Press Release

Luke Pinkerton

Co-Inventor, of the Revolutionary Helix TSMR Concrete Reinforcement

and

Founder, President and Chief Technical Officer of Helix Steel International

is coming to Australia for the

Concrete 2015 Conference

to be held in Melbourne from 30th August – 2nd September

On Monday 31st August 2015 at 2.20pm

Luke Pinkerton will present to the Conference a paper titled:

"Twisted Steel Micro-Reinforcement: Proactive Micro-Composite Concrete Reinforcement"

(See the attachment for an Abstract of the Paper to be delivered)

Don't miss it !!! Put this in your diary !!! Plan to be there !!!

For more information contact:

Mr Kevin Fuller – CEO of Helix Steel Australasia (0419 502 735)

or

The Helix Steel Agent in your State.

All contact details are on the Helix Steel Australasia website at www.helixsteel.com.au

“Twisted Steel Micro-Reinforcement: Proactive Micro-Composite Concrete Reinforcement”

Abstract:

Reinforced concrete is a two-part system that at best can be described as a “macroscopic” composite made of reinforcement bar and a concrete matrix.

The bar is designed to carry load only after the concrete fails – **reactive** reinforcement.

Adding Twisted Steel Micro-Reinforcement (Helix™) at a specified dose to an ordinary concrete matrix creates a “microscopic” composite. The unique design of the TSMR allows for efficient load re-distribution prior to failure of the concrete. The result is a significant increase in concrete strain capacity.

TSMR provides proactive reinforcement since, unlike rebar and other forms of reinforcement, it engages the material before it actually fails.

Like rebar, **TSMR also provides reactive reinforcement** as it continues to provide stable tensile resistance after the concrete’s strain capacity is exceeded.

With existing design methods, structural engineers are not able to calculate the required dosage of TSMR.

The authors present a simple design method to determine the necessary TSMR dosage to resist the tensile forces in an area of concrete equal to or greater than the conventional reinforcement.

The design models have been validated through third party testing at an IAS/NATA certified laboratory, full scale field-testing, calibration, and peer review by structural engineers in multiple countries.