

Australian Industry

WINS!

WTIA National Diffusion Networks
Project (NDNP) funded by the
Federal and State and Territory
Governments and industry



AusIndustry

SUCCESS STORY NUMBER RT01: INDUSTRY SECTOR CROSS POLLINATION – *Improved technology and skills for reinforcing steel welding in response to road transport industry needs.*

The Story

The WTIA National Diffusion Networks Project focuses on 8 different Industry Sectoral Projects (ISPs), two of which serve the Building and Construction and the Road Transport industry sectors. In an excellent demonstration of cross-pollination, the technology found in one sector has provided the foundation for the solution to a common problem highlighted by members of another ISP both within NSW and Australia-wide.



Reinforcing steel is commonly used in a wide range of concrete structures, including road bridges and overpasses. First raised by the NSW Roads and Traffic Authority (RTA), members of the SMART (Save Money And Re-engineer with Technology) Road Transport Industry Group confirmed that subcontractors' lack of knowledge and skills in the welding of reinforcing steel was creating serious quality issues in major public infrastructure projects throughout the country. Not only were cost, quality and timeliness compromised, but also public safety was ultimately at risk.

Outcomes

Drawing on the technical knowledge of Building and Construction ISP members OneSteel and Smorgon Steel Group Ltd, WTIA established a series of training workshops on Practical Understanding and Interpretation of AS/NZS 1554 *Structural Steel Welding - Parts 1, 2, 4 & 5* and Part 3 *Welding of Reinforcing Steel*.

The workshops introduced to industry the recently updated Expert Technology Tool (ETT) Technical Note 11 which gives a practical

commentary on the Standard, highlighting its recent changes. The ETT was developed with the support of a Technology Expert Group drawn from industry and based upon the membership of WTIA Technical Panel 6 *Welded Structures*. A special AS/NZS 1554 materials kit was also compiled to assist companies to address their welding management issues.

The workshops addressed the challenges with welding reinforcing steel, covering solutions such as tack welding, locational welding, prequalification of welds, compliance with prequalified welds, provision of lifting points on prefabricated cages, training and qualification of welders, supervision, inspection and documentation of cage production. A Technical Guidance Note is now being finalised for free use by industry.

A total of 19 workshops have been held around Australia to date, with an on-going programme planned to meet industry needs. So far over 321 people have attended both public and in-house venues, 115 of them attending workshops in NSW in Wollongong, Sydney and Newcastle.

Cooperative Effort

The workshops were supported by the Australian Steel Institute, National Precast Concrete Association Australia and Steel Reinforcement Institute of Australia that worked with the WTIA in a great cooperative effort. The NDNP Project and its contribution to NSW industry is supported by the Minister for Small Business David Campbell through the NSW Department of State and Regional Development.



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