



Crosscut

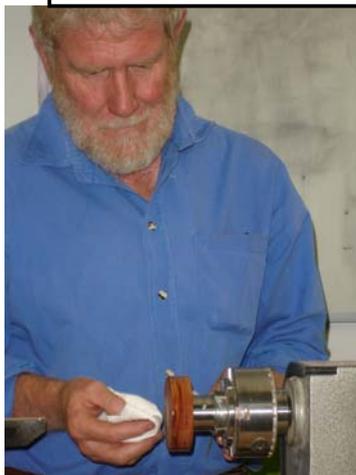
Newsletter of the Witwatersrand Woodworkers' Association

◀ Sawstop contractors saw demonstrated by Greg De Villiers.

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Next Turners Meeting on Monday, the 01st February 2016 from 18h00 at WWA clubhouse at the Living Link Hall. **No Turner's meetings in December 2015 or January 2016.**

Next Meeting on Wednesday, the 9th December 2015 – General meeting from 18h00 at the **WWA clubhouse in Albertskroon** Bring and braai, quiz, bring tools to swap and for sale.



News

2nd November - Turner's meeting. Super

glues – types and uses. Roland Westgate, Technical director and head of R&D at RiChem presented the range of super glues and some other products offered by RiChem that are of interest to wood workers. Roland demonstrated the use of some of the range and provided some hints for successful applications. He showed how to use fillers and accelerators to enhance work-pieces. He also showed some other products for joining plastics, which are known to be difficult applications. Super glue can be removed using a variety of solvents such as acetone, methylene chloride (found in some paint removers), some citrus cleaners and nail-polish remover. The latter is likely to be the safest for removal from skin. Go to www.richem.co.za for more information on the individual products.



Wood of the Month – Syringa. Melia Azederach is a

common street tree in Gauteng. It produces attractive lilac flowers in spring with a pleasing perfume, which accounts for the common name of Persian Lilac. It is listed as a Class 3 invader, which means it should not be planted, but need not be removed. The berries are distinctive and numerous. They are poisonous to humans, but not birds. The wood has a distinctive ring-porous grain, and is valued for turning and furniture making, with the heart-wood similar to Burmese teak in colour.



11th November - Club meeting. SawStop demo by Greg

DeVilliers from Vermont Sales. Vermont has the agency for Saw stop in South Africa, and we were fortunate to see a demonstration of the SawStop contractors saw at the club house. Three out of the four saws in the range will be made available in South Africa: the contractors saw as demonstrated, the cabinet saw and the top of the range industrial saw. The Job site saw will not be available locally for the time being. Full product details, recommended pricing, spares and accessories are available on the web site www.vermontsales.co.za. Saws can be built from a range of options so the user can select the exact fence, blade, dust collection and other accessories by going to www.sawstop.com Rand pricing is not supported on the US site at present, so you will have to cross reference the SA site. Remember that Vermont does not sell directly, so you will need to go a dealer, where pricing may vary somewhat from the recommended pricing - it may be worthwhile to shop around. Spare parts are available directly from Vermont.



Greg showed all the features of the job site model, and it is clear even without the safety functions, the saw is a well-thought out design. To show the safety protection function, Greg tried to cut a Vienna sausage with the blade, which duly retracted with a bang, without even a nick visible on the sausage. Greg did point out that although the SawStop is much safer than a conventional tablesaw, it is not entirely fool-proof. It can still kick back if the guards are not in place, and the blade brake is not active while the saw is coasting down after switch-off, so it must be treated with the same respect as a normal table saw. It might just save you from that momentary attention lapse one day!

Club Notices

Annual Toys for Charity braai. This took place at the Gereformeerde Kerk, Randburg in Northwold. The guide dog association premises were under quarantine due to an outbreak of distemper. Thanks to Frans for organising the magnificent location at very short notice. It was the usual success, with terrific support from our sponsors. We sold all the raffle tickets and the display of toys was of the usual high standard.

Pictures and more details to follow in the next Crosscut.



From the committee:

1. Members are encouraged to bring friends/neighbours/relatives to our meetings with the view to increasing membership.
2. Members are requested to advise the committee of demos/subjects they would like to see covered at the Saturday Workshop meetings.
3. We have secured the services of the local security company in Albertskroon to be present when we lock up in the evening – on this basis we can commence Wednesday Workshop meetings subject to a member volunteering to open the workshop and supervise the meetings.
4. DVD's of Ernie Campbell's Workshop 1 book are ready to be handed out to new members (those who have joined the WWA during the last 12 months) other members may purchase them (to cover costs) at R10.00
5. The Turners jackets will be available for collection at the December meeting.
6. Members are encouraged to donate items they have made for raffles at our meetings.



Regular Events:

Note the regular workshops are cancelled for December. Toymakers will restart on the 01st Feb 2016. Wednesday workshop will resume on the 15th Jan 2015.

Toymakers. The toymakers meet on the first and third Mondays of every month, at 09h00 till 12h00 at the Albertskroon workshop. Meetings will be cancelled if they coincide with a public holiday. Contact Eddie Marchio on 011-678-8062 or [rm22 AT mweb.co.za](mailto:rm22@wweb.co.za) for more information.

Wednesday workshop. 1st and 3rd Wednesdays, from 17h30 to 20h00 at Albertskroon. Contact John Allen on 083 407 8008 or Clive Stacey (See below)

Ken's Saturday Workshop. Ken Bullivant holds a Saturday workshop at his house in Boksburg. The location is 13 Franklin Avenue, Comet, Boksburg on the first Saturday of the month from 09:00 to 12:00. They decide on an annual project and work throughout the year making it. Individual projects are discussed and problems solved. Ken also offers private lessons too. Contact Ken on 082 809 0020 if you wish to take part.

Friday Morning workshop - Winston Klein will be convening a workshop at the Albertskroon work shop on the 1st and 3rd Fridays monthly from 09:00 to 12:00. Contact Winston at 072 553 5045 or [kleins AT iburst.co.za](mailto:kleins@iburst.co.za) (Winston previously ran the Wednesday workshops at the clubhouse until Grant took over.)

Saturday Turning workshop. Schalk van Niekerk conducts Saturday morning turning workshops at his premises in Germiston. (At the old East-African Timbers site) Membership is R400- per year, R30- per meeting. He can accommodate up to 12 people in a session with the lathes he has available for teaching. They meet on the 2nd and 3rd Saturdays of the month from 8h00 to 12h00. Contact Schalk on 082 443 4972 or schalk@onegoodturn.co.za or Johan Kramer on 083 251 0183.

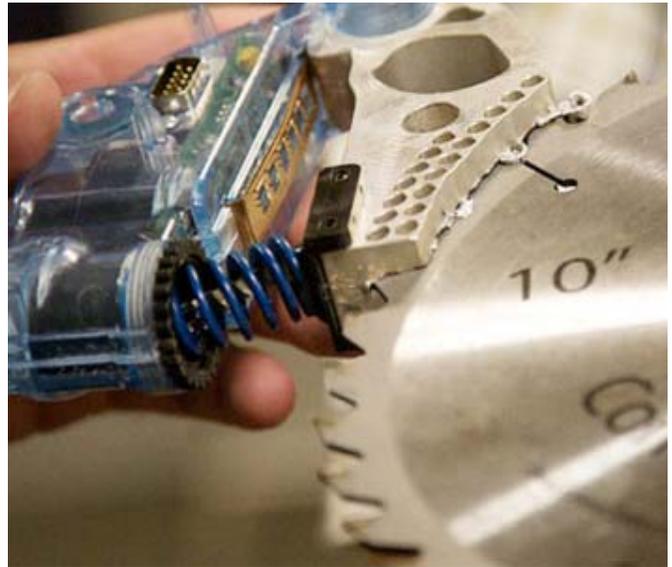
Saturday meetings

1. Second Saturday of month - Eddie will open the workshop – 011 678 8062 [rm22 AT mweb.co.za](mailto:rm22@web.co.za)
2. Third Saturday of month – Clive will open the workshop – 083 407 8008 [stacey AT netactive.co.za](mailto:stacey@netactive.co.za) Clive will also open the workshop during the week “BY ARRANGEMENT” **Clive will not be available in Jan 2016.**
3. Fourth Saturday of month – Graham will open the workshop – 082 900 0242 [grahamcr AT mweb.co.za](mailto:grahamcr@web.co.za)

Please can the conveners complete the attendance register on the bar counter, so we can gauge attendance?

Sawstop – the History

If you have been reading woodworking magazines and forums on the Internet, you will know that **Sawstop** is not just a flash-in-the-pan product pushed by a fly-by-night company. Although the saws have only just been launched in South Africa, they have been on the US market for more than ten years. There is some interesting history and a bit of controversy around Sawstop that makes for interesting reading. On Wikipedia at <https://en.wikipedia.org/wiki/SawStop> there is a factual account of the development of the product which is reproduced on the next page.



Injuries caused by table saws are a serious problem:

“Table saw accidents are painful, life-changing and expensive. Each year, more than 67,000 U.S. workers and do-it-yourselfers suffer blade contact injuries, [according to government estimates](#), including more than 33,000 injuries treated in emergency rooms and 4,000 amputations.”

(From <http://www.fairwarning.org/2013/05/after-more-than-a-decade-and-thousands-disfiguring-injuries-power-tool-industry-resisting-safety-solution/>)

However, there is little will to address them. This is a bit like traffic accidents in South Africa, where we know how reduce them, as has been done in other countries like Australia. (Australia had a similar road accident death rate to us in the 1980s, and they fixed it. We know what to do, if we cared enough to do it.)

Sawstop attempts to address the problem using technology, but has met with resistance from the established stakeholders in the USA.

Greg De Villiers (Vermont Tools) says that Sawstop sales have increased dramatically in the USA, to become the leading product in its class. Given that the USA is such a litigious society, it is surprising, given the scale of injuries caused by table saws, that this has taken so long. There was a significant court verdict in 2010 that held Ryobi America liable for injuries to a worker using a Ryobi site table saw, despite contributory negligence on the part of the worker and the employer. (See <http://www.fairwarning.org/2013/05/after-more-than-a-decade-and-thousands-disfiguring-injuries-power-tool-industry-resisting-safety-solution/> for more background.

Given the very poor safety standards in most workplaces in South Africa, it will be interesting to see how this product sells.

Bosch has finally launched a competing product (the ReaXX job-site saw which will be priced similarly to the Sawstop unit).

Personally speaking, I think these are both very important steps towards table saw safety.

Hobbyist woodworkers can use table saws safely by ensuring that all the safety equipment is in place and by safe work habits, despite which accidents can still happen. However, in the workplace, where there are cost and production pressures, it is more difficult to maintain safe working practises. Hopefully, we will see a good sales of these products and a reduction in workplace injuries.



You may find this excerpt from Wikipedia interesting:

SawStop is a [table saw](#) manufacturer headquartered in [Tualatin, Oregon](#), USA. The company was founded in 1999 to sell table saws that feature a patented automatic braking system that stops the saw within milliseconds if its blade comes in contact with the operator's hand or other body part.

How it works

SawStop's saws apply a small amount of electric [voltage](#) to the blade of the saw. The current through the blade is continuously monitored. If the saw detects a change in this current (as would occur if a hand or other body part came into contact with the blade) an automatic braking system is activated, forcing an aluminum brake block into the blade. The saw stops within five milliseconds, and [angular momentum](#) lowers the blade into the table. The operator suffers a small nick instead of an amputation or other more serious injury.^[2] The design takes advantage of the difference in "electrical conductivity" (similar to a GFI circuit) between wood and flesh.^[3]

According to SawStop, there are restrictions and limitations:^[4]

- The braking system must be deactivated when cutting very green or wet timber.
- Non-conductive blades or blades with non-conductive hubs or teeth cannot be used.
- The braking system is designed to work with [kerfs](#) from 3/32" to 3/16"; using thinner or thicker kerfs limits the saw's ability to stop the blade after accidental contact, likely resulting in more serious injury.
- It is impractical to retrofit into existing table saws.^[4]

Activating the braking system often damages one to two teeth on the blade.^[4]

History

Steve Gass, an amateur woodworker with a doctorate in physics who worked as a patent attorney,^[1] came up with the idea for SawStop's braking system in 1999.^[5] It took Gass two weeks to do the design, and a third week to build a prototype based on a "\$200 secondhand table saw."^[1] After numerous tests using a [hot dog](#) as a finger substitute, in spring 2000, Gass conducted the first test with a real finger on himself: he applied [Novocain](#) to his left [ring finger](#), and after two false starts, he placed his finger into the teeth of a whirring saw blade. The blade stopped as designed, and although it "hurt like the dickens and bled a lot," his finger remained intact.^[1]

SawStop, at the time consisting of "three guys out of a barn in [Wilsonville](#)", demonstrated a prototype in August 2000,^[1] at the International Woodworking Machinery and Furniture Supply Fair, a [trade show](#).^[5] A series of meetings followed, where in an attempt to license his invention, Gass "negotiated with major players such as [Ryobi](#), [Delta](#), [Black & Decker](#), [Emerson](#), and [Craftsman](#)"; he followed up on those negotiations with a February 2001 presentation to the Defense Research Industry (a trade group for attorneys representing the power-tool industry).^[1] That presentation immediately preceded one from Dan Lanier, Black & Decker's national coordinating counsel; Lanier's presentation gave Gass the impression he was unlikely to succeed in convincing major power tool manufacturers to license SawStop technology.^[1] In July 2001, SawStop was awarded a safety commendation by the U.S. [Consumer Product Safety Commission](#) (CPSC) for "developing innovative safety technology for power saws intended to prevent finger amputations and other serious injuries."^[2] In 2002 [Popular Science](#) named SawStop's technology one of its "100 Best New Innovations."^[6]

In January 2002, SawStop appeared to come close to a licensing agreement with [Ryobi](#), who agreed to terms that involved no up-front fee and a 3% royalty based on the wholesale price of all saws sold with SawStop's technology; the royalty would grow to 8% if most of the industry also licensed the technology.^[1] According to Gass, when a [typographical error](#) in the contract had not been resolved after six months of effort by Gass to get Ryobi to sign the proposed deal, Gass gave up on the effort in mid-2002.^[1] Some subsequent licensing negotiations were deadlocked when the manufacturers insisted that Gass should "indemnify them against any lawsuit if SawStop malfunctioned", something Gass wouldn't agree to since he would not be manufacturing the saws.^[1]

The failure to license it to Ryobi or another manufacturer prompted SawStop to start its own company; over two years later, the company's first saw was produced by a Taiwanese manufacturing plant in November 2004; by 2005 SawStop had grown to "eight people out of a two-story barn Gass built himself."^[1]

Citing statistics that show accidents in the US with table and bench saws resulted in 3000 amputations annually of one or more fingers, SawStop's technology inspired Representative [Kevin Joyce](#) to propose the [Illinois General Assembly's](#) 2005 Electrical Saw Safety Act.^[7] The number of finger or hand amputations in the US has more recently been estimated to be 4000 annually,^[8] costing more than \$2 billion a year to treat victims.^{[1][9]}

In June 2006, the CPSC recommended that the U.S. government begin the rulemaking process that could result in mandatory safety standards for table saws.

SawStop has provoked opposition from the [Power Tool Institute](#) (PTI),^[8] which represents Black & Decker, [Hilti](#), [Hitachi Koki](#), [Makita](#), [Metabo](#), [Bosch](#), [Techtronic Industries](#) and [WMH Tool Group](#). In April 2008 they told Congress that SawStop's braking system is:^[10]

- dangerous because it requires the user to come in contact with the blade before activating;

- unproven, particularly in terms of durability;
- prone to false trips caused by commonly available wet and green wood;
- potentially vulnerable to latent damage that cannot be inspected and may cause a hazard;
- costly to the user because once activated, saw blade and cartridge must be replaced; and
- significantly more expensive, ranging from a minimum of 25 percent and ranging upwards depending on saw type

The PTI objects to the licensing necessary due to the "more than 50 patents" related to SawStop's braking system;^[10] such costs "would destroy the market for the cheapest, most popular saws, adding \$100 or more to the price of consumer models that typically sell for less than \$200."^[8] In response, their members developed "new plastic guards to shield table saw users from the dangers of a spinning blade" and began selling models with that feature in 2007; as of May 2011, PTI says "its member companies have received no reports of injuries on [the 750,000] table saws with the new guard design."^[9]