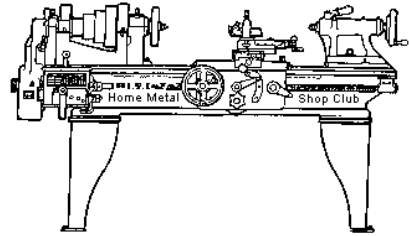




November 2022
Newsletter

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<http://www.homemetalsclub.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 <i>Vance Burns</i>	Vice President <i>Ray Thompson</i>	Secretary <i>Joe Sybille</i>	Treasurer <i>Gary Toll</i>	Librarian <i>Ray Thompson</i>
Webmaster/Editor <i>Dick Kostelnicek</i>	Photographer <i>Jan Rowland</i>	CNC SIG <i>Martin Kennedy</i>	Casting SIG <i>Vacant</i>	Novice SIG <i>John Cooper</i>

This newsletter is available as an electronic subscription from the front page of our [website](#). We currently have over 1027 subscribers located all over the world.

About the Upcoming 10 December 2022 Meeting

The next general meeting will be held on 10 December 2022 at 1:00 P. M. on-line at Zoom.us. The meeting ID is 842 4521 9944 and passcode is 021839. John Cooper and Richard Douglas will give a presentation on their three day visit to the industrial trade show, FabTech 2022, in Atlanta, GA.

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 [Librarian Ray Thompson](#).

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 Vice-President Ray Thompson.

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 listing 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 ten years of service, our current webmaster would like to pass the webmaster torch to a successor.

Recap of the 12 November 2022 General Meeting

By *Joe Sybille*

Twelve participants attended the 1:00 P.M. meeting.



President Vance Burns led the meeting. See photo above.

Presentation



Club member Richard Douglas gave a presentation on International Standards Organization (ISO) Inserts. This presentation is a continuation of a June 2022 presentation on inserts. In that presentation, the emphasis was on inserts meeting standards in the US.

Douglas began by comparing the designations of three different standards, namely, US Standard, ANSI, and ISO. The US Standard and the ANSI one are both standards in the US; however, the US Standard predates the ANSI one by many years and, while still in use, is no longer as common as it used to be. It appears the manufacturers of inserts agreed to a common standard years ago. ANSI came along to codify standards already in use by US manufacturers. There is a difference between the two standards regarding the radius of various inserts.

Until a few years ago, inserts worldwide were made to imperial standards. The size designations were converted to metric dimensions for use in countries where metric units are the standard. Letter designations are the same worldwide. Typically, there are four letters preceding a group of numbers. The first letter denotes the shape of the insert. The second is the relief angle. Tolerance is denoted in the third letter. The fourth letter designates the geometry which reveals the clamping style and the presence of a chip breaker. Nowadays, new emerging geometries for inserts, both domestically and internationally, are available and do not follow the nomenclature discussed in this presentation.

Whereas the standards in the US use three numbers following the four letter designation, the ISO standard uses six numbers following the same four letter designation. The first two numbers designate the length of the cutting edge in millimeters (mm). The second two numbers designate the thickness in millimeters, and the last two numbers designate the corner radius. Sometimes, there are two letters following the six numbers. The letters denote the geometry of the chip breaker. There appears to be no consistent agreement among manufacturers for chip breaker designation. Consult the manufacturer of the insert of interest for specific details on the chip breaker.

Slides for this presentation may be viewed [at this link](#).

Show and Tell

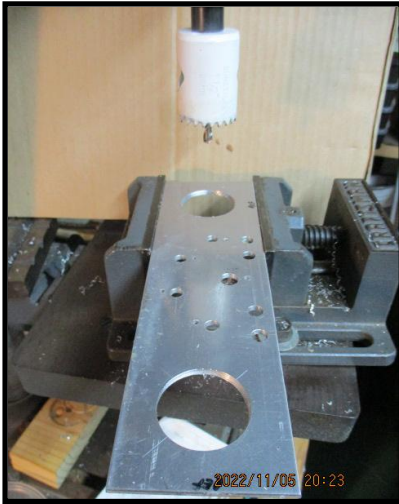
Wilfried Nils showed several inserts and a mill cutter he uses in his shop. See photos at right.

Richard Douglas showed a short video on a machine juggling balls about the size of a table tennis ball. The machine was built by Lenz, an



automation control engineering company. He saw the demonstration at the industrial tradeshow FabTech 2022 in Atlanta, Georgia.

Joe Sybille showed pictures of a prototype panel for a power supply he is building. See photos below.



Safety Moment

A member cautioned those present to exercise safety when handling sharp knives in the kitchen. This is especially prudent advice during the upcoming holiday season. Of course, this caution will apply to handling sharp cutting tools in the workshop.

The safety video depicted a worker suffering a fatal injury by performing a task too close to a moving conveyor belt. Somehow, the worker became entangled in the conveyor belt and co-workers could not turn off the power to the belt quickly enough to save the worker's life.

Another video depicted a worker crushed under the weight of a collapsed trench. The trench was over four feet deep, and there was no cave-in protection provided in the trench to protect the worker.

Problems and Solutions

A participant wanted to know if engaging in brazing or acetylene welding was harmful to a person with a heart monitor. Several comments on the matter were offered. The participant was advised to seek information from the manufacturer of the equipment under consideration and the maker of the heart monitor.