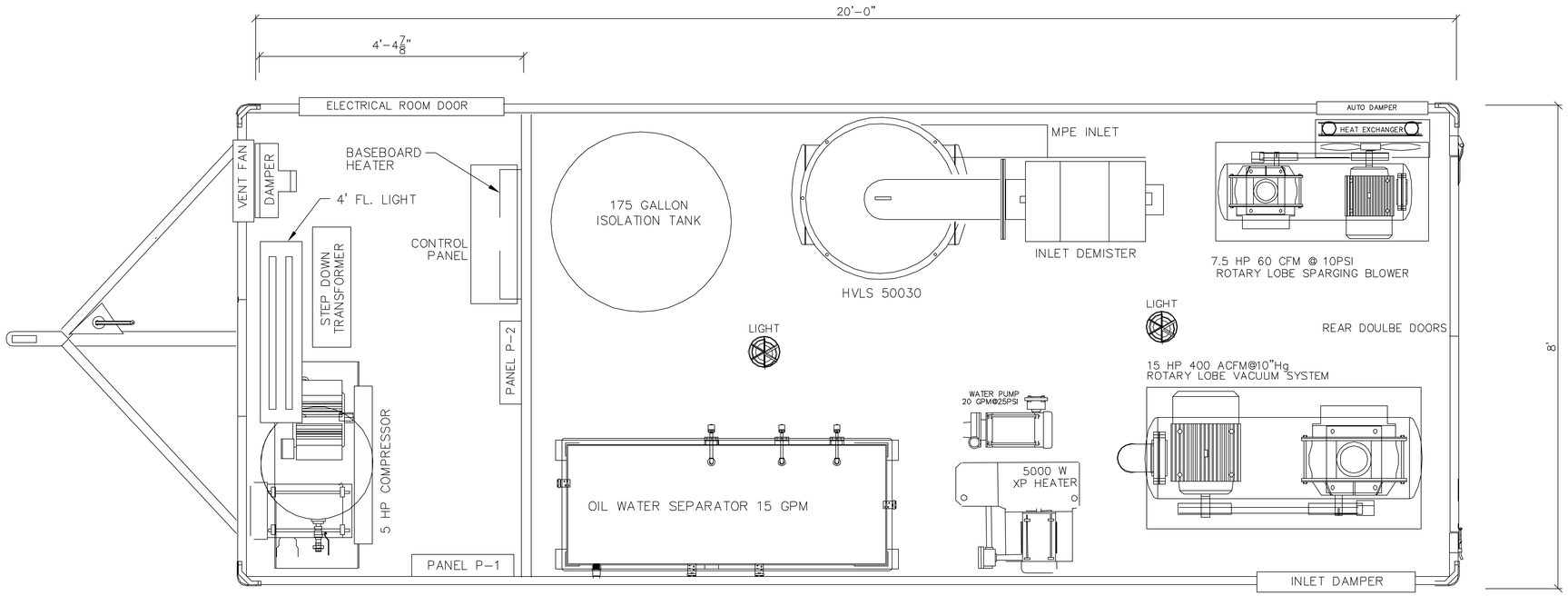


3805C
SCG Industries Limited Process Specifications & Technical Information

Vacuum Pump

1 Manufacturer: SutorBilt
2 Model: 5 MP
3 Pump Speed %(of Max) 2200 RPM (78%)
4 Motor Rating: Class 1 Division II, 460 volt 3 phase
5 Motor Manufacturer: Marathon
6 Motor Horsepower: 15
7 Motor Speed: 1750 rpm
8 Rated Flowrate: ( Max Vac) 400 ACFM (10Hg)
9 Safeties & Control: Vacuum Relief Valve, Vacuum switch, Pressure Switch, Temp switch set below flash point of Gasoline, Thermal overload on motor.
10 Temperature Switch Manufacturer : Burling
11 Temperature Switch Model: B-IC-53-CSA
12 Demisting Knock out canister: SCG model located between HVLS and pump for secondary protection
13 Inlet Particulate filter: Solberg
14 Electrical Classification of Temperature Switch: Non-Incendiary
15 Vacuum gauges: Before and after throttle valve, filter and demister
16 Pressure Gauges: after pump
17 Inlet plumbing: Air dilution c/w muffler, throttle valve, and check valve

Phase Separation Vessel (HVLS)

1 Type of Separator; HVLS-500
2 Manufacturer: SCG Industries Limited
3 Flow rate: 500 scfm, 10 gpm
4 Material of Construction: Vessel(s) Steel
5 Reservair Volume: 30 Gallons (Lower Tank)
6 Type of Level Switch(es): Side-Mounted Level Switch H/H (upper tank), Top Mounted Level Switch (Bottom Tank)
7 Level Switch(es) Manufacturer: W.E Anderson
8 Level Switch(es) Model: F7 SS2
9 Characteristics: No emulsion, no motors, no scaling. Liquid and sediment transferability. Air over water transfer without the use of any moving parts.
10 Water Demisting Percentage Recovery: 99.9
11 Sight Glass: Yes (Both Tanks)
12 Control System: PLC driven cycling controller c/w electric Solenoids

Air Compressor

1 Type: 60 gal Vertical Compressor
2 Manufacturer: Ingersoll-Rand
3 Model: 2340 (SN 3002723)
4 Flow Rate: 17 CFM @ 100 psi
5 Hydraulic Flow Rate: (HVLS) 25 Gallons/Minute
6 Motor Rating: general purpose, within electrical room
7 Motor Manufacturer: Marathon
8 Motor Horsepower: 5
9 PLC controlled continuous operation Alarm program (1 hr)
10 Voltage 460 volt, 3 phase

Flow Stabilization Tank

1 Type: HDPE
2 Size: 175 gal
3 Accessories: Bottom clean out, High /High Float, Discharge flow valve.

Oil Water Separator

1 Type of Separator: B-15
2 Flow rate: 15 gpm
3 Material of Construction: Vessel(s) Steel Epoxy lined internal
4 Dimension: 5.5 long, 2 wide, 4.5 high
5 Type of Level Switch(es): Side-Mounted Level Switch H/H water, H/H Product
6 Level Switch(es) Manufacturer: W.E. Anderson
7 Level Switch(es) Model: F7 SS2
8 characteristics: Coalescing, sediment settling, Oil Pumping option
9 Oil Sight Glass

Effluent Transfer Pumps

1 Type: Centrifugal
2 Manufacturer: Jacuzzi
3 Model: .5 hp 5DA1B 230 volt 3 ph
4 Flow Rate: 20 gpm @ 25 psi
5 Electrical Classification: Class 1 Division II
6 Control; PLC Programmable
7 Flow Meter: 1"T-10
8 Material of Construction: Vessel Steel

Enclosure

1 Type: SCG two room enclosed Trailer
2 Dimensions: 20'L x 8'W x 8.5'H
3 Entrance(s): Rear Double Doors, Electrical Room Man door
4 Noise Emissions: 75 dba
5 Thermal Rating: Walls and cieling R-6 styrofoam, Floor R-8 Poly Urethane Spray foam.
6 Heater Type: 5000 watt
7 Heater Manufacturer: Ruff neck
8 Heater Model: FX412480360-5
9 Heater Output 5000W
10 Cooling Provision: 1/3 HP Exhaust Fan
11 Fan Manufacturer: Leader Fan Industries
12 Fan Model: X-12
13 Thermostat Manufacturer: Roughneck
14 Thermostat Electrical Classification: Non-Incendiary
15 Material of Construction: Skid Aluminum (checker plate floor)
16 Material of Construction: Walls 24 Gauge Anodized Aluminum interior and exterior
17 Sump with Level Switch
18 Wall thickness 1.5"
19 Material: Non Combustible
20 Weather proof
21 Exterior color: White
22 interior color: White
23 Low Temp Alarm Switch: Yes
24 Equipment location: Positioned for ease of repair
25 Fire extinguishers: 1 in each room adjacent to man doors
26 Lighting: 3 incandescent Process room, 1 Flourescent in electrical room
27 Roof Construction: 24 gauge Aluminum interior and exterior
28 Suspension: 2 only 5200 lbs axils for added stability and reduced tongue weight
29 Manufacturers Warranty 3 years structural 2 years corrosion

Two Way Telemetry

1 Control capable of modification of all I/O functions remotely
2 Connection: 56 K modem at Electrical control room
3 Logging: Capable of storage and retrieval of data
4 Alarm Auto Dialer 4 channel

System Controls

1 PLC Type: Micro
2 PLC Manufacturer: Toshiba
3 PLC Model: TS1
4 Shop Programmed
5 Emergency Shut-Down
6 Spare Inputs/outputs
7 Status Lights on PLC
8 Control Panel Mounting: Interior Electrical Room
9 Transformer 208/120v for control and receptacle
10 Main Fused Disconnect 100 amps, 460 volt Time Delay fuses
11 Distribution: Block
12 Protection: Time delay fuses for all motors and transformers
13 Outputs Fused, labeled, and c/w Terminal blocks
14 Inputs Labeled and c/w terminal blocks
15 115 volt receptacle duplex GFI
16 Motor starters c/w thermal overloads and aux. contacts for all motors
17 Switches and sensor supply power Non -Incendiary

Electrical

1 Classification of Controls: Built to Standards (as per NEC)
2 System Electrical Requirements 460 Volt/100 Amp/3 Phase

Air Sparge Blower

1 Type: Rotary Lobe
2 Model: Sutorbilt 3MP
3 Hp: 7.5 hp
4 RPM: (% of Max) 1700 rpm (50%)
5 Exhaust Temp rise 130 F
6 Capacity: (Max start- up pressure) 60 cfm ( 10 psi)
7 Safety Features: Pressure switch, pressure relief
8 Accessories: Throttle, Dilution, Silencer, Pressure gauges Controls Pilot switch, Lockout feature to MPVE Electrical Classification Class 1 Div 2

Heat Exchanger

1 Type: Air to Air
2 Model: SCGAA100
3 Care dimensions: 14"wX14"hX1.5"depth
4 2" flanged pipe connection
5 Rating: 100cfm
6 Cooling to within 20 degrees F of ambient temp

FINAL AS-BUILT

US Army Corps of Engineers

U.S. ARMY ENGINEER DISTRICT, BALTIMORE
CORPS OF ENGINEERS
BALTIMORE, MARYLAND

SOURCE AREA REMEDIAL SYSTEM
GASOLINE ALLEY AREAS 3805 & 1995
FORT DRUM, NEW YORK

AREA 3805
SYSTEM C EQUIPMENT
LAYOUT AND SCHEDULE

EA ENGINEERING, P.C.

| DRAWING NUMBER | PLATE |
|---|---|
| N/A | M-3 |

SCALE: AS NOTED | DATE: SEPT. 2004 | SHEET 3

FILE: Syracuse...fp/Syracuse/Working Projects\Fort Drum Projects\WARC\Design\drawings from Investor\final design drawings\M-3.dwg [Layout1]