

## CARES and the reinforced concrete industry

Product certification for constructional steels.

Ben Bowsher – Executive Director.



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## What is Product Certification ?

- A substitute for 2<sup>nd</sup> party (customer) approval. To give confidence to customers that there is a reduced risk of non-compliance.
- Specific to an individual product or product type.
- Use standard(s) wherever possible.
- Operates primarily in the field of steel for construction.
  - Reinforcing Steel / Prestressing Steel / Structural Steel.
- Be appropriate to the product.
- Use dedicated skills, experience and knowledge.

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## What Product Certification is not.

It is NOT Quality System certification (ISO 9000)

- Differences;
  - Product specific.
  - Specific expertise required.
  - More commercially important (specified).
  - More powerful.
  - PC is generally more difficult to achieve.

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## Objective of Product Certification

**To reduce the Risk to the user.**

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## Who must it satisfy?

Whoever is the user.

For reinforcing steel, this may be regarded as anyone who might be concerned in the compliance of the product;

- Processor/stockist.
- Contractor.
- Specifier/specification.
- Designer (clients representative).
- Construction client.
- (Financier).

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## How must it operate ?

- Not for the benefit of one individual or group of individuals.
- Not show undue preference or discrimination.
- With impartiality.
- With openness and integrity.
- With technical competence.

i.e. It should follow the international rules of accreditation.

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## Design of the certification scheme.

- Should be designed by parties in the supply chain.
- Should be appropriate for the product and its supply chain.
- Should include an appropriate system of evaluation.
- This will dictate the type of staff and how they work.
- Should include feedback mechanism(s), i.e. Does it work?

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## CARES

- Independent third party product certification scheme.
- Set up in 1980 by UK concrete supply chain.
- Objective – “To operate and promote certification schemes to ensure consistent compliance with appropriate product standards”
- Operates primarily in the field of steel for construction.
  - Reinforcing Steel / Prestressing Steel / Structural Steel.
- Funded solely by certification fees.
- “Not-for-profit” company. Service to concrete sector.
- Voluntary scheme, supported by Specifiers/Clients.
- Accredited under international requirements - ISO Guide 65.

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## Members of CARES (owners). Independence and Balance.

- **Highways Agency**
- **Southern Water**
- **British Airports Authority**
- **Association for Consultancy and Engineering**
- **Institution of Structural Engineers**
- **UK Contractors Group**
- **Civil Engineering Contractors Association**
- **CONSTRUCT**
- **Post Tensioning Association**
- **UK Steel Association**
- **British Association of Reinforcement**

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## CARES Structure

Current:

- Members.
- Board of Directors (nominated by Members).
- Executive Committee (business).
- Chairman’s Group (remuneration, Terms and Conditions of employment).
- Technical committees (Rebar / PT / Sustainability).
- CARES (executive).

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## Objective of CARES certification.

To reduce the Risk to the ‘USER’ of Product non-compliance, i.e. as the steel arrives at the construction site. (In the UK, this is normally ‘as processed’).

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## CARES Rebar Scheme.

**Cascading** and **Modular** approach to certification for this Product;

- Steel (Bars /Coils), including Stainless Steel.
  - Feedstock e.g. Billets.
  - Rod in coil for further work.
- Cold reduced wire.
- Cutting and Bending.
- Mesh/Fabric.
- Welding.
  - Tack welding.
  - Load bearing welding
- Splicing (coupling).
- Stocking and distribution.
- (Ancillary products).

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## CARES Schemes.

- Reinforcing Steel (SRC).
- Post Tensioning (PT).
- Technical Approvals (TA).
- CE Marking.
- Sustainable Reinforcing Steel (SRS).
- Others:
  - ISO14001(EMS), OHSAS18001, ISO9001.

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## Experience and Qualifications

- Metallurgical and Construction
- Assessors from industry
- Management
  - Standards Committees
  - Technical Committees
  - National and International organisations

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