METRO DETROIT METAL WORKERS

Monthly Newsletter

Pre-meeting matters...



N.A.M.E.S.

It's only a week or so away now and many are working extra hours in preparation for a good show. Dave Zimmerman has secured the best seats in the house for the MDMW display, once again, so patrons will be able to view your displays first thing as they enter the front doors!

Reminder that I-75 is closed Southbound over the Rouge River so seek alternate routes; consider using 94 West to Southfield and then down to Dix-Toledo, South through to Eureka Rd. Reminder from Brian "I can't drive 55" Lawson

Be careful and watch out for the speed traps!



Vice, Kevin Thomas, called the meeting to order promptly at 7:15pm, shutting down the premeeting festivities..... Kevin has been working on a repair for one of the members who is restoring cob grinder—that's a whole other story though....

Kevin took us through the repair set up as it was a bit tricky because of the cast angles on the shaft support housings that were worn and in need of a bushing.

With the draft angle on both sides (see picture below) he had to dig deep into his bag-o-tricks and figure out how to hold the thing. He bored the casting out after "bumping" it around a bit. The bushing material was then rough OD / ID machined to relieve some of the stress in the material before bringing the OD to size and the ID to near size. Bushing was pressed in and a temporary shaft, machined to fit intermediate ID size of bushing, was used to realign the casting on center in the lathe for final ID machining. As Kevin put it, it's **P**retty **D**arn **C**lose a.k.a. PDC and turned out really nice....





One of our members asked a great question, "Who do you cut a taper without a taper attachment?" which prompted a lengthy discussion and a video presentation. Several methods were discussed and they all had limitations, advantages and down sides as well. Depending on the size of the taper,

the accuracy required and the tools available there are a few quick options. Using the compound for short angles is one way, directly cutting the angle set on the compound. A second, more time consuming, option for small angles is to offset the tailstock to throw the part out of alignment and "induce" an angle. Luckily we were able to jump on YouTube and pull up a really good video explaining much of this, hosted by This Old Tony, check his channel out if you haven't, who had recently posted the tapers and spheres video (https://youtu.be/MzJ6wR59AkY). Great discussion!

Monthly give away—play... Pickings are slim and it's been so rough that people aren't even claiming the prizes! It's a fun part of our meeting and many have done a great job bringing in items but the well is, well, a bit dry right now. If you've got an item that's been collecting dust instead of making chips, bring it along. Everyone would appreciate the chance at it and we have many new members, with limited equipment, who would be grateful to put it to use.

Fire In The Hole

Steve Huck's engine lite up for us at the meeting and hopefully you'll all see it run at NAMES. Speaking of Steve, a few of us were lucky enough to get an autograph.... Check out (photo below) page 21 in the latest KBC add!





A couple of questions were asked of Steve about the starter motor system he uses. Steve explained that it's a model plane starter that comes with a rubber cup to grab and spin the propellers on the planes to start them. Steve adapted it to drive his crank making use of a One Way Bearing (One Way Bearings are designed to transmit torque between the shaft and housing in one direction and allow free motion in the opposite direction.) which makes for a very simple starting system. Nice Work Steve!

Jim and Bert suggested a video for the groups viewing pleasure, and man was it a HIT....! Check out Chinese Forge (https://youtu.be/t77lewlhDmw) on YouTube if you haven't seen it. Wow, pretty hard to put into words the physical labour, time and coordination between a group of employees working toward a common goal. Impressive even if you wouldn't dare do it!!!!

