

Independent Third Party Australasian Standards Certification & Verification of Reinforcing, Prestressing & Structural Steels Compliance

WHY YOU NEED ACRS THIRD PARTY CERTIFICATION FOR REBAR PROCESSORS AND REINFORCING MESH MANUFACTURERS



- ACRS Certificates of Product Compliance cover reinforcing steel, prestressing steel and structural steel products supplied to Australian and New Zealand standards.
- ACRS provides a vital link between the steel manufacturer and the construction site, and ensures that all materials are from an ACRS certified supplier and satisfy the requirements of the relevant AS/NZS Steel Standard.
- ACRS checks that materials supplied from the mill are correctly processed during reinforcement fabrication so that material performance is not compromised before supply to site.
- ACRS checks that all necessary procedures and documentation are in place to ensure adequate product traceability from the steel mill to the processor and mesh manufacturer.
- Processors change the mechanical properties of the input materials. Consistent quality output needs to be monitored & demonstrated to comply with AS/NZS4671 requirements.
- Mesh manufacturers need to demonstrate strength of weld, minimum sheet size, actual diameters tolerance & size, tensile strength, ductility etc.

AVOID THE RISKS OF USING NON-COMPLIANT PRODUCT

WHY DO REBAR PROCESSORS NEED THIRD PARTY CERTIFICATION ?

- Processors change the mechanical properties of the input materials. Consistent quality output needs to be monitored & demonstrated to comply with AS/NZS4671 requirements.
- Processors are responsible for the correct bending mandrels for reinforcement. This needs to be verified to maintain cover/corrosion protection and steel congestion and meet the design intent and tolerances of AS/NZS4671 Steel Reinforcing Materials, AS3600 Concrete Structures, NZS3101.1 & 2 Concrete Structures, and AS5100.5 Concrete Bridges requirements.
- Unless the steel reinforcement meets the design criteria and materials specification set out in Australian and New Zealand Standards the results can be dire.
- ACRS chain of certification checking ensures that feed materials are not supplied from a mix of different mill suppliers both certified and noncertified.
- It's no good purchasing conforming steel from the mill and then ruining it with poor cutting and bending at the reinforcing processor.

WHY DOES REINFORCING MESH NEED THIRD PARTY CERTIFICATION ?

- Mesh manufacturers need to demonstrate strength of weld, minimum sheet size, actual diameters tolerance & size, tensile strength, ductility etc.
- Consistent quality output needs to be monitored & demonstrated to comply with AS/NZS4671 Steel Reinforcing Materials, AS2870 Residential Slabs & Footings, AS3600 Concrete Structures, NZS3101.1 & 2 Concrete Structures, and AS3727 Residential Pavements requirements.
- Many builders don't consider the effects of noncompliant materials. This is where an otherwise good project can end in tears. E.g extensive cracking in walls and floors, visible damage, poor resale, etc.
- ACRS chain of certification checking ensures that feed materials are not supplied from a mix of different mill suppliers both certified and noncertified.
- It's no good purchasing conforming steel from the mill and then ruining it with poor welding or dimensional control in the mesh.



SPECIFY THE STANDARDS AND THE MEANS OF CHECKING COMPLIANCE

SPECIFY ACRS CERTIFIED REBAR PROCESSORS AND REINFORCING MESH

ANY BREAK IN THE CHAIN OF CERTIFICATION OF THE STEEL MILL, THE REBAR PROCESSOR AND/OR THE MESH MANUFACTURER MEANS THE STEEL IS NOT ACRS APPROVED

- With steel reinforcement, ACRS certifies BOTH the steel mill that manufactures the steel AND the steel reinforcement processor and mesh supplier.
- Verification of the outputs of both these supply streams is essential for any steel reinforcing materials claiming to be Standards-compliant.
- It's no good purchasing conforming steel from the mill and then ruining it with poor cutting and bending at the reinforcing processor or poor welding or dimensional control in the mesh.
- The steel simply won't meet Standards when it leaves the reinforcement supplier and so does not meet the Construction Code.
- Materials are sourced widely in Australia, New Zealand and overseas, and manufactured to all kinds of Standards, even no Standards, so you need to check what you are getting.

SPECIFY THE STANDARDS AND ALSO THE MEANS OF CHECKING COMPLIANCE

- As well as specifying the relevant Standard, project teams and design engineers need to specify the mechanism for demonstrating compliance such as ACRS third party product certification.
- If the means of demonstrating compliance is not detailed, then the risk of non-compliant steels from the market place being supplied is greatly increased.

WHAT ARE THE RISKS OF USING NON-COMPLIANT PRODUCT ?

- Lack of certainty of compliance without checking/ validation by an independent specialist third party product certification body such as ACRS increases the risk of receiving non- conforming product
- Products used in building and construction need to comply with the relevant quality and safety standards covered under the Australian National Construction Code (NCC) and the New Zealand Building Code responsibilities (e.g. s14C owner/ builder, s14D designer, s14E builders and s14G manufacturers/suppliers).
- Construction works not covered by the NCC, such as infrastructure and unique structures, are subject to the standards nominated by the relevant designer/engineers and contract documentation.
- In all cases, the building designers & other professionals such as engineers should nominate, through plans and specifications, the Standards that must be met by the building & construction products used for a project. The relevant designer/ engineer should also specify what level of evidence should be accepted as proof that a building product meets the specified standard.
- In addition to the NCC and contractual responsibilities, the Australian workplace health and safety laws set out additional responsibilities for various types of procurers (e.g. designers, builders and all associated contractors and workers) with respect to product conformance and safety.
- Australia and New Zealand are part of a global supply chain and building & construction products are now being sourced from overseas and local manufacturers and suppliers. Evidence is increasing that many suppliers of products, regardless of where they are made, are not providing evidence that they meet Australian and New Zealand Standards and building requirements, and hence they may not comply.

AVOID THE RISKS OF USING NON-COMPLIANT PRODUCT

SPECIFY THE STANDARDS AND THE MEANS OF CHECKING COMPLIANCE

SPECIFY ACRS CERTIFIED REBAR PROCESSORS AND REINFORCING MESH

ABOUT ACRS

- ACRS (the Australasian Certification Authority for Reinforcing and Structural Steels) was established in 2000 with the support and endorsement of leading engineering and construction groups, such as Austroads, Engineers Australia, Consult Australia, Master Builders Association, the Housing Industry Association and others,
- ACRS has provided consistent rigorous checking of compliance by highly experienced assessors with over 1,000 audits and 3,500 materials assessments now completed.
- ACRS certifies steel manufacturing & processing companies at over 150 locations in over 15 countries for construction steel products supplied to Australian and New Zealand standards.
- ➤ In addition, the number of companies submitting themselves for ACRS assessment and then either withdrawing or failing – over 50 since 2010 – shows that the minimum quality available in the market for compliant products is maintained by ACRS rigorous assessment.
- The ACRS Scheme Rule on "All Products All locations" to be certified has been instrumental in ensuring verification of compliance across the full range of certificate holders' activities.
- ACRS is recognised locally and internationally for its expertise in checking compliance of construction steels to AS/NZS Standards.
- ACRS is a JAS-ANZ accredited, not-for-profit, independent Authority that provides expert, impartial assessment and certification that gives specifiers and customers the widest available choice of construction steel materials demonstrably compliant with Australian and New Zealand Standards.

For further information about the validity of certification for any materials being supplied into your project, contact ACRS:

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www.steelcertification.com – for full details of all ACRS Certificate holders and products

www.steelcompliance.com – how to reduce the risks of non-compliant products