

Nb-Si (Niobium-Silicon)

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The Nb-Si phase diagram in [Massalski2] was redrawn from [1993Sch].

[2002Fer] assessed the Nb-Si system thermodynamically. The Si solubility in the $\beta\text{Nb}_5\text{Si}_3$ phase was modeled according to two possibilities: Si substituting for Nb and vacancies in the Nb positions. The calculated results for both models agreed well with [1993Sch]. Figure 1 shows the result for the second case.

References

- 1993Sch:** M.E. Schlesinger, H. Okamoto, A.B. Gokahle, and R. Abbaschian, The Nb-Si (Niobium-Silicon) System, *J. Phase Equilibria*, Vol 14 (No. 4), 1993, p 502-509
2002Fer: P.B. Fernandes, G.C. Coelho, F. Ferreira, C.A. Nunes, and B. Sundman, Thermodynamic Modeling of the Nb-Si System, *Intermetallics*, Vol 10 (No. 10), 2002, p 993-999

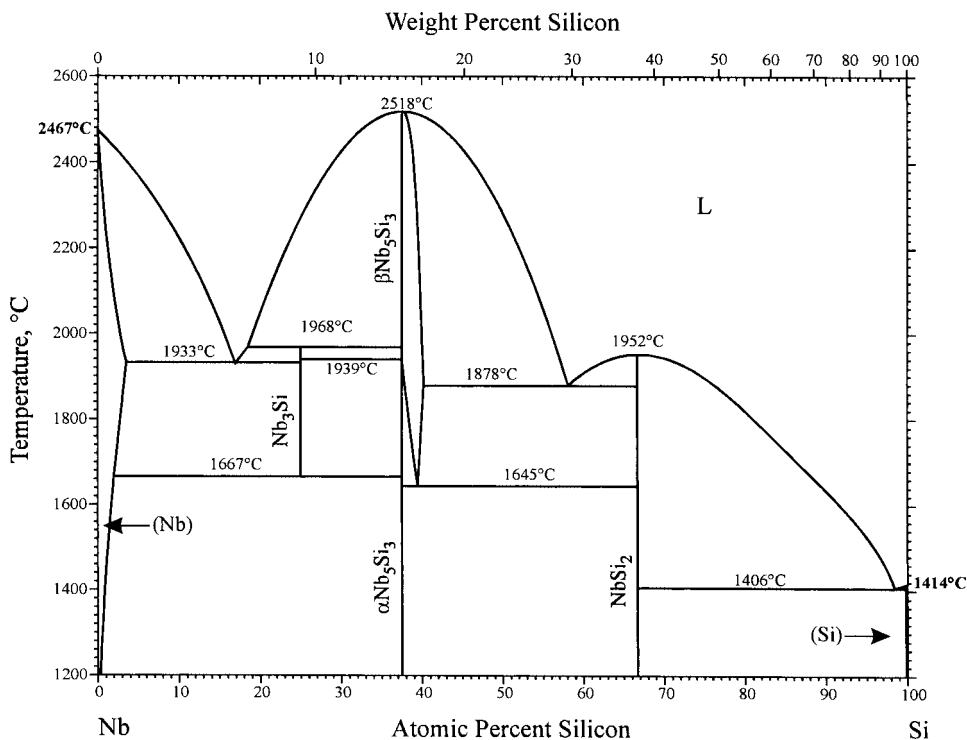


Fig. 1 Nb-Si phase diagram