

SCHSM

Southern California Home Shop Machinists



Benchmaster Mill (see last page)

Club Officers:

President:
Douglas Walker

Vice President:
Michael Miller

Treasurer:
Frank Schettini

Secretary:
Butch Sherrick

Ron Gerlach
Webmaster

Larry McDavid
SCHSM groups.IO Manager

Club Events:

Model T Club Auction
Saturday, July 15, 2023
Long Beach City College
Veteran's Stadium
General Admission \$5.00
(Club members will be
attending and displaying,
and generally get in free)

Annual Club auction/sale
At August club meeting

SCHSM Newsletter May 6, 2023

Call to Order: The May 6, 2023 meeting of the Southern California Home Shop Machinists was called to order at 2:22 pm by Club President Douglas Walker (technical problems delayed the start of the meeting). The meeting was held live at El Camino College and online via Zoom. Ten members attended the meeting on Zoom and fifteen were in attendance in person at the start of the meeting. This number grew to nineteen by the end of the meeting. No visitors or new members were in attendance.

Club Business

Doug Walker commented about the good attendance and fun at the tour of the International Printing Museum.

Club Treasurer Frank Schettini then gave a report on the state of the club's finances, which was sound.

Back to Doug who spoke about the upcoming club picnic. He confirmed with Jim Endsley that nothing had changed on the park reservations for June 10.

Doug called for a four-person volunteer Picnic Committee to arrange this year's picnic. Apparently no one volunteered at the time.

Doug then mentioned he was talking to a couple lawyers about the possibility of registering the club as a 501(C) organization for insurance purposes.

Back to discussions about the picnic, Doug voiced his concern that last year one member was not happy that the event was both a paid event and pot-luck. Other members disagreed and commented that they liked the pot luck style last year. One member pointed out that any extra money from the picnic was revenue for the club. Ron Gerlach made a motion to vote on whether or not to have a potluck this year, and then to hand the result of that vote to whoever comprised the Picnic Committee once it was established. The motion was seconded, a vote taken, and the majority voted to have a potluck at this year's picnic. To my knowledge by the end of the meeting there were no volunteers for the Picnic Committee.

Doug thanked member David Brown for arranging a guest speaker at the June meeting on the subject of Fusion Ignition.

David Brown spoke briefly about how he went about contacting the Lawrence Livermore National Laboratory to arrange for the speaker.

Upcoming Events

Old Tool Swap Meet

Date: Saturday, May 20

Location: Anderson Plywood in Culver City

Antique Engine and Tractor Show

Date: June 17-18, 2023 / June 24-25, 2023

Location: Antique Gas & Steam Engine Museum
2040 N. Santa Fe Ave., Vista, Ca. 92083

BAR-Z Summer Bash

Date: Last weekend in June (See website for exact dates)

Location: Rancho Cucamonga, CA

Model-T Club Swap Meet

Date: Saturday, July 15, 2023

Location: Veteran's Stadium at Long Beach City College
5000 Lew Davis St., Long Beach, Ca.

Website: www.lbmtc.com

Note: Club members will be attending and displaying at this event. Flyers are available from Eldon. Club tables are 1019, 1020, and 1021. Club members generally get in free.

Annual Club Auction and Sale

Date: At regular August club meeting

Show and Tell

Norm Wells offered for sale 1/8" router bits for a club donation of fifty cents each. He had a quantity of 200 with him, and stated he had more.

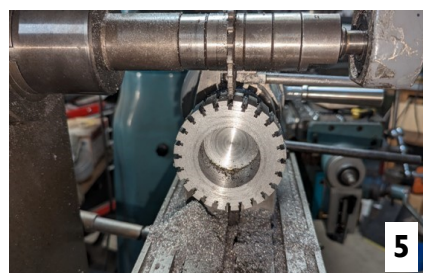


Presentations — Ron Gerlach—Hercules engine timing gear

Ron Gerlach gave a presentation on his effort to restore an 1895 Hercules vertical gas engine. When restored it will be one of only three operational engines known to exist. His presentation focused on machining a timing gear for the crankshaft of the engine using DOM (Drawn Over Mandrel) tubing. The photos to the right are of one of the existing operational engines, and the carcass of Ron's project engine.



Presentations (cont.) -Ron Gerlach—Hercules engine timing gear



- Photos clockwise from upper left:
1. Original gear showing wear and extreme pitting
 2. Both timing gears in place
 3. Gear blank tack-welded to custom-made arbor
 4. Machining of gear blank
 5. Rough cutting of teeth using generic cutter
 6. Finish cutting of teeth using gear cutter
 7. Near-finished gear still welded to arbor
 8. Final facing of gear after removal from arbor
 9. Nearly-finished gear (only keyway left to cut)

Ron also displayed his gear teeth measuring tools as well as vintage pipe thread cutters used to produce the engine cooling tubes.



Show and Tell (cont.)

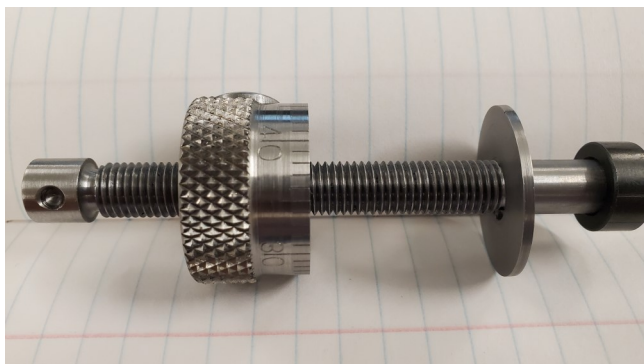
Ken Rector let the club know about the Old Tool Swap Meet at Anderson Plywood in Culver City. Per Ken it will open at 4:00 AM on the third Saturday in May (May 20th). This is held four times per year. You can find the schedule on their website: <https://andersonplywood.com/old-tool-swap-meet/>

Eldon Barkley gave information on the upcoming Model T Swap Meet at which the Club will be displaying. He showed maps on how best to get there and park, and handed out flyers. Per Frank Schettini, it's best to arrive at 5:00 AM.

Bill Nelson shared a couple new projects he completed:



An adaptor he made to adapt his 6K collets to his 5C fixtures. He noted that he had a much better assortment of 6K collets, and wanted to avoid duplicating his collection in 5C collets.



A quick adjustable stop he made for the quill on his milling machine. To make a 0-50 dial come out in even increments required 20 TPI threads. Bill ended up having to make his own tap, also shown here.

Presentation — Millar Farewell—Sheet Metal Storage Rack

Millar Farewell presented a metal rack he fabricated using his CNC Plasma cutting table. The rack is to hold sheet metal in the upright position.



Photos clockwise from upper left:

- Lower frame made from angle iron with 1/2" support rods
- Welded rack with base of 2" square tubing
- Completed rack in place and loaded with sheet metal. The rack is 16" wide.

Show and Tell (cont.)

Michael Miller showed a spindle and grinding wheel balancing flange for his Palmgren surface grinder. He is looking to find extra balancing flanges, or the proper taper to build his own, but is having trouble obtaining either. He asked the club for suggestions.



Allan Braun: parts he produced on his recently-acquired CNC Swiss Lathe:



An aluminum model of a tool bit holder he produced by 3D scanning the original.



From left to right: The aluminum tool bit holder model, a customer's aluminum spool valve, a stainless steel test part.

When and where we meet:

First Saturday of every month,
2:00 p.m.

El Camino College
Classroom AJ115
1st Floor of the Industry and
Technology Building
16007 Crenshaw Blvd
Torrance, CA 90506

The building is near Parking Lot
B. Enter the campus from
Manhattan Beach Blvd.

We're on the Web!
www.schsm.org

This Month's Featured Equipment (from top of first page)

Ken Rector's Benchmaster milling machine. According to Ken, a few other members have, or have had, these machines. Some history of the machine was found on the website lathes.co.uk, which has a wealth of information on vintage machine tools. According to the site, this machine started life as a "Duro" mill, made by the Duro Manufacturing Company in Los Angeles, California. The machine with the Duro name was made in 1942 only.



Starting in 1943, the company changed its name, and the name of the mill, to Benchmaster. The mill was produced into the 1950's. The website notes that one of the shortcomings of the mill was the fact that the #2 Morse taper spindle had no quill. As such, all Z-travel was made using the knee of the mill, which allowed 8" of motion. The 6" x 14" table has a travel of 5" x 8". The machine can be converted from a vertical mill to a horizontal mill. Ken commented that he has the accessories to do this.

Featured Equipment

Members are encouraged to participate in the monthly Featured Equipment by emailing a few photos and a brief description to Butch Sherrick, club Secretary. The equipment can be new or old, perfect condition or a scrap-yard find. The intent is to share knowledge, generate interest, and encourage conversation between members.

Participation

SCHSM welcomes presentations by members or guest speakers on any subject related to metal working activities. If you have some knowledge or experience you feel may be of interest to our members, or if you know someone who may have something interesting to relate, please consider making a presentation at a meeting.

Presentations may be a little longer and more detailed than a Show and Tell, and may be accompanied by slides, video, or physical displays. Please contact President Douglas Walker to make arrangements to give a presentation.

If you would like to contribute an article to this newsletter or make a comment, contact the Secretary, Butch Sherrick. He can be reached via the SCHSM Groups.io Group. Please note that presentations submitted for the newsletter may be edited for brevity. To enjoy the entire presentation members are encouraged to attend the monthly meetings.