

STEEL FUTURES

SCNZ LAUNCHES CME MENTORING PILOT

SCNZ has taken an important initiative with the launch of its CME Mentoring pilot project. On July 30, fourteen students from seven Auckland high schools spent their first day at the Manukau Institute of Technology learning to practise safety in a heavy fabrication workshop. SCNZ drew up the programme in conjunction with MIT with the support of the schools, local and central government agencies, the students' parents and SCNZ members.

In the first five weeks of the programme, the students, who are still at school, spend one full day a week at MIT, learning how to mark out and use thermal cutting equipment, how to grind and polish, as well as the Arc, MIG and TIG welding processes.

In their second five-week block, the students will be given one day per week of work experience in a steel fabricator's workshop, courtesy of SCNZ members who are participating in the programme. During the next school holidays, the students will then have one week of paid employment with the company to gain further experience. And after the school holidays, they will spend three days over three weeks back at MIT, where they will review their progress and be introduced to Computer Aided Design (CAD).

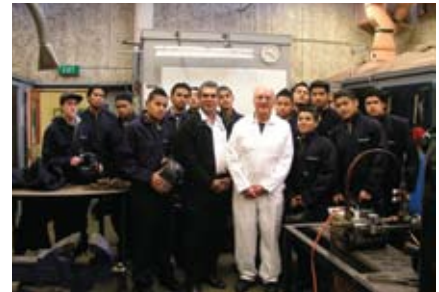
SCNZ's Mentoring & Training Officer is John Kotoisuva. "These students have been hand-picked because of their interest in starting their careers in steel. SCNZ has written a booklet on the subject and also made a 20-minute DVD that illustrates where such career paths can lead to. The

CME Mentoring pilot is the next logical step and my role as Mentoring and Training Officer is to see that the students begin to not only acquire knowledge and skills but also the right attitudes and values.

They will learn to respect a qualified tradesman because of his superior skill, and they will learn to value honesty and reliability, punctuality and a strong culture of safety. And if this pilot is successful, SCNZ intends to develop it into a full year's programme in 2009, ultimately rolling it out as a national programme."

John Kotoisuva himself has been through the ranks and has considerable experience as a no-nonsense, inspirational mentor. "When these 14 young men pulled on their CME Mentoring overalls and safety boots, it was as if they'd become a team. SCNZ is taking this initiative with the full support of its members in response to the skills shortage confronting the construction industry in general and the structural steel sector in particular. With the construction workforce aging and with some skills migrating to Australia, there is a need for young people to follow on. SCNZ's CME Mentoring programme is aimed at giving senior school students a steel construction focus to their career choice."

The schools participating in the pilot scheme are: Howick College, Green Bay High, Waitakere College, Kelston Boys High, Southern Cross Campus, Sir Edmund Hillary Collegiate and Tamaki College.



Top: The CME Mentoring team pictured at MIT with SCNZ's John Kotoisuva and (in the white overalls) their teacher, Arthur Orton.

Lower: Their first day of training at MIT and students tackle an exercise in drilling steel.

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CME MENTORING & GATEWAY

SCNZ has been participating in Careers evenings held by several Auckland schools, among them Alfriston College and Waitakere College, in keeping with our objective of arousing interest in careers in steel. Not surprisingly, the SCNZ representatives and Gateway Co-ordinators cross paths. The Waitakere Secondary Schools Gateway Broker is Jacquie Brayshaw who had this to say about SCNZ's CME Mentoring Programme: "It will inform students about the academic requirements of the steel industry before they select specific options in their senior year. This will promote the importance of retaining core subjects which many students drop in favour of soft options. CME Mentoring encourages student/parent dialogue regarding career choice and creates realistic expectations as to the financial outcome. What's good about this programme is that it gives



the student a personal advocate in the person of the mentor who guides the student into a safe, supportive learning environment. Gateway Co-ordinators can be confident about directing a student into this programme, because it ensures a smooth transition between the school and a career in the New Zealand steel industry."

Email from Arthur Orton to John Kotoisuva 26 August 2008.

"Hi John

"I have been very impressed with all the CME students. I gave them a test on safety and they all passed, with some excellent results. Their practical jobs have also been very good and from what I have seen on our industrial visits, they have settled in very quickly with positive remarks from the employers. Well done, John. Regards, Arthur Orton."

SCNZ's Training & Mentoring Officer, John Kotoisuva, with two of his students at MIT, Auckland.

THE 4TH METALS INDUSTRY CONFERENCE OCTOBER 30 & 31 WILL BE FABULOUS!

SCNZ Members planning to attend this biennial event can be confident that their programme for this one will be a cracker! It includes the Great Escape on the afternoon of Day One. For SCNZ Members only, the Great Escape starts at 12.30 on Thursday afternoon with a coach ride from the SKYCITY Convention Centre to Pier Z. Boarding the Grunty One or the Cobalt, we head out into the Hauraki Gulf and tuck into a delicious packed lunch on our way to a secret fishing spot.

All tackle and bait will be provided and there will be prizes for the best catches of the afternoon. We dock at 5.00pm and take the coach back to SKYCITY in good time to freshen up for dinner. Thanks to the sponsorship of Dimond, the guest speaker will be Matt Watson from the ITM fishing show on television. Dinner music will be Latin American jazz by Mojave.

Friday kicks off with several good options by way of plenary sessions. Among the electives, newly arrived Dr Stephen Hicks, the HERA Steel Research Manager, will give an update on Steel Construction Developments in the U.K.; Gene Lowson, President of the American Welding Society, will talk about welding technology development; and Larry Williams of Steel Frame Alliance and Nader Elhajj will present on Sustainable Steel Construction: a forward global perspective. After morning tea, SCNZ members are likely to opt for the case studies - two



A superb setting for the awards and the Awards Dinner.

from Auckland and one from Wellington - and the Steel versus Timber debate. After lunch SCNZ's John Kotoisuva looks at how to attract and train the next steel industry generation; Neil Evans of Gaze Burt Lawyers looks at Successful Conflict Resolution Strategies; and Clark Hyland examines Growth Opportunities for Steel. The programme for the day concludes with the Pathway to ISO14001 Environmental Management Accreditation, after which we hold an SCNZ Members' Forum and the AGM.

Then it will be time for the Metals Industry Awards Dinner, sponsored by New Zealand Steel. The venue, under the curved dome of the Auckland War Memorial Museum, is spectacular and a number of important awards will be made, including the inaugural SCNZ Awards for Excellence in Steel Construction. (See details and nomination form enclosed.) This will be a big occasion, one that the ladies and partners will thoroughly enjoy, because not only will the food and the wine be splendid but so too will the music. It's by Prima! A truly great band to listen and dance to - covers, requests, you name it, they'll play it and we'll love it.

So use the pre-registration option below to link through to the HERA website and submit your registration. This one's a winner!



The Cobalt heading out into the Hauraki Gulf.

**The 4th NZ Metals Industry Conference
Building Sustainability
Skycity Convention Centre, Auckland
29th - 31st October 2008**

<http://www.hera.org.nz/Conference/index.htm>

SCNZ ELECTIONS

Nominations for the election of SCNZ members to the Executive Council closed on August 22; voting closes on September 26. This year the current Chairman, John Frear, and the immediate past Chairman, Greg Jensen, are required to stand down; having served four years continuously, they are not eligible for re-election. Treasurer Steve Stickland and Councillor Chris Kay are also required to stand down but are eligible for re-election. The HERA representative position is also due for renomination and ratification by the SCNZ Council.

The continuing Councillors are Evan Kroll (Steel Constructor), Dave Munro and Neil Downing (Steel Distributors) and Scott Miller (Professional). The elected positions available for

nomination this year were Steel Constructor (1), Steel Producer (2) and Associate (1). Nominations have been received for each of these positions, so the Chairman, John Frear, has pronounced the following new councillors duly elected: Bob Hawley (Steel Constructor) Red Steel Ltd, Napier; Chris Kay (Steel Producer) New Zealand Steel Ltd, Waiuku; Brendan Smith (Steel Producer) One Steel Ltd, Auckland; and Steve Stickland (Associate) Corus New Zealand Ltd, Auckland.

The Council-elect will now nominate a Chairman and Vice Chairman for election by the Members at the AGM on 31 October 2008. The new Council will take office following the AGM.

TOWARDS LICENSED PRACTITIONERS IN STEEL CONSTRUCTION

SCNZ staff members are working with the Department of Building & Housing and their consultants to draft assessment procedure for people seeking to gain the Steel Structures Licence, due to be introduced early in 2009.

Manukau Welders in Auckland, MJH Engineering in Wellington and Chapman Engineering in Christchurch will trial the assessment procedure over the next six weeks.



On an elevated and steep slope, erection proceeded quickly and safely at Victoria University Wellington.

"The licence covers everything from the loading of the vehicle that transports the steel to the site to the final stages of erection," says John Kotoisuva, SCNZ's Training and Mentoring Officer. "Welding standards, erection tolerances and safety procedures are all included."

Chris Chapman of Chapman Engineering in Christchurch is enthusiastic about the Licensing of Building Practitioners. "The steel sector is already quite well structured, what with welding tickets required for every job. But this move will formalise inspections on site and that's to be welcomed."

Malcolm Hammond of MJH Engineering in Wellington agrees. "It's been important to clarify that the Licensed Practitioner is deemed to be qualified to oversee work done on site rather than have a hands-on role. Companies that have robust Quality Assurance systems will have no difficulty complying, as the dummy run that we're about to do will no doubt show."

STEEL STRUCTURES STANDARD REVIEW

Work on the review of Steel Structures Standard NZ53404 is progressing steadily and Part 1: Materials Fabrication & Construction, is taking shape in a format more specific to the structural end-user. That standard is being re-organised into seven parts to improve usability and allow progressive development and release.

Part 1, titled Materials Fabrication & Construction, is the first to be reviewed. SCNZ is leading the review process in conjunction with Standards New Zealand. SCNZ Manager Clark Hyland is chairing the subcommittee that includes architectural, structural engineering, precast, builder and SCNZ steel constructor representatives.

The changes include a review of all tolerances for fabrication and erection as compared with international standards. There are guidelines for adjusting the interface between steel and concrete, and the specifying of coating systems has been clarified to increase designer confidence. For architecturally exposed steelwork, clear standards have been set for the level of finish required. And the means of determining the extent of welding inspection criteria for inspection necessary for a structure have been upgraded.

The next meeting will be on September 11 to consider welding retest frequencies, composite construction tolerances and bridge construction matters. This will be followed by a review at the full Standards New Zealand Committee on September 25, after which the draft will be disseminated for public comment. Ultimately, end-users will be able to purchase the final version separately, making it more useful and likely to lead to better economic outcomes.



STEEL V TIMBER

Even with the recent steel price rises, when it comes to light industrial structures, steel portal frame solutions provide significant cost advantages over Laminated Veneer Lumber (LVL). This was apparent from a 2008 study conducted by SCNZ.

Under examination was a design for a 55m-wide warehouse with central columns and portal frames at 10,75m spacings. These spacings, in fact, put the timber purlins at their extreme limit, so options for 8m and 6m were also considered. The study concluded that the 6m spacings offered the greatest efficiency for the timber solution but steel was found to be more cost effective by \$27/m².

Kevin Cowie, SCNZ structural engineer, notes: "The study took into account not just the supply costs but also the cost of fabrication and erection." Other factors are worth bearing in mind. A considerable body of design guideline literature has been developed for steel, and both the literature and the software are regularly updated. Engineers in need of professional advice can obtain it, usually at no cost, from the SCNZ engineers who developed these aids. Similarly, erection crews are more au fait with pre-assembled steel than they are with LVL.

SCNZ SPONSORS ACENZ

This year's conference of the Association of Consulting Engineers was held in the Bay of Islands and took as its theme "The Trusted Advisor". Once again SCNZ was a major sponsor, with a trade stand that carried several important messages:

1. When calculating the cost of construction, factor in time and sustainability and the benefit of end-of-life recycling; steel is the winner on all counts.
2. The useful life of steel-framed buildings can be extended because they are highly adaptable. Their return on investment is real value for money.

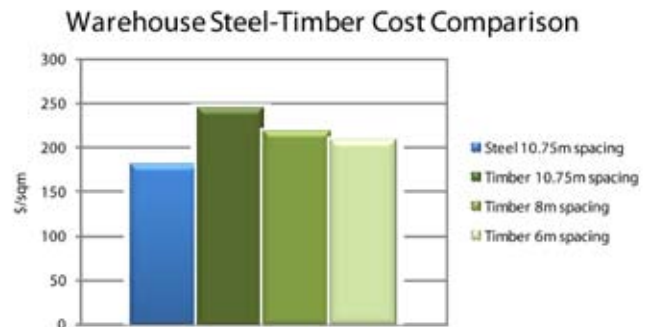
Delegates attending the conference were invited to join SCNZ and a 12-month subscription to the following SCNZ design tools - for free!

Online Connection Guide
Online Estimating Guide
Steel in Housing Design Aid
SteelDoc
Steel Advisor

It was SCNZ's way of saying that its members are partners in steel that can be trusted.

SCNZ Manager, Clark Hyland, addressed the gathering on the issue of steel construction pricing. He said the three most commonly asked questions are:

Once made, LVL cannot be recycled; the poisons used to protect it from rotting remain toxic at end of life. When a steel structured building reaches end of life, the metal has no problems with toxicity. Forward thinking designers can plan for a steel structure to be demounted and re-erected in a new location. The sports stadium at Wollongong is an example in point; it began life as part of the aquatic centre at the Sydney Olympics. Of course, re-use of structural steel was seldom planned in the past, making the total recyclability of steel one of its chief attributes. Steel structured buildings are warehouses of their own parts.



Are steel prices likely to drop?

Is there a better alternative to steel construction?

Is there a better way to procure structural steelwork?

The answers he gave were No, No and Yes respectively.

"Steel prices may soften in the coming months, but no-one can predict when. Steel construction is still the best way to build most structures because of its inherent speed, reliability and accuracy.

"There are, however, better ways of procuring steel that will minimise pricing and delivery risks to all construction. Talk directly to SCNZ steel constructors and discuss arrangements for early procurement and offsite payment. With the increasing productivity of SCNZ member companies, it is now a better



SCNZ Manager Clark Highland talks to consulting engineers attending the ACENZ Waitangi conference.

time than ever to choose steelwork as the structural strength of building and infrastructure projects.