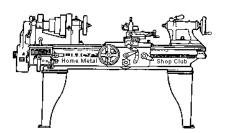


November 2018

Newsletter

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http://www.homemetalshopclub.org/

The Home Metal Shop Club has brought together metal workers from all over the Southeast Texas area since its founding by John Korman in 1996.

Our members' interests include Model Engineering, Casting, Blacksmithing, Gunsmithing, Sheet Metal Fabrication, Robotics, CNC, Welding, Metal Art, and others. Members enjoy getting together and talking about their craft and shops. Shops range from full machine shops to those limited to a bench vise and hacksaw.

If you like to make things, run metal working machines, or just talk about tools, this is your place. Meetings generally consist of *general announcements*, an *extended presentation* with Q&A, a *safety moment*, *show and tell* where attendees share their work and experiences, and *problems and solutions* where attendees can get answers to their questions or describe how they approached a problem. The meeting ends with *free discussion* and a *novice group* activity, where metal working techniques are demonstrated on a small lathe, grinders, and other metal shop equipment.

President	Vice President	Secretary	Treasurer	Librarian
<i>Brian Alley</i>	Ray Thompson	Joe Sybille	Emmett Carstens	<i>Ray Thompson</i>
Webmaster/Editor	Photographer	CNC SIG	Casting SIG Tom Moore	Novice SIG
Dick Kostelnicek	Jan Rowland	Martin Kennedy		John Cooper

This newsletter is available as a free electronic subscription from any page of our <u>website</u>. We currently have over 1189 subscribers located all over the world.

About the Upcoming 8 December 2018 Meeting

The next general meeting will be held on 08 December at 12:00 P. M. (Noon) at EuroWorld Motorsports, 1298 N. Post Oak Road, Houston, Texas 77055. Brian Alley will give a talk about the EuroWorld facility. Seating is limited at Euro World, so bring a portable chair for your convenience. Visit our website for up-to-the-minute details, date, location maps, and presentation topic for the next meeting.

General Announcements

Videos of recent meetings can be viewed on the HMSC website.

The HMSC has a large library of metal shop related books and videos available for members to check out at each meeting. These books can be quite costly and are not usually available at local public libraries. Access to the library is one of the many benefits of club membership. The club has funds to purchase new books for the library. If you have suggestions, contact the <u>Librarian Ray Thompson</u>.

We need more articles for the monthly newsletter! If you would like to write an article, or would like to discuss writing an article, please contact the Webmaster Dick Kostelnicek. Think about your last project. Was it a success, with perhaps a few 'uh ohs' along the way? If so, others would like to read about it. And, as a reward for providing an article, you'll receive a free year's membership the next renewal cycle!

Ideas for programs at our monthly meeting are always welcomed. If you have an idea for a meeting topic, or if you know someone that could make a presentation, please contact <u>Vice-President Ray Thompson</u>.

Reminder: Members are requested to turn in their completed member satisfaction survey at the December meeting. The purpose of the survey is to provide suggestions for general discussion on how the meetings should change, if at all, to increase interest.

The yearly tailgate sale will take place at the <u>EuroWorld facility</u> immediately after the December meeting.

Recap of the 10 November 2018 General Meeting

By Joe Sybille, with photos by Jan Rowland

Twenty-one members attended the 12:00 P.M. meeting at the South Houston Branch, Harris County Library, 607 Avenue A, South Houston, Texas 77587. One visitor, Ed Lewis, attended the meeting. There were two new members today, Danny Wilsher and Jake DeBoe. Welcome to the club Danny and welcome back Jake. There are twenty-five members in good standing with the club.

President Brian Alley led the meeting (right photo).

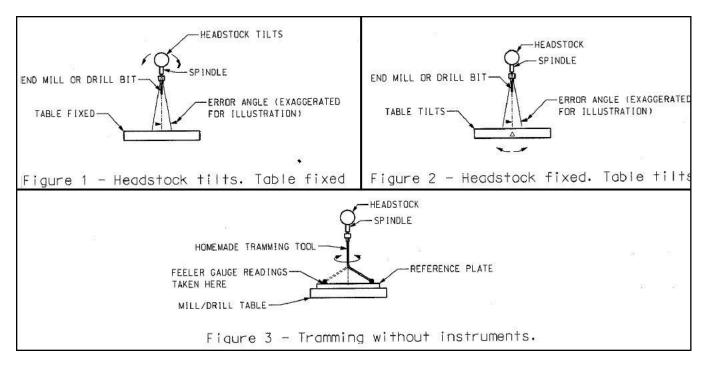
Presentation

Club member Brian Alley gave a presentation on "Tramming a Mill/Drill without Instruments". Brian demonstrated the technique on a vintage table top drill with a swivel head. The purpose of tramming is to ensure the mill/drill head is perpendicular to the mill/drill table. The technique is the same whether the headstock tilts (See Figure 1 below.) or the table tilts (See Figure 2 below.).





Affix a reference plate to the table. A good reference plate is a new or newly resurfaced disc rotor or a known flat surface with uniform thickness. Mount the tramming tool into the spindle as shown in Figure 3 below. Locate the ball of the tramming tool to just touch the reference plate. By hand, rotate the tramming tool. Any change in clearance between the reference plate and the tramming tool ball requires an adjustment of either the headstock or the table. Continue rotating the tramming tool and making adjustments to the headstock or the table until the clearance is the same all around between the tramming tool ball and the reference plate. Clearances should be checked with a feeler gauge. Once the clearance is the same around the reference plate, the mill/drill is trammed and any end mill or drill bit mounted in the spindle will be perpendicular to the mill/drill table.



Safety Moment

President Brian Alley showed a video on life altering accidents that could have been prevented if the workers had followed established proper safety procedures

Show and Tell

Norm Berls showed a tool he made for cutting knurls. To use the tool to make proper knurls he uses a strap wrench to slowly turn the lathe chuck. See right photo.



Gene Rowan exhibited samples of items he electroplated for customers. See right photo.



Nick Gardiner showed a model steam engine for which he is seeking to identify the thread size of the air intake. See left photo.

Mike Winkler showed a screw on cap he 3D printed for a small gas cylinder. See photos at left below.



Richard Douglas displayed more tools from the estate of his uncle, a retired mechanical

engineer. See 3 photos at right.

Brian Alley showed a picture

of a lathe used in the mining industry. Significant about the lathe is the large 54" swing and its long 356" distance between centers.





Problems and Solutions

A member wanted to know sources of steel in the local area. Several recommendations were offered.

Another member wanted to know the best way to put back in service a three phase, 220 volt, ¾ hp @ 525 rpm, motor that had salt water damage. Several suggestions were offered, the most notable of which was to purchase a new motor.

A visitor has in his shop two milling machines with tooling, a lathe with tooling, and several precision measuring instruments that he would like to donate to an organization in the Brookshire, Texas area. The equipment uses metric graduations. After the donation, he would like to have access to the machines for personal use. He asked for suggestions on how to proceed with his donation. Several suggestions were offered.

Articles

LED Work Lamp

By Vance Burns

I saw a <u>Clickspring video</u> on building a lamp-base adapter for the lamp shown at the left. Their videos are superb.



The lamp is so affordable I decided to pick one up at the local Houston IKEA store. I meet a lot of fellow Harvey flood survivors who have swallowed their condescension and spent a lot of time at IKEA...

Chris' Clickspring lamp mods are machining centric, but I've been using it as-is for a general handyman work light. My house is coming along, but I have a lot of refining tasks to do and few of them are in well-lit areas. This light is a real pleasure to have in my handyman tool kit.

I've had several lights in my time, portables, super bright flashlights, magnetics, lights on tools, lights on headbands, drop, mechanics and high lumen tripod setups. When I am horizontal and waist deep in fixing a kitchen cabinet there is not much room nor an extra hand for keeping the light on task. Also, when 50% of me is inside the project, it can get a little steamy; even some LEDs shed considerable heat.

With its 24" gooseneck reach, it doesn't have to be cheek-to-jowl with me. The neck looks short in the pictures on the website; however, it is much longer in practice. The base is appropriately weighted for the lamp's needs. The cord is 6.5 feet long with an integral power switch. It has a wall transformer rated at 7VDC output at 3 watts. The light element looks like a Cree LED but I didn't disassemble it to confirm.

Is it amazingly bright? No, it is amazingly inexpensive. It is bright enough and being long and supple, the not insignificant light it produces can be used to its best potential. Being self-standing it can be moved at will. The strong yet slender 24" flex neck can get it in the most awkward places.

I would enjoy a battery operated lamp in this style, but the cons would be much higher: initial outlay as well as ongoing operating costs and one more thing to babysit when I am focused on completing a long and complex task; if I have to walk away for a bit I don't have to worry about coming back to a dim light that needs a recharge or an extra energy pack.

If your wife is crafty she would enjoy this lamp as well. If you put one in the kid's room or on a study desk it will serve well. Lamp light fatigue is the bane of those addicted to research; I really appreciate reading illumination that is below my sightline. In a glare prone situation, the advantage is with flexible lamps.

Next time I am back at Ikea (*sigh*) I plan to pick up a few more. The Clickspring mod is worth considering.