



WELDING FABRICATOR CERTIFICATION SCHEME

DOCUMENT CS/4: CAPABILITY ASSESSMENT

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Issued under the authority of the Governing Board for Certification
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1 INTRODUCTION

This Schedule covers the assessment of manufacturing capability against the current product range.

The Assessment is in two parts. Firstly, a review of recent company history to verify the range of product capability claimed by the manufacturer (principal categories are given in Appendix 1). Secondly, it deals with fabricating and related equipment, product size and weight limitations, the established procedures. The workforce competencies, and the competence of those having welding responsibilities is reviewed by the Assessment Team.

The capability of a fabricating company depends critically on the competence of those who control welding and related activities, and this is recognised in BS EN ISO 3834 by requiring manufacturers to nominate competent 'Welding Co-ordinators'. The role of Welding Co-ordination personnel is specified in BS EN ISO 14731.

2 VERIFICATION OF MANUFACTURING CAPABILITY

The fabricator shall provide the Scheme Manager with either a completed Capability Assessment Record form (specimen copy attached) or be able to provide documentation with equivalent information. The Assessment Team will, by simple observations or enquiry, satisfy themselves that the more important entries on the form are substantially valid. The Lead Assessor's signature against any particular entry indicates that that entry has been verified. In cases where there is any reason for the Assessors to question the stated information, agreement shall be reached between the two parties as to the entry on the form. In cases where agreement cannot be reached between the two parties, the Scheme Management Committee shall be the final arbiter.

It is understood that all information appearing on the form may be available for publication. Any details which the fabricator wishes to remain confidential should not be included, but may be listed on an alternative document.

The information required by the Capability Assessment form includes details in the following areas:

- current product range
- welding processes
- materials and thickness ranges
- forming, machining and cutting facilities
- NDT facilities (in-house)
- heat treatment facilities
- maximum handling size and weight
- transportation limitations
- personnel
- training facilities
- sub-contracting (essential processes normally sub-contracted)
- special equipment/techniques available
- most common application codes or standards

Where appropriate, recorded compliance to specific code requirements will be indicated for each product range.

Where convenient, to avoid unnecessary work, current company brochures, or preprinted publicity material may be supplied but should be listed and cross referenced. Evidence of independent verification of facilities by other bodies such as ASME, TUV, API, etc, should be provided if available.

3 WELDING CO-ORDINATION (BS EN ISO 14731)

To demonstrate compliance with ISO 3834, the manufacturer must nominate appropriate staff to take responsibility for welding co-ordination activities according to ISO 14731. At least one of these persons shall be a Responsible Welding Co-ordinator having authority to sign for welding matters on behalf of his company. The manufacturer shall define, in his quality documentation, the specific responsibilities of his nominated Welding Co-ordination Personnel.

The manufacturer shall provide his welding engineering management structure, organisation and relevant supporting evidence on or with this completed document (CS/4).

Verification of the manufacturers welding co-ordination arrangements, and the competence of the welding co-ordinator staff is a vital part of the Welding Fabricator Certification Scheme.

APPENDIX 1

Principal product categories to be used in identifying current product groups within which the manufacturer claims a recent capability

Manufacturing product scope will be classified into one or more of the categories, and where appropriate, related items as defined in the IIW Thesaurus of Welding Products. Each group contains a portfolio of related products for example:

Category:	Structural Steelwork
Related items:	Agricultural buildings Single and multi-storey frameworks Bridges Masts, aerials, pylons Chimneys Hangars Viaducts Aqueducts

Where appropriate, specific application codes with which the company can demonstrate familiarity and compliance should be indicated for the product category or related item.

Product Classification

- 1 Sheet metal fabrication
- 2 Sheet metal containers
- 3 Rod and wire products
- 4 Domestic equipment
- 5 Hand tools
- 6 Vehicles, on/off road
- 7 Earth moving plant
- 8 Railway rolling stock
- 9 Mechanical handling equipment
- 10 Agricultural/garden machinery
- 11 Power tools
- 12 Machine tools
- 13 Electrical rotating machines
- 14 Internal combustion engines
- 15 Mechanical conveying equipment
- 16 Pumping equipment
- 17 Turbines, water/steam
- 18 Wind power machinery
- 19 Machinery
- 20 Mineral/quarry plant
- 21 Ship machinery
- 22 Electrical power equipment, static
- 23 Pressure vessels, unfired
- 24 Boilers
- 25 Heat exchangers
- 26 Process plant
- 27 Food/light processing plant
- 28 Pipelines, land
- 29 Pipelines, offshore
- 30 Pipework
- 31 Fluid control equipment
- 32 Structural steelwork

33	Offshore structures
34	Water control equipment
35	Storage vessels
36	Airframes
37	Ships' hulls
38	Repair and maintenance
39	Surface coating
40	Plastics products
41	Other products

CAPABILITY ASSESSMENT SCHEDULE

Name of Company: _____

Address:

Record of recent Contracts (where relevant)

The following space is to be used for the Company to provide evidence of performance within the scope applied for.

The details should include, as appropriate:

Delivery date; type of product; shipping weight, customer, designer, nominal value, Application Codes, principle material type and thickness and any other information that will illustrate the company's capability.

Completed _____ **by:**

Date: _____

CAPABILITY ASSESSMENT RECORD FORM - to be completed by Applicant Company

Name of Company

Location

MATERIALS NORMALLY FABRICATED

MATERIAL	FORM	UP TO 5MM	5 - 20	21 – 50	ABOVE 50

FORM = sheet, plate, pipe, sections.

Indicate approximate percentage of weight of materials used annually or of typical product in each thickness.

FORMING, MACHINING AND CUTTING FACILITIES AND PROCESSES (Answer Y/N as appropriate)

TYPE	TYPICAL (THICKNESS/SIZE)	TYPE	MAXIMUM (THICKNESS/SIZE)
Air arc		Grinding	
Oxy/fuel – hand		Blasting (shot etc)	
Gantry m/c CNC		Pressing	
Plasma		Folding	
Light weight tractor m/c		Rolling, cold	
Edge planing/milling		Rolling, hot	
Shearing			
Sawing			
Other			

NDT FACILITIES

TYPE	Y/N	Operator Qualification	Subcontract Y/N	On site/Off site
X-ray				
Gamma ray				
Ultrasonic				
Magnetic Particle				
Dye Penetrant				

Form completed by _____ Date

Name of Company

Location

HEAT TREATMENT FACILITIES

	LOCAL Y/N	FURNACE (Capacity)	SUBCONTRACT Y/N
Stress relief			
Normalising			
Other (specify)			

MAXIMUM HANDLING SIZE AND WEIGHT (where relevant)

TRANSPORT LIMITATIONS EX-WORKS (SIZE AND WEIGHT) (where relevant)

Road	
Rail	
Water	

PERSONNEL (numbers)

	PERMANENT	TEMPORARY (at present)
Total fabrication workforce		
Welders: ___ MMA ___ MIG/MAG		
Welding Engineers - CEng		
Design Office staff		
Planning and Production		
Welding Inspectors		
Welding Supervisors		

Form completed by _____ Date

Name of Company

Location

TRAINING FACILITIES

Give details of in-house facilities, such as apprentice training school :

SPECIAL EQUIPMENT/TECHNIQUES AVAILABLE

MAJOR USE AND CONTROL OF SUB CONTRACTORS

ACTIVITY	TYPE OF WORK	NAME	CONTROLLED BY*
Fabricating			
Welding			
Forming			
NDT			
Heat treatment			
Mechanical testing			
Other			

* eg ISO 9000: Audit, receipt inspection, third party Certification etc.

Name of Company

Location

PRINCIPAL APPLICATION STANDARDS OR CODES eg BS, EN, ASME ETC

STANDARD/CODE (REFERENCE)	PRODUCT

Signed _____ Date