance.

7.2 Piping Inspect

A. Check for corrosion, cracking, and leakage before assembly.

7.3 Process

A. Manual reset dry-run protection. Stop pump if fuel level falls below pump suction.

7.4 Piping Inspection

A. Final pressure test, conducted in accordance with ASME B1.20.3.

7.5 Pressure Test

A. Final pressure test, conducted in accordance with ASME B1.20.3.

7.6 Rating

A. 10 psig (69 kPa).

7.7 Rated Pressure

A. 3.4 psi (23.5 kPa) FS.

7.8 Test

A. Final pressure test, conducted in accordance with ASME B1.20.3.

7.9 Test Pressure

A. 10 psig (69 kPa).

7.10 Test Rating

A. 3.4 psi (23.5 kPa) FS.

8.0 START-UP

A. Install piping subject to equipment to allow service and maintenance.

8.1 Piping

A. Install piping subject to equipment to allow service and maintenance.

8.2 Piping Inspect

A. Check for corrosion, cracking, and leakage before assembly.

8.3 Process

A. Manual reset dry-run protection. Stop pump if fuel level falls below pump suction.

8.4 Piping Inspection

A. Final pressure test, conducted in accordance with ASME B1.20.3.

8.5 Pressure Test

A. Final pressure test, conducted in accordance with ASME B1.20.3.

8.6 Rating

A. 10 psig (69 kPa).

8.7 Rated Pressure

A. 3.4 psi (23.5 kPa) FS.

8.8 Test

A. Final pressure test, conducted in accordance with ASME B1.20.3.

8.9 Test Pressure

A. 10 psig (69 kPa).

8.10 Test Rating

A. 3.4 psi (23.5 kPa) FS.

D. Lines: 1. Supply Air Ducts: Fibrous glass, type 1, 1-inch thick, Return Air Ducts: Fibrous glass, type 1, 1-inch thick, Transfer Ducts: Fibrous glass, type 1, 1-inch thick.