

## Facilities Systems Capacity Details - 34 Commerce Way, Woburn

### 1. Electrical Service

*Primary Feed: 1000kVA transformer feeds the East side of the Building which feeds the Secondary  
Secondary: 500kVA transformer feeds the West side of the Building*

*Both transformers are located just outside the building's south side.*

### 2. Backup generators

*Caterpillar Model #3412 – located in back parking lot  
Diesel*

*27.02 L Displacement*

*680-900 kVA Rating (min-max)*

*208-600 V Voltage*

*60 Hz Frequency*

*450W KW Milton CAT 3412 – located on Roof*

*Natural Gas*

*1649 in3 displacement*

*423 – 500 ekW rating*

*60 Hz Frequency*

### 3. Plant steam boiler

*2 Fulton Boilers Model # ICS-8.5*

*8.5 hp, Max allowable Working Pressure (MAWP) 150 psi*

*Natural gas*

### 4. Neutralizing tank to treat lab waste water

*The lab drains and sinks feed in to the site's exterior, below-grade water treatment system.*

*Continuous treatment, gravity system, controls in an interior closet. 2x equalization tanks are 325 gallons each in a vault on east side of property*

### 5. House air/Compressed air

*Clean compressed air system with:*

*2 oil-free Air Compressors*

*2x oil-less rotary scroll compressors: 3x 5 HP, 45 acfm @ 100 psig*

*120 gallon Air Tank*

*MAWP 200 psig*

*2 Desiccant Air Dryers*

*42 acfm, MAWP 150 psig*

*0.2 µm air filters*

*Distribution Branches*

- Manufacturing Branch*
- Utility Branch*
- Lab / Support Area Branch*
- HVAC Control Branch*

*Check Valves (Backflow Preventers on Non-Mfg branches)*

## **6. WFI water system**

*The clean steam generator condenses steam (generate 80 kg/h of steam at 3 bar) to WFI when there is no demand from the autoclaves. No redundancy for generation, the loop is kept at 80C.*

*WFI Tank is 750L with a working volume of 450L.*

*The max draw rate is 12L/min.*

*Regeneration rate is 1.25L/min.*

*There are a total 8 Drops for the loop. (1-M204), (1-M205), (1-M213), (1-M208), (1-U113) and (2-M113).*

*Piping, connectors and controls will need to be added to support CIP practices.*

## **7. Autoclaves**

*2 Autoclaves on site:*

*Getinge model #: GE 6915 AR-1 (Drug Product Dedicated / Double Doors Housed in M113)  
more information is on the turn over package. 26"W x 36-1/4"H x 60-5/8"D*

*Belimed model #: 9-6-12 HS1 (Drug Substance Dedicated / Single Door Housed in M205)  
more information is on the turn over package. 26"W x 43"H x 55"D*

## **8. Cleanroom AHU (Air handling unit)**

*All recirculating fan unit are supplied by AHU-1, AHU-2, AHU-3. Because these areas are considered viral production areas the dedicated exhaust is ERU-2*

*Rooms that RCF-1 (Recirculating Fan Unit) Supplies: M110, M109A, M112A.*

*Rooms that RCF-2 (Recirculating Fan Unit) Supplies: M102, M103, M103A, M104, M104A, M200, M201, M202, M203.*

*Rooms that RCF-3 (Recirculating Fan Unit) Supplies: M107.*

*Rooms that RCF-4 (Recirculating Fan Unit) Supplies: M108.*

*Rooms that RCF-5 (Recirculating Fan Unit) Supplies: M101, M112, M113, M113A, M114.*

*Rooms that RCF-6 (Recirculating Fan Unit) Supplies: M207.*

*Rooms that RCF-7 (Recirculating Fan Unit) Supplies: M208.*

*All remaining graded rooms are 100% Make up air therefor supplied by AHU-1, AHU-2, AHU-3 and exhausted through ERU-1*

*CNC and supporting laboratory areas are supplied by AHU-4 and exhausted through ERU-3*

## **9. Loading docks**

*There are 5 docks*