



SCHSM

Southern California Home Shop Machinists

December 5, 2015

OFFICERS

President	Michael Vulpillat
Vice President	Paul Chretien
Secretary	Ken Rector
Treasurer	Jim Endsley

COMING EVENTS

January Meeting
January 2, 2016
2:00 P.M.
El Camino College

February Meeting
February 6, 2016
2:00 P.M.
El Camino College

Old Tool Swap Meet
February 20, 2016
Anderson Plywood
4020 Sepulveda Blvd
Culver City

Preface

The December monthly meeting of the Southern California Home Shop Machinists convened at 2:00 P.M. on Saturday, December 5th, 2015 in classroom AJ115 on the first floor of the Industry and Technology Building at El Camino College in Torrance California. There were 25 people in attendance. There was one visitor this day who arrived near the end of the meeting.

President Michael Vulpillat called the meeting to order and member Frank Schettini gave away a bunch of electrical related stuff he obtained from a shop move. This included large scale shrink wrap, switches and connectors and like material. Thanks Frank.

President Vulpillat called for a discussion and vote to establish a date for the club picnic in June, 2016. Members present voted to have the picnic on June 11th. He also spoke about club membership requirements and offered his opinion on alternate ways to define membership in the SCHSM. He mentioned difficulties with maintaining three lists of people associated with the SCHSM and suggested changing the club bylaws in a way to make this easier. No action was taken. Lewis Sullivan said that the Newsletter was missing an acknowledgement of his and Willie Jordan's effort in support of the LMS Open House display. Secretary Ken Rector apologized.



Lewis Sullivan and Willie Lewis worked hard to provide support for our display at the LMS Open House. They coordinated, transported and installed club equipment, including compressors, hoses, and cables to support the display. Thanks to you guys for your dedication and efforts.

Holdridge Shop Tour

Chuck Norton attended the recent tour of the Holdridge Radius Turner shops and contributed the following report.

One of the owners gave an interesting, informal presentation on the history of the company and demonstrated the use of one version of a radii-cutter (ball turner) that appears to be their primary (if not the sole) commercial product. They make and sell several versions that differ primarily in size. Production volume is limited. I think he said fewer than 1,000 units per year. The demonstration was conducted using an aluminum bar about 4" in diameter.

One of the present day owner/operators of the company is the son of the inventor of the device. He conducted the tour. There are two partners who are the sole employees of the company. OSHA would have had a field day in that shop but since they have no employees, apparently the "no harm, no foul" rule is in effect.

Only a couple of the operations involved in production are automated. There were a couple of Hurco machining centers. The rest of the production line consists of a variety of very experienced machines, each of which performs one or two operations relating to the production of the radii-cutter. The entire operation from machining raw castings to shipping and receiving is conducted in one large room at the corner of Redondo Beach Blvd and Figueroa in Gardena. The inventor/founder of the company developed the device, secured a patent, put up the building, and went into production after WWII in that same location. The device has changed only slightly since its invention and initial development. An indexable cutting tool was developed several years ago. I had the impression that the owner considers the expansion of CNC machining to eventually eliminate the market for the radii-cutter.

If I understood the comments of the owner/operator correctly, they sell only a few hundred units per year and the price of the larger version can run over \$1K. Google <Holdridge Radii-Cutter> for pictures and descriptions of the device as marketed.

Club members were given an opportunity to operate the radii-cutter during the demonstration. Several took advantage of the opportunity to participate. The tour lasted about two hours. From my perspective the tour was extremely interesting and well worth the time spent.

Show and Tell

Don Huseman told about problems he is having adapting a threaded backplate for a 10" chuck. The back plate needs to have a slight taper turned on its edge to accurately fit the taper in the chuck. This requires some very accurate work to get this to fit correctly and Don is having difficulties getting the taper attachment on his lathe set correctly. He proposed modifying the chuck to remove the taper and just making a slip fit. In response, members suggested he use the compound instead of the taper attachment. Members were pretty unanimously against modifying the chuck itself. There seems to be no end to the amount of internet material on this subject. Google returned 22,800 results for a search on "making a lathe chuck backplate"

Jim Endsley showed a lamp base he made from a 5# workout weight and some hardware store fittings. He also mentioned weights and lamp parts available at the thrift shop.

Eldon Barclay brought in an assortment of ball turning attachments he has accumulated over the years. He has an OMW tool that he bought. He showed one he made for turning inside (concave) radii of a couple of different size ranges. He also showed an "Over the Top" tool he made from an article in Home Shop Machinist magazine that uses a boring head mounted on the lathe tool post. Elton explained how it works and how to set it up in the lathe. He also described an accompanying fixture for grinding a tool bit for use with it. Eldon used the tool for making ball handles for a Qorn T&C Grinder he is making. He showed an example of the handles and fixtures used to turn the tapered shaft portion of the handles.



Michael Vulpillat told about Instamorph, a low melting point plastic that is useful in the shop. He also mentioned two other products; Sugru - a silicon molding plastic and Bondix - a liquid plastic cured by UV light. Michael also told about a silicon tape that is non-adhesive self sticking tape that gives a very strong bond.

Ron Gerlach showed a urathane rubber tire he made on the lathe. Ron bought tubing of the correct ID and mounted it on a mandrel to turn the OD. He described the cutting tool and speeds he used. He used a tool post mounted Dremel Tool with a stone to finish the OD.

Butch Sherrick is converting a Rong-Fu mill to cnc using a conversion kit from CNC Masters which included ball screws, steppers and controllers. He told about the inadequate design of the limit switch system in the kit and how he changed it to a safer more professional style system.



Paul Chretien brought in a basket of tools he found useful in his shop. He showed an Annular Cutter that is a hollow multiple cutting edged tool used to make holes in metal. The cutter makes an annular hole in the material and leaves a solid core in the center. The tool is similar to a drill but much more robust and can cut a partial hole, or radius, on the edge of the work piece. Paul told how he modified an end mill holder to accept the larger stem diameter of the annular cutter. He commented on the difficulty working with the hardened end mill cutter and the resources he expended. Paul's other tools included two styles of guillotines used to cut screws to length, a Dremel Tool holder for his lathe tool post, a spring making attachment, a boring head and a quick change tool post. All very useful tools he has made over the years.

Nominating Committee

A Nominating Committee was organized composed of Eldon Barclay, Frank Kozlowski and Ken Rector. The committee will contact members to search for candidates to serve as officers for the 2016 term.

The 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 that 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 or video, or physical displays. Probably every member has some experience they can share and this is the purpose of the SCHSM. Please contact President Michael Vulpillat to make arrangements to give a presentation.

The SCHSM meets in class room AJ115 on the first floor of the Industry and Technology building of El Camino College, 16007 Crenshaw Blvd. Torrance California, at 2:00P.M., on the first Saturday of every month. The building is near Parking Lot B. Enter the campus on Manhattan Beach Blvd.

If you would like to contribute an article to this newsletter or make a comment about the newsletter, contact the editor, Ken Rector, via the SCHSM Yahoo Group, or at kdrhoo@yahoo.com.

Find us on the web at www.schsm.org.

