

Dy-Mg (Dysprosium-Magnesium)

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The Dy-Mg phase diagram in [Massalski2] was updated by [1992Oka] (dashed lines in Fig. 1) primarily based on the work of [1991Sac]. Solid solubility limits of the DyMg, DyMg₂, and Dy₅Mg₂₄ phases were speculative.

Solid lines in Fig. 1 show the Dy-Mg phase diagram obtained by [2004Du] by a thermodynamic assessment primarily based on the phase boundary data of [1991Sac]. The diagram of [2004Du] is expected to be thermodynamically more consistent, but it should be confirmed experimentally, particularly in areas where the disagreement between [1992Oka] and [2004Du] is large.

References

- 1991Sac:** A. Saccone, S. Delfino, D. Maccio, and R. Ferro, A Contribution to the Magnesium Intermetallic Chemistry: Dysprosium-Magnesium System, *Z. Metallkde.*, Vol 82 (No. 7), 1991, p 568-473
- 1992Oka:** H. Okamoto, Dy-Mg (Dysprosium-Magnesium), *J. Phase Equilibria*, Vol 13 (No. 2), 1992, p 214-216
- 2004Du:** Z. Du and H. Liu, Thermodynamic Assessment of the Dy-Mg System, *The 12th National Symposium on Phase Diagram, Materials, Design, and Their Applications*, (China), 2004, p 84-87

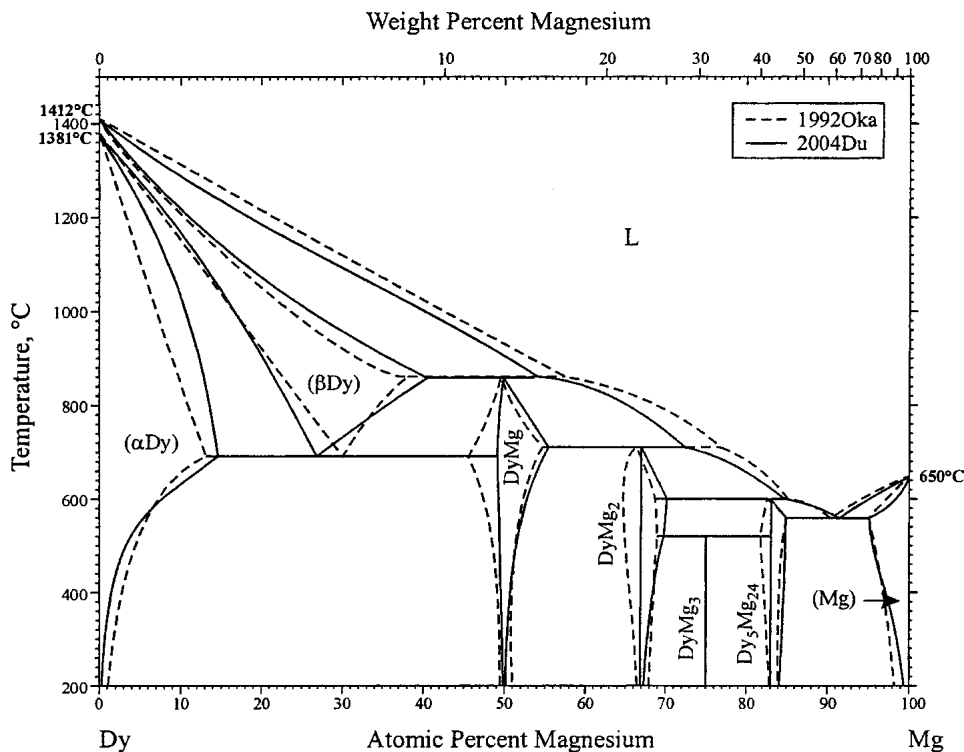


Fig. 1 Dy-Mg phase diagram