Errata
to
ASME BPVC.I-2023
Rules for Construction of Power Boilers

A production error caused misalignment of data in several columns of Table PW-39.2. In addition, the Celsius temperature range in the penultimate entry under "15E Group 1" has been corrected by errata. The corrected table follows this cover sheet. The realigned data and corrected Celsius temperature are shown in bold.

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October 2023

(23)

Table PW-39.2
Mandatory Requirements for Postweld Heat Treatment Temperature Ranges for Welds Between P-No. 1, 3, 4, 5A, 5B Group 1, 6, 7, 8, and 15E Group 1

P-No.									
1	3	4	5A	5B Group 1	6	7	8 [Note (2)]	15E Group 1	
PWHT Temperature Range, °F (°C)									P-No.
See Table PW-39-1	1,100–1,300 (595–705)	1,200–1,300 (650–705)	1,250–1,300 (675–705)	1,250–1,300 (675–705)	[Note (1)]	[Note (1)]	1,100–1,300 (595–705)	[Note (1)]	1
...	See Table PW-39-2	1,200–1,300 (650–705)	1,250–1,300 (675–705)	**1,250–1,300 (675–705)**	**[Note (1)]**	**[Note (1)]**	**1,100–1,300 (595–705)**	**[Note (1)]**	**3**
...	...	See Table PW-39-3	1,250–1,350 (675–730)	1,250–1,350 (675–730)	[Note (1)]	[Note (1)]	1,200–1,350 (650–730)	1,300–1,350 (705–730)	4
...	...	...	See Table PW-39-4	1,250–1,425 (675–775)	[Note (1)]	1,350–1,425 (730–775)	1,250–1,425 (675–775)	1,300–1,425 (705–775)	5A
...	...	...	...	See Table PW-39-4	[Note (1)]	1,350–1,425 (730–775)	1,250–1,425 (675–775)	1,300–1,425 (705–775)	5B Group 1
...	...	...	...	...	See Table PW-39-6	[Note (1)]	[Note (1)]	[Note (1)]	6
...	...	...	...	...	...	See Table PW-39-7	1,350–1,425 (730–775)	1,350–1,425 (730–775)	7
...	...	...	...	...	...	...	See Table PW-39-8	1,300–1,445 **(705–785)**	8 [Note (2)]
...	...	...	...	...	...	...	...	See Table PW-39-5	15E Group 1

GENERAL NOTE: This Table provides PWHT temperature ranges for materials of different P-Numbers welded together. For P-Numbers not listed, exemptions and other requirements for mandatory postweld heat treatment requirements, see Tables PW-39-1 through PW-39-14.

NOTES:

(1) For these welds, the lower minimum PWHT of the higher P-No. may exceed the lower critical temperature of the lower P-No. Consideration should be given to separate welding procedure qualifications for these material combinations per the rules of Section IX, QW-407.1.

(2) Sensitization of certain 300 series stainless steels may occur when they are exposed for periods of time in the temperature range of about 1,000°F to 1,550°F (540°C to 845°C). Sensitization involves the precipitation of chromium carbides along the grain boundaries potentially leading to intergranular corrosion during service. Refer to Section II, Part D, Nonmandatory Appendix A for further information. Consideration should be given to reducing sensitization by such means as the use of low carbon or stabilized grades of stainless steel or buttering the nonstainless portion of the weld with a Ni-base weld metal and postweld heat treating prior to completing the dissimilar metal weld without subsequent postweld heat treatment (see Section IX, QW-283 for rules regarding the qualification of such welds).

ERRATA TO TABLE PW-39.2, fixes:
- [Note (1)] is moved to the second row under P-No. 7 column
- the last 3 cells in the second row are moved over one column

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P-No.									
1	3	4	5A	5B Group 1	6	7	8 [Note (2)]	15E Group 1	
PWHT Temperature Range, °F (°C)									P-No.
See Table PW-39-1	1,100–1,300 (595–705)	1,200–1,300 (650–705)	1,250–1,300 (675–705)	1,250–1,300 (675–705)	[Note (1)]	[Note (1)]	1,100–1,300 (595–705)	[Note (1)]	1
...	See Table PW-39-2	1,200–1,300 (650–705)	1,250–1,300 (675–705)	1,250–1,300 (675–705) [Note (1)]	[Note (1)]	1,100–1,300 (595–705)	[Note (1)]	3	
...	...	See Table PW-39-3	1,250–1,350 (675–730)	1,250–1,350 (675–730)	[Note (1)]	[Note (1)]	1,200–1,350 (650–730)	1,300–1,350 (705–730)	4
...	...	...	See Table PW-39-4	1,250–1,425 (675–775)	[Note (1)]	1,350–1,425 (730–775)	1,250–1,425 (675–775)	1,300–1,425 (705–775)	5A
...	...	...	...	See Table PW-39-4	[Note (1)]	1,350–1,425 (730–775)	1,250–1,425 (675–775)	1,300–1,425 (705–775)	5B Group 1
...	...	...	...	...	See Table PW-39-6	[Note (1)]	[Note (1)]	[Note (1)]	6
...	...	...	...	...	...	See Table PW-39-7	1,350–1,425 (730–775)	1,350–1,425 (730–775)	7
...	...	...	...	...	...	...	See Table PW-39-8	1,300–1,445 (705– 85)	8 [Note (2)]
...	...	...	...	...	...	...	...	See Table PW-39-5	15E Group 1

GENERAL NOTE: This Table provides PWHT temperature ranges for materials of different P-Numbers welded together. For P-Numbers not listed, exemptions and other requirements for mandatory postweld heat treatment requirements, see Tables PW-39-1 through PW-39-14.

NOTES:

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P-No.									
1	3	4	5A	5B Group 1	6	7	8 [Note (2)]	15E Group 1	
PWHT Temperature Range, °F (°C)									P-No.
See Table PW-39-1	1,100–1,300 (595–705)	1,200–1,300 (650–705)	1,250–1,300 (675–705)	1,250–1,300 (675–705)	[Note (1)]	[Note (1)]	1,100–1,300 (595–705)	[Note (1)]	1
...	See Table PW-39-2	1,200–1,300 (650–705)	1,250–1,300 (675–705)	**1,250–1,300 (675–705)**	**[Note (1)]**	**[Note (1)]**	**1,100–1,300 (595–705)**	**[Note (1)]**	**3**
...	...	See Table PW-39-3	1,250–1,350 (675–730)	1,250–1,350 (675–730)	[Note (1)]	[Note (1)]	1,200–1,350 (650–730)	1,300–1,350 (705–730)	4
...	...	...	See Table PW-39-4	1,250–1,425 (675–775)	[Note (1)]	1,350–1,425 (730–775)	1,250–1,425 (675–775)	1,300–1,425 (705–775)	5A
...	...	...	...	See Table PW-39-4	[Note (1)]	1,350–1,425 (730–775)	1,250–1,425 (675–775)	1,300–1,425 (705–775)	5B Group 1
...	...	...	...	...	See Table PW-39-6	[Note (1)]	[Note (1)]	[Note (1)]	6
...	...	...	...	...	...	See Table PW-39-7	1,350–1,425 (730–775)	1,350–1,425 (730–775)	7
...	...	...	...	...	...	...	See Table PW-39-8	1,300–1,445 (705–785)	8 [Note (2)]
...	...	...	...	...	...	...	...	See Table PW-39-5	15E Group 1

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