

GUIDANCE

WELDING PROCEDURE AND WELDER APPROVAL TESTING

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Reference: **BS EN ISO 15614-1 - Clause 8.4.3**

SITUATION:

What is required for the approval of a “slip-on” flange to nozzle weld?

GUIDANCE:

A slip on flange to nozzle fillet weld can be approved by a butt weld WPQR in pipe BS EN ISO 15614-1 clause 8.4.3.a but it also states where this is the predominant form of production welding a fillet weld is required.

The range of thickness approval given by table 5 (Butt welds) and table 6 (Fillet welds) relates to the average of the flange and nozzle body thickness. Thickness approval range shall be based on parent materials.

The range of diameter for the nozzle is based on Table 7.

For thin wall pipes ($\leq 3\text{mm}$) due to the dissimilar thickness ratio of flange to pipe, consideration should be given to a special test in accordance with BS EN ISO 15613.

Note: Where the slip on flange to nozzle is approved via a fillet weld qualification test and mechanical properties are relevant to the application a supplementary butt weld qualification will also be required to comply with the requirements of BS EN ISO 15614-1, table 1, footnote f.