Re: Walkthrough of DMS Metal Shop for Estimate

**Subject:** Re: Walkthrough of DMS Metal Shop for Estimate

**From:** Tails Hartnett <hon1nbo@dallasmakerspace.org>

**Date:** 2/6/21, 12:15 PM

**To:** <REDACTED> <<REDACTED>>, James Henningson

<mrjimmy@dallasmakerspace.org>

+James Henningson

Quick reminder, it's a 50A max expected on the line and an existing 60A breaker, but I see you listed 40A fuses

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K/J/T Hartnett

Metal Chair; Instructor of various tools

On Sat, Feb 6, 2021 at 9:28 AM <REDACTED> <<REDACTED>> wrote:

Ok, looking at it, the following will be needed;

1-60 amp fused disconnect, a nema 3r will probably work unless you want to go full dust proof, can install a gasket on-site if you’d rather not.

3 type h or k 40a fuses.

1-40a 3p twist-lock receptacle.

1-40a 3p twist lock cord cap.

1 8/3 SO cable with ground for cord.

Installation/securing of 30 ft 3/4” EMT conduit with bends.

Penetration of wall,

Penetration of panel,

2 3/4” LB fittings.

6 3/4” EMT couplings (compression)

6 3/4” EMT connectors (compression)

30’ of number 8 wire,

1 deep 4x4 box,

1 industrial 4x4 twist lock box cover.

20 concrete tapping screws,

10 3/4” conduit hangers 1-hole strap type.

It being new installation of raceway, disconnect, wire, and terminations, I’m going to estimate labor coming in at around 500.  For the material, I’d recommend Home Depot or Lowe’s, they tend to be less expensive than a supply house for small orders.

On the awesome side, I can get the raceway/wire pull 90% complete, up to the side of the panel, and then do the shutdown to complete the termination.  In other good news the wire needed will

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be #8 rather than #6, which lets the conduit be smaller as well.  How thick is that wall I’m going to be penetrating?

On Friday, February 5, 2021, 12:11 PM, Tails Hartnett <hon1nbo@dallasmakerspace.org> wrote: Close,

The options are to wire the 480v now, or to install a transfer switch for an existing

208v as a stop gap.

However, I checked last night and we do actually have 60A available on the panel

opposite our wall we can pull through. Tl;dr we took over our neighbor and the units

were joined together a couple years ago, and apparently there is enough service on

the existing 480v for this plasma unit. This seems like the most efficient option.

Long term we still have to install our second 480v transformer for the other equipment

in metal shop, but that likely won't happen with your existing work plan, but we might

as well get an estimate.

I'm free a little later this afternoon or most of the weekend. I'm told they want to

schedule your work for early next week so I figure sooner is better.

Can you do around 3:30 or 4pm?

~H

On Fri, Feb 5, 2021, 10:27 <REDACTED> <<REDACTED>> wrote:

So, looking at either a 480 disconnect or a manual transfer switch for the existing

208 with disconnect, yes?  My availability is pretty open, when works best for you?

On Thursday, February 4, 2021, 3:12 PM, Tails Hartnett

<hon1nbo@dallasmakerspace.org> wrote:

Hi <REDACTED>,

I'm the lead for the Metal Shop at the Dallas Makerspace. Since you're

going to work on the woodshop adjacent to the metal shop, I've been

asked to schedule a walkthrough with you to determine what's required.

We're setting up a hand plasma unit.

Long term we are installing a 480v line. We have the transformer already

for it. Whether this happens sooner or later will depend on what it will run

through you cost wise. If the board decides to postpone that work, the

other option is putting in a disconnect and using an existing 208v 3 phase

line. The unit cannot run at full capacity (it can safely run at reduced

capacity as long as the line is breakered properly), but with a transfer

switch we can prevent a user from running the other equipment on the

208v line at the same time.

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Re: Walkthrough of DMS Metal Shop for Estimate

Let me know your availability. I can be reached at this email, or my mobile:

<REDACTED>

Cheers,

~Tails

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K/J/T Hartnett

Metal Chair; Instructor of various tools

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