

March 17, 2014

Mr. Gary Milby
Associate Superintendent
Hardin County Schools
65 W.A. Jenkins Road
Elizabethtown, Kentucky 42701

Dear Gary:

Listed below are the pros, cons and budget pricing for the three different options discussed for the welding exhaust at the Hardin County Schools Early College and Career Center. Shrout Tate Wilson recommends Option 1 - Avanti WB3000 with self-contained filtering as it offers the lowest first cost of the (2) options that do not require modifying the make-up air for the space. Options that do not modify (increase) the make-up air are favorable as they align with the building's energy goals.

1. Avanti WB3000 (2 booth) - Self-Contained Filtering:

Pros:

- Energy efficient especially during times the class is only using a handful of booths.
- Easy installation (wouldn't require exhaust ductwork/accessories)
- Self Contained
- If one goes down you don't lose all booths.

Cons:

- More filters/motors/parts to maintain.

Price:

- \$90,000 (this price includes booths)

2. Weld Fume Control System – Central Filtering

Pros:

- Energy Efficient
- Less maintenance compared to the 2-booth system.
- Able to vary fan speed when less booths are being used.

Cons:

- Requires duct installation
- Takes up quite a bit of floor space
- If one fan goes down you lose the whole system

Price:

- \$106,800 (includes duct and booths)

3. Exhaust Fan with Make-up air

Pros:

- Very little maintenance.

Cons:

- Would require additional gas work for make-up air unit.
- Not energy efficient.
- More ductwork (for make-up air unit and exhaust fan)
- Would require roof-mounted equipment.

Price:

- \$116,800 (this price does not include any structural cost for the support of rooftop equipment; includes minimum of \$32,000 for Avanti 1000 Welding Booths)

Should you have questions or need additional information, feel free to contact me.

Sincerely,



Justin McElfresh AIA, CID, LEED AP
Project Architect

Taylor, Rusty

From: Justin McElfresh <jmcelfresh@scbarchitects.com>
Sent: Wednesday, March 19, 2014 10:04 AM
To: Milby, Gary; brandon.cecil@stweng.com
Cc: Robbins, Dan; Taylor, Rusty; Wyatt, David
Subject: RE: additional systems for review

Gary,

Our analysis of options in general applies to the system type. Alternate manufacturers such as Lincoln are acceptable (especially if you can get the system more economically).

The Lincoln is typically what STW has seen put in. Everyone really seems to like them and is pleased with Lincoln's responsiveness.

Per my conversation with Brandon this morning, Option 2 pricing is based on the Weld Fume Control System with central filtering as STW completed recently in Franklin County. The system there was Lincoln.

Sincerely,

Justin

From: Milby, Gary [<mailto:gary.milby@hardin.kyschools.us>]
Sent: Tuesday, March 18, 2014 5:33 PM
To: Justin McElfresh; brandon.cecil@stweng.com
Cc: Robbins, Dan; Taylor, Rusty; Wyatt, David
Subject: additional systems for review

Justin and Brandon,
I have been asked to see if you could review the two attached systems for possible recommendation with the other 3 that were reviewed?

Brandon,
Do you know which school systems use Avani?
The principal really likes the Lincoln Central System with the extraction arm. It seems to be the more expensive price. Is it really worth it?

Justin,
Is option 2, Weld Fume Control System – Central System a true \$106,800?
What system is this? AVANI, Lincoln?

Thanks,
Gary Milby
Associate Superintendent, Finance and Support Services
Hardin County Schools
65 W. A. Jenkins Rd.
Elizabethtown, Ky. 42701

Taylor, Rusty

From: Justin McElfresh <jmcelfresh@scbarchitects.com>
Sent: Monday, March 17, 2014 3:43 PM
To: Justin McElfresh; Milby, Gary
Cc: Taylor, Rusty; Robbins, Dan; Kenny Stanfield; Brandon Cecil
Subject: RE: 1309 Hardin ECCC Welding Exhaust Analysis_Recommendation
Attachments: 3_17_14 Welding Exhaust Analysis.pdf

Gary,

Per my conversations with Rusty and Brandon, I have revised Option 3 to include a minimum of \$32,000 for the welding booth equipment so that it is an "apples to apples" comparison.

Justin

From: Justin McElfresh
Sent: Monday, March 17, 2014 2:45 PM
To: 'Milby, Gary'
Cc: 'Taylor, Rusty'; Robbins, Dan; Kenny Stanfield; 'Brandon Cecil'
Subject: 1309 Hardin ECCC Welding Exhaust Analysis_Recommendation

Gary,

Attached is the requested analysis of the (3) options for the welding exhaust at the Hardin County Early College and Career Center along with our recommendation. Please let me know if you have questions.

Sincerely,

Justin McElfresh, AIA, CID, LEED®AP BD+C
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