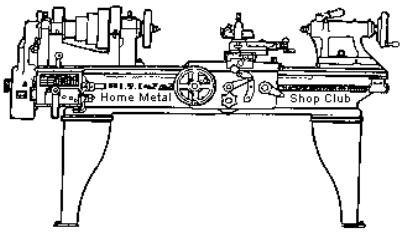
April 2025
Newsletter

Volume 30 - Number 04



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
Dean Eicher	*Vacant*	*Joe Sybille*	*Joe Sybille*	*Mark Counterman*
Webmaster/Editor	**Audio/Visual**	**CNC SIG**	**Casting SIG**	**Novice SIG**
Dick Kostelnicek	*Mark Heidorn*	*Martin Kennedy*	*Vacant*	*John Cooper*

This newsletter is available as an electronic subscription from the front page of our website. There are over 1027 subscribers located around the world.

About the Upcoming 10 May 2025 Meeting

The next general meeting will be held 10 May 2025 at 12:00 P.M. (Noon) at TxRxLabs, 6501 Navigation Blvd., Houston, Texas 77011 and on-line at Zoom.us. Log-in credentials are as follows: Meeting ID = 834 8458 9257 Passcode = 805729.

General Announcements

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 Librarian *Mark Counterman*.

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 Secretary Joe Sybille.

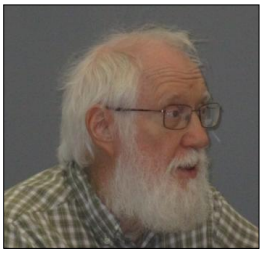
Members are requested to submit to the club secretary the name, address, telephone number, and website address, if any, of any metal or other material stock supplier with whom the member has had any favorable dealings. A list of the suppliers will appear on the homepage of the club website. Suppliers will be added from time to time as appropriate.

The club is looking for a member to serve as webmaster. After over twenty years of service, our current webmaster would like to pass the webmaster torch to a successor. Dean Eicher has agreed to serve as club president. Thanks Dean. Positions still vacant are vice-president and casting special interest group leader.

Recap of the 12 April 2025 General Meeting

By *Joe Sybille*

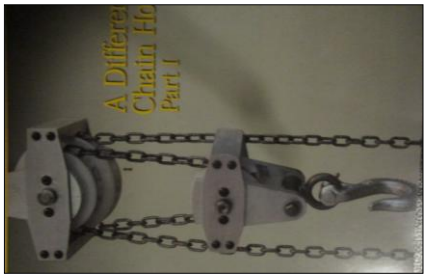
Eight participants attended the 12:00 P.M. meeting at TxRxLabs. Five participants were in person and three participants attended virtually. Among the participants attending in person was first time visitor David Johns. Welcome David. Dean Eicher led the meeting (right photo).



Presentation

TxRxLabs staff member Chris Kelly gave an impromptu combined talk and tour of the progress to date of the casting laboratory. Kelly showed equipment used to make sand castings and ingots, mostly aluminum. 3D printed patterns were used to make the sand molds. Patterns made this way are cheaper and enable the design of complex shapes, something that would be difficult and time consuming using conventional pattern making methods. Among the equipment shown was a furnace that uses for combustion fuel diesel oil and recyclable waste oil. The diesel oil is used to initiate combustion in the furnace and afterwards the waste oil is used to sustain the combustion in the furnace.

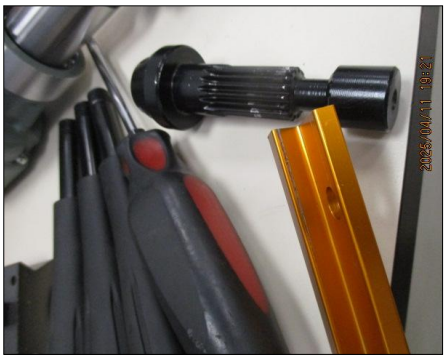
Show and Tell



Dean Eicher described how he would like to build a differential roller chain hoist. His inspiration is an article from Machinist Workshop Volume 35 Number 3. See photo at left.

John Cooper showed pictures of a tool he made to facilitate the installation of a diesel fuel filter. Unfortunately, even though the tool as designed fit the filter, it did not fit the opening through which the filter must pass to attach to the mounting point.

Dean Eicher showed the internal parts of his magnetic base drill press. The rough movement of the quill served as the impetus to take apart the drill press to discover the problem. See photos below.



Joe Sybille showed a picture of a bottle launcher made by Mike Gibson. See photo at right. Gibson wrote an article about the launcher in the HMSC newsletter of Volume 16 No. 3 page 4.

Safety Moment

A participant described how drilling a hole in a tire tread led to a sprained wrist. The participant used a hole saw mounted in the chuck of a hand drill to make a 3/4" drain hole in a well-worn motorcycle tire. Failing to recognize modern motorcycle tires have steel belting in the tread proved problematic. When the hole saw teeth grabbed the steel belting, the hand drill twisted unexpectantly causing pain to the wrist of the participant.

Problems and Solutions

A participant restores vintage Honda motorbikes. Through wear and tear, the shock absorbers no longer dampen road irregularities. Original shock absorbers are no longer available. To keep the motorbikes as original as possible, the participant would like to recondition the shock absorbers. Assistance is requested with the design and fabrication of a metal part that would serve as part of the control of hydraulic fluid within the shock absorber. Once the design is proven, the participant will recondition several similar shock absorbers.