



Power/Utility Requirements and Consumption

This power/utility requirement and consumption document gives the power and utilities requirements for products that come equipped on brewhouse and cellar vessels, as well as auxiliary brewery equipment that may have been purchased from us. We recommend consulting the user manuals for all components for additional information regarding installation, maintenance and other requirements.

Note: As Forgeworks is not licensed to provide MEP or HVAC consultation. For more in depth questions, we may refer customers to consult with a licensed HVAC/Utilities professional.

ELECTRICAL

Barley Crusher by Forgeworks:

1 HP Baldor Explosion Proof Motor, 1725 RPM, PH1/Class B

Single Phase: 115 Volts/13 Amps

Three Phase: 230 Volts/6.5 Amps

Grain Conveyance Auger by Farmer Boy Ag:

$\frac{3}{4}$ HP Auger Motor, 4.6 Amps

1 HP Auger Motor, 6.2 Amps

Centrifugal Pumps:

SP-41 Pump w/ Baldor 1.5hp with VFD, Single Phase, 10 Amps max

SP-41 Pump w/ Baldor 1.5hp with VFD, Three Phase, 5 Amps max

Midco Economoite Direct Fire Burner

Gas Connection: $\frac{3}{4}$ " NPT

Gas Pressure Required: 12-14" w.c.

Electrical Service: 120V / Single Phase / 60 Hertz

Electrical Load: 3 Amps

Johnson Controller A421ABG-02C: (1) per vessel

Product Specifications

Setpoint Range -30 to 212 F (-34 to 100 C)

Differential Range 1 to 30 F (1 to 30 C)

Supply Voltage 120 VAC, 60 Hz

Power Consumption 1.8 Amps Max

Rake and Plow Gearmotor and VFD:

MOVITRAC LTE-B+ VFD Unit - 230 V for 3-phase 230V Gearmotor – Input Current: 20.7 Amps

SEW-Eurodrive Gearmotor: 230 V / 8.4 Amps or 460 V / 4.20 Amps

Electrical Immersion Elements by Glo Quartz (for Electric Fired Kettles and Hot Liquor Tanks)

-Electric Kettles

3.5bbl Kettle: (4) approximately 4415 Watt Rating each, 13.24395492 kW required

5bbl Electric Kettle: (4) approximately 6307 Watt Rating each, 18.9199356 kW required

-Electric Hot Liquor Tanks

Assuming the Hot Liquor is pre-heated in the Kettle and transferred to the Hot Liquor Tank.

3.5bbl with (1) Electric Immersion Element:

-Element Rated to 2650 Watts to raise temp 5° in 1/2 Hour, 1.324395492 kW Required

5bbl with (1) Electric Immersion Element:

-Element Rated to 3784 Watts to raise temp 5° in 1/2 Hour, 1.89199356 kW Required

7bbl with (1) Electric Immersion Element:

-Element Rated to 5298 Watts to raise temp 5° in 1/2 Hour, 2.648790984 kW Required

10bbl with (1) Electric Immersion Element:

-Element Rated to 7568 Watts to raise temp 5° in 1/2 Hour, 3.78398712 kW Required

15bbl with (1) Electric Immersion Element

--Element Rated to 11352 Watts to raise temp 5° in 1/2 Hour, 5.67598068 kW Required

20bbl with (1) Electric Immersion Element:

-Element Rated to 15136 Watts to raise temp 5° in 1/2 Hour, 7.567974241 kW Required

For Hot Liquor Tank requiring multiple Electric Immersion Elements, ask your Forgeworks representative which elements and related power requirements are recommended based on your planned usage.

Archon Industries Inc- Tank Light Model LUM17

Certificate # 20180301-E175164, Report Reference E175164-19970207

UL 1598 and CSA C22.2 No. 250 Standard for Luminaires, and UL 8750 Standard for Light Emitting Diode (LED).

Washdown Safe, IP65 rated per IEC 60529

Power Consumption: 12.6 Watts

AC Supply: (120/220-240/277) VAC

CITY WATER

It is recommended to have 60psi at 25-30 gallons per minute

NATURAL GAS

It is recommended to have 12-14" Water Column of Gas for optimum performance of the in-direct fire natural gas burner. Each burner is convertible to propane,