Al-V (Aluminum-Vanadium)

H. Okamoto

The Al-V phase diagram was reviewed by [2001Oka]. Further investigation was needed because the phase diagram assessed by [1989Mur] disagreed significantly with the experimental result reported later by [2000Ric]. For example, the peritectic melting point of Al_8V_5 estimated at 1670 °C by [1989Mur] must be 1408 °C [2000Ric].

Figure 1 shows the Al-V phase diagram assessed by [2004Gon] by taking into account the result of [2000Ric].

The Al-V phase diagram was calculated earlier by [1987Kau] based on old data. [2006Kos] also calculated the phase diagram, but the data of [2000Ric] were overlooked.

The AlV₃ phase has not been discussed in all thermodynamic models described above. In order to attract attention, boundaries of the AlV₃ phase has been copied from [1989Mur] in Fig. 1.

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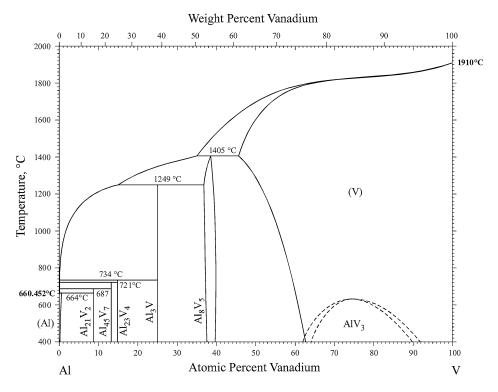


Fig. 1 Al-V phase diagram