

Clarification No. 1 (12.02.2025)

TENDER MPKRI11468GX: The Procurement and Installation Of 3x Lp Heaters 4 For A Period Of 5 Years on An As And When Required Basis At Kriel Power Station.

Query Title:

Design Code And Welding Standards Allowed In The Design

Description Of Query:

Background:

The Technical specification allows different design codes which can be used for the design of the heater; PD 5500, BS EN 13445 & ASME VIII Div 1 (in paragraph 4.3.2.).

The Piping connection welds “will be done according to BS EN 13480” (paragraph 4.4.15).

4.5 Welding requirements specifies ISO 9606 and ISO 15614-1, not ASME IX.

Query:

Installing a heater built to ASME VIII Div 1 will have welds at the nozzles with ASME material on the one side and the existing EN pipe material on the other. ASME VIII Div 1 U-1 (e) (1) (-a) Includes the welding end connection for the first circumferential joint welded connections. This is in contradiction with the requirement in Eskom’s technical specification paragraph 4.4.15 which requires the weld to be to EN 13480

Recommended Approach:

1. Eskom allows welding to be done in accordance with ASME IX, both shop and field installation welds.
2. Given ASME VIII DIV I is allowed, perform the connection weld on the nozzles (ASME to EN 13480 interface) in accordance with ASME IX to be in compliance with ASME VIII DIV I.
3. Replace the first sections of piping where there is no P-number assigned to the existing material. Replace it with an EN 10216-2 material listed in ASME IX Table QW/QB-422 to have a P-number for both materials.

Eskom Response:

Your interpretation is noted, however, in Eskom we have many ASME pressure vessels or pressure equipment that is fitted into a EN/BS plant design. We understand that ASME consider the first circumferential weld to be part of the vessel.

Eskom's stance has always been to consider the vessel to terminate as per the design drawing with the vessel to pipe connection to fulfil the most stringent welding requirements between ASME and EN. This is because when we perform RBI our

acceptance criteria for pipe welding is to EN if the plant is BS constructed.

Thus, this leads to say if the most stringent requirements between ASME and EN is applied between the BS and ASME interface both codes minimum requirements are met.

Eskom have partnering agreements for welding on plant and on EN/BS designed plants we stick to the EN codes to ensure compliance with respect to welding NDT and inspection criteria on the pipework is uniform. You are welcome to apply for a concession to deviate from the ASME requirements with respect to first interface circumferential weld. This stance has been confirmed with one of Eskom's International Welding Engineers.