

Conditions for Use of AS/NZS 3992 Section 2 Prequalified Weld Procedures

SCOPE

Prequalified AS/NZS 3992 welding procedures are not permitted where impact testing of the weld deposit or base material is required by the construction code or at design temperatures colder than 0°C.

Prequalified AS/NZS 3992 welding procedures may require client / project approval prior to use.

USE OF PREQUALIFIED PROCEDURES

The manufacturer or contractor shall be responsible for application of the prequalified AS/NZS 3992 welding procedure and comply with the following requirements prior to use in production:

- a) Enter name of the manufacturer or contractor on the prequalified AS/NZS 3992 welding procedure.
- b) An employee of that manufacturer or contractor shall sign and date the AS/NZS 3992 welding procedure.
- c) Welders employed by the manufacturer or contractor shall be qualified in accordance with AS/NZS 3992 Section 9.

LIMITATIONS OF PREQUALIFIED PROCEDURES

- a) Any change in the stated prequalified WPS variables shall require qualification in accordance with AS/NZS 3992 Section 3.
- b) Where impact testing of the weld deposit or base material is required by the construction code at design temperatures colder than 0°C., the use of prequalified AS/NZS 3992 welding procedure is prohibited.
- c) Only A1 / A2 materials listed within AS/NZS 3992 Section 5 Table 5.3 may be welded.
- d) Where PWHT is applied in production in accordance with AS 4458, data shall be available verifying the welding consumable used demonstrates acceptable strength and ductility in the PWHT condition. Reference to AS/NZS or ISO consumable certification shall be made. If unavailable, the prequalified AS/NZS 3992 welding procedure shall be qualified in accordance with AS/NZS 3992 Section 3.

OTHER PREQUALIFIED PROCEDURE RESTRICTIONS

- a) The manufacturer or contractor may not deviate from the welding conditions specified on the prequalified AS/NZS 3992 welding procedure.
- b) Prequalified AS/NZS 3992 welding procedures may not be supplemented with PQRs or revised in any manner.
- c) Multiple prequalified AS/NZS 3992 welding procedures shall not be used in the same production joint to make up wall thickness ranges or apply multiple welding processes.
- d) Weld bead depth shall not exceed the width at the surface for each individual pass.

CONSUMABLES

- a) Consumables may require special conditioning, storage, and handling prior to and during production to ensure hydrogen status classification is maintained.
- b) See AS 4458 Section 9 for guides on consumable treatments.
- c) Use manufacturer recommendations for consumable conditioning if those recommendations differ from that detailed in AS 4458 Section 9.

GUIDELINES

- a) The user shall consider all AS/NZS Standard design requirements where restrictions may apply in particular to joint design and WPS application.
- b) The user shall consider factors affecting the preheat temperature which may include carbon equivalent value, combined joint thickness, and restraint conditions.
- c) The user requires significant welding knowledge and accepts full responsibility for the performance of welds and for providing the engineering capability, qualified personnel, and suitable equipment to implement prequalified AS/NZS 3992 welding procedures.
- d) The user shall consider applicability or relevance of health and safety regulatory limitations / precautions prior to use.