



Asnuntuck Community College
170 Elm Street
Enfield, CT 06082

(12.14.22)

Welding Shop HVAC issues
Inspection dates 12-12-2022 and 12-13-2022

The issues listed below were found to be causing the intermittent odors in welding rooms 138 and 142B. Also listed is the need for balancing the flow of the equipment, as a slight negative pressure in the space is needed.

Welding Room 138

MAU-1 and MAU-2 need to be balanced and the burners set up.
WEF-1 and WEF-2 need to be balanced.
MAU-1 and MAU-2 are periodically taking in combustion exhaust from RTU-1
MAU-1 is stated to have a possible gas leak within the unit near the burner. This has not been proven

RTU-1 needs the exhaust pipes extended externally and should terminate above the unit.
RTU-1 needs both ignitor mounting screws drilled out and replaced, or a new plate replaced for each circuit.
RTU-1 needs to have the gas pressure and combustion checked. Both circuits have new heat exchangers.
RTU-1 needs to have the min position for the economizer checked

MAU-1 has an unknown intermittent delay or an unknown control problem causing the delay. The electrical drawing for the unit has faded.
MAU-1 and MAU-2 need electrical drawings from the manufacturer.

The burner primary control for MAU-1 and MAU-2 does not have power on unless the burner is operating. This does not allow diagnosis of the control circuit unless the unit is running.

Welding Room 142B

MAU-1 has been opened and the heat exchangers inspected for deterioration.
Both heat exchangers for MAU-1 are in very good shape.

MAU-1 needs to be balanced

EF-2 and EF-3 need to be balanced
EF-2 and EF-3 are vibrating. Inspect bearings and belts

Welding room 138 RTU-1 has exhaust blowing into intake of MAU-1 for 142B periodically.
MAU-1 needs both heating exhaust pipes extended. (B-Vent)
The roof hatch of room 142B when open can pull in exhaust from MAU-1- The negative pressure in 142B appears to be excessive.

Conclusion

We have scheduled a balancer to accompany us to review and obtain a baseline tomorrow, Thursday December 15th at 8:00am
We are going to fabricate and install an exhaust extension on RTU-1 to prevent flue gas from getting pulled into the intakes of the make-up air units.
We will further inspect and repair what is needed for EF2 and EF3
We will request an Electrical diagram from the manufacturer for future reference.
We will review the manufacturer's set up procedures and implement them as soon as possible for the burners of MAU-1 and MAU-2
We will further inspect the possibility of a small gas leak in the burner, possibly at the pilot assembly



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