



SCHSM

Southern California Home Shop Machinists

May 3, 2014

OFFICERS

President	Frank Kozlowski
Vice President	Charles Angelis
Secretary	Ken Rector
Treasurer	Jim Endsley

The May monthly meeting of the Southern California Home Shop Machinists began promptly at 2:00 P.M on Saturday, May 3, 2014 in the basement classroom of the Communications Building of El Camino College. There were 30 people present, with no new visitors.

COMING EVENTS

SCTA Dry Lakes Racing Event
May 17
El Mirage Dry Lake

June Meeting
June 7
El Camino College

SCHSM Picnic
June 14
Alondra Park

Antique Gas and Steam Engine
Show
June 28
Vista CA

The annual club picnic will be held on Saturday, June 14th in Alondra Park. The street address of the park is 3850 Manhattan Beach Blvd. We have reserved our usual area which is in the very northeast corner of the park, just east of the golf course and fronting on Manhattan Beach Blvd, and just next to the parking lot. We have the area all day and there are several picnic tables we can use for lunch. For just sitting around, you may be more comfortable if you bring your own chairs. Everyone is encouraged to bring some examples of their shop work to display and there will be a generator and compressor for equipment that runs on air or 110v. A catered lunch will be served for which the cost is \$10 per person. The main event of the day, after lunch, will be the engine performance contest. Please give your \$10 lunch fee to Treasurer Jim Endsley either before or during the June meeting. Jim cannot accept any lunch fees after the June meeting as we need to have an accurate count for the caterer at that time.

Jim Endsley announced that the club will attend the Antique Gas and Steam Engine Museum (AGSEM) Spring Tractor Show on June 28. Members who wish to participate in our display should arrive at the museum entrance at 8:00am to begin setting up our display. So far seven members have committed to

participate. If you would like to join this group and display some of your work, please contact Jim. There is no admittance fee for exhibitors.

The Antique Gas & Steam Engine Museum collects, preserves and displays examples of mechanical ingenuity and crafts associated with the early days of the American farm and rural community. The museum occupies about ten acres of a rural valley in Vista, a few miles inland from Oceanside. They exhibit a large variety of gas and steam engines, and agricultural and commercial vehicles. During the Spring Tractor Show they have a large number of guest exhibitors showing various engines and agriculture related equipment. The main event of each show day is a parade of operating steam and gas powered equipment. You can find out more about the museum and the Spring Tractor Show at the museum web site, www.agsem.com.

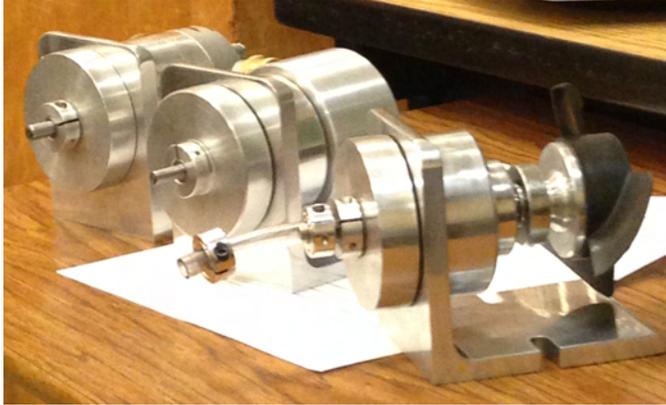
Our sponsor at El Camino College, Ed Hoffman reported on the college Robotics Team participation in the VEX Robotics World Championship. Ed said that the team finished number 52 in the world. The team has twelve active members with eight present at the competition. You can find more about the competition on the net. Look for VEX Robotics Competition on Youtube. Ed also reported that the school is looking for machine shop instructors. Applicants for the position do not need a teaching credential but do need at least an AA degree and six years of machinist experience.

In response to last months discussion concerning fine finishing in the lathe, Dan Snyder presented his Contrary Tool Bit and Holder. This is a tool bit having a vertical cutting edge the height of the tool and inclined to the side as shown in the accompanying image. Dan says the tool will reliably take a half thousand cut with a very smooth surface finish. The idea is to use a cutting edge nearly parallel to the direction of motion so it slices across the work at a narrow angle, a shearing/slicing type cut. The tool bit is sometimes called a Vertical Shear Bit.

The picnic air engine competition organizers have finalized the rules for the event and distributed them as a handout at the meeting. They plan to make them available on the SCHSM club Yahoo Group. The competition offers everyone a chance to display their engineering and machining skills together with a little innovation. A synopsis of the design requirements is, a volume not to exceed a 6 inch square base and height no greater than 12 inches. A power takeoff shaft centerline no more than 4 inches above the baseline, 1/4 inch diameter and approximately 1/2 inch long to rotate clockwise when viewed from the outboard end. For the official rules refer to the Yahoo Group or contact Willie Jordan or Mike Jacob. Mike has made three test devices



to be used to measure contest engine performance. They are a water pump and two inertia devices as seen in the image below. Performance is measured by the volume of water pumped per unit time and engine rpm after an elapsed time period driving the inertia devices.



During Show and Tell, Richard Albers showed photos of a retractable clothes hanger and a water heater retaining bracket he made for a corner of his shop.

Lewis Sullivan showed an angle grinder hanger bracket he uses to hang his 4 inch grinder conveniently close to where he is working with it. The bracket is made from the steel C channel material Lewis uses for building construction and is designed to hang the grinder in either side. Lewis spoke about the variety of cutoff discs now available for these versatile tools. He

thinks everyone should have one in their shop. He also stressed that safety precautions are necessary when using the grinder, since the spinning discs can be dangerous.

Dr. Jim Kreter also recommended safety precautions for grinders and in the shop in general. He recommends wrap around safety glasses and full face shield be worn in the shop. He told some grisly stories about accidents he has seen in his practice.

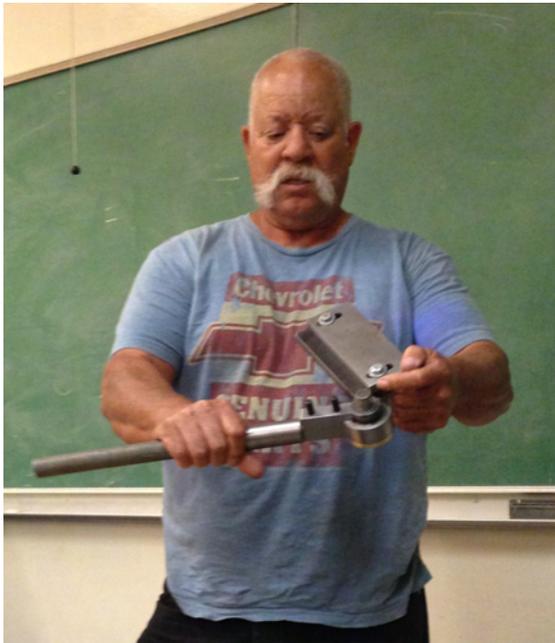
Paul Chretien brought in a rod bender that is capable of bending 3/8 inch steel rod that he built. This is a heavy duty tool with a two foot extension handle. It looks like it would tear my vice right off the bench. The design is based on one built by Tom Lipton of oxtool.com. Tom Lipton's Blog is titled "Nothing Too Strong Ever Broke" and this bender illustrates that concept very well. Paul recommended everyone should checkout Tom's youtube channel for some very interesting videos of machining practices. His blog and videos are very well done and offer hours of shop experiences for those wee hours when sleep escapes you.

Paul also showed a small tube bender built from a design by George Britnell. Plans for this bender can be found on homemodelenginemachinist.com.

In response to last months discussion about fine saws, Larry McDavid showed two Xacto saws with very fine teeth and kerf that can be used for cutting wood or plastic. Also, in response to last months discussion



about steel phases, he passed around a reference book containing phase diagrams for various bi-metal elements.



After polling members, Larry McDavid volunteered to purchase a case of Kroil Penetrating Oil to resell to members. This is a very effective penetrating oil that far surpasses home-brewed concoctions of ATF-acetone, kerosene-lacquer thinner, brake fluid-acetone and other secret formulas you might be using. Be prepared to buy a can from Larry at the next meeting.

Ken Rector reminded members of the SCTA racing event at El Mirage Dry Lake the weekend of May 17-18. Ken prompted members to attend on Saturday, the 17th, to arrive early (8:00am), to bring a lunch, to see some very fast and interesting cars running on the salt flats. You can find out more and get directions to El Mirage on the SCTA web site at www.scta-bni.org. There is a BLM \$15 day use fee required to enter the El Mirage Dry Lake recreation area.

The club welcomes presentations by members or guest speakers on any subject related to our 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. Please contact President Frank Kozlowski to make arrangements to give a presentation.

The SCHSM meets in Communications Building (COMM) basement classroom COM101, of El Camino College, 16007 Crenshaw Blvd. Torrance California, on the first Saturday of every month. The building is near Parking Lot C. Enter the campus on Manhattan Beach Blvd.

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

If you would like to contribute an article, or suggest an improvement to this newsletter, please contact the editor, Ken Rector via the SCHSM Yahoo Group.

