

#### 4.12.2.2 *Qualification via Standards*

Qualifications obtained by welders under appropriate Standards laying down welder qualification tests are acceptable as evidence of their ability. Such evidence shall refer to welding carried out on joints and in positions as close as practicable to the actual joints and positions to be used in construction. Welders qualified to Standards such as AS 1796, AS/NZS 2980, AS/NZS 3992 or ISO 9606-1 shall be deemed to be qualified.

#### 4.12.2.3 *Qualification via visual and macro examination*

Welders not already qualified in accordance with Clause 4.12.2.2 for the welding process and position required by the welding procedure under the conditions of employment shall be required to demonstrate an ability to comply with the appropriate requirements of this Standard by welding a suitable test piece for all welding procedures required on the job. Each test weld shall have a minimum examination length of 300 mm, be examined visually and by means of a macro test (see also Table 4.7.1 for alternative test methods for butt welds applicable at the fabricator's discretion), and shall satisfy the requirements of Clause 6.2.2.

Grinding or repair of the capping passes of test welds is not permitted.

Welder qualifications for welding to a specified welding procedure shall remain valid, provided the following criteria have been met:

- (a) It can be shown from records maintained by the organization employing welders that the welders have been employed with reasonable continuity using the relevant welding processes and have continued to produce satisfactory welds as verified by a non-destructive examination (WDE).
- (b) The procedure is used within its qualification limits and the following:
  - (i) Welder qualifications established in any one position described by this Standard are extended within the limits of Table 4.12.2(A).  
NOTE: The positional qualification limits of the weld procedure are not applicable to welder qualifications.
  - (ii) For welds on pipe with an outside diameter  $d$  or hollow sections where  $d$  is the dimension of the smaller side, the welder is qualified as follows:
    - (A) For a test piece with an outside diameter of  $\leq 100$  mm,  $d$  to  $2d$ .
    - (B) For a test piece with an outside diameter of  $> 100$  mm,  $\geq 0.5d$  to unlimited.
  - (iii) Persons operating automatic or semi-automatic equipment and qualified to use a particular process with an approved consumable or combination of consumables shall be considered qualified to use other approved consumables or combinations of consumables with the same process [see Table 4.12.2(B)].
  - (iv) Welder qualifications established under this Clause with any one of the steels covered by this Standard shall be considered as qualification to weld any other of the steels covered by this Standard.

#### 4.12.2.4 *Reapproval*

Reapproval shall be required if any of the following conditions apply:

- (a) Six months or more have elapsed since the welder was employed on the relevant welding processes.
- (b) For other than welders qualified to AS/NZS 2980 or ISO 9606-1, the welder changes employment. Under such circumstances, the new employer shall qualify the welder who has changed employment.
- (c) There is some specific reason to question the welder's ability.