

Steelwork

Scope of Services

The Steelwork Inspection Department has a team of Inspectors/Surveyors based at convenient locations throughout the United Kingdom. Suitably experienced personnel are also available for commissions overseas. This team is managed from the Head Office in London and regional offices in Darlington and Chepstow. Consultancy is available for a wide range of construction materials, welding, metallurgy, NDT, painting, QA/QC etc.

CONSULTANCY

Consultancy is available for:

- materials;
- fabrication processes;
- welding details;
- review of contractors' welding procedure specifications and approvals.
- non-destructive testing techniques;
- painting inspection techniques;
- review of contractors' QA/QC documents;

VENDOR SURVEYS & QUALITY AUDITS

Vendor Survey and Quality Audit services are available for the assessment of contractors.

PRE-CONTRACT AND PRE-FABRICATION MEETINGS

Managers are available to attend pre-contract and pre-fabrication meetings, where the Specification, the contractors quality control and the role of Sandberg as the independent inspection authority can be discussed by all interested parties.

QUALITY PLANS

When specific details of a project are known, (usually after a pre-fabrication meeting) a Quality Plan can be drawn up to reflect all aspects of quality control and inspection to be carried out by Sandberg inspectors.

MILLS INSPECTION

Surveillance inspection at steel mills to carry out visual examination, dimensional checks, witness mechanical tests and verify certificates of test.

INSPECTION AT CONTRACTORS' WORKS

Materials Verification

Verification of identification marks to the details shown on the certificates of test. Metallurgical services are also available for verification testing when necessary.

Materials Traceability

Surveillance inspection of contractors' systems for traceability of materials during fabrication.

Procedure Specifications

Surveillance inspection to confirm that contractors' welding procedure specifications apply to the types of connections involved in the project.

Welding Procedure Approval Records

Review of contractors' welding procedure approval records and test results documents by a manager to ensure compliance with relevant codes and specifications.

Surveillance inspection during welding to ensure the contractor is working to approved welding procedures.

Welder Approval Records

Surveillance inspection to confirm that suitably qualified welders are employed by the contractor.

Fabrication Inspection

Surveillance inspection of steelwork to ensure that the correct materials are used and dimensions are in accordance with the drawing details and specification tolerances. This also includes the manufacture, machining and welding of castings.

Visual Inspection

Surveillance inspection of materials for finish and size, fit-up conditions prior to welding, and quality of completed welding.

Non-destructive Testing

Surveillance inspection to witness NDT and verify that approved procedures and techniques are used by the contractor. Verification of contractors' radiographs and NDT reports.

Inspectors are also available to carry out cross-check non-destructive testing when necessary.

Trial Erections

Witnessing trial erections on behalf of the Engineer or Client. Verification of major dimensional checks carried out by the contractor.

Quality Control Documentation

Review of contractors' QC documentation packages to confirm acceptance prior to the despatch of items to the project site.

Protective Treatment

Witnessing blasting and painting trials. Surveillance of contractors' quality control during application of the protective treatment system, including checks of specific gravities, environmental conditions, surface preparation, overcoating times, wet and dry film thicknesses, adhesion and aesthetic quality of finish.

INSPECTION ON SITE

Welding

Witness and verify fit-up conditions, pre-heat, welding parameters. welding in progress and completed welding.

Surveillance inspection to ensure approved welding procedures and welders are used.

Non-destructive Testing

Witness NDT carried out by the contractor. Verify that approved procedures and techniques are used and that operators are suitably qualified.

Verification of contractors' equipment calibration records.

Review of contractors' radiographs and NDT reports.

High Strength Friction Grip Bolted Connections

Witness and verify contractors' fitting and tightening techniques to ensure compliance with the specification.

Protective Treatment

Surveillance inspection of painting contractor, including checks of specific gravities, environmental conditions, surface preparation, overcoating times, wet and dry film thickness checks, adhesion, and aesthetic quality of finish.

NON-DESTRUCTIVE TESTING

NDT technicians, qualified to nationally recognised certification schemes, are available to carry out ultrasonic testing, magnetic particle inspection and dye penetrant inspection.

INVESTIGATIONS

Investigation of existing structures after fire, bomb or water damage. This facility is also complemented by our laboratory services.

Investigation of corrosion damage to steel and cast iron structures.

Investigations of failed protective treatment including the identification of potential solutions.

PRINCIPAL BRIDGE INSPECTIONS

Inspection and testing to Highways Agency or Railtrack requirements, including provision of scaffolding, towers, mobile access etc, when necessary.

BRIDGE MAINTENANCE PAINTING INSPECTION

Inspection to DoT requirements.

WITNESSING WELDING PROCEDURE & WELDER APPROVALS

Inspectors are available to witness tests on behalf of contractors or clients to national or international standards. Our Metallurgy Laboratory is available to carry out the necessary NDT and mechanical tests.