

Noble Metal Alloys: Phase Diagrams, Alloy Phase Stability, Thermodynamic Aspects, Properties and Special Features : Proceedings of the TMS Alloy Phase Committee, the TMS Thermodynamics Committee, and the American Society for Metals Alloy Phase Diagram Data Committee, Held at the Metallurgical ... 362 pages 1986 The Society, 1986 9780873390118 TMS Thermodynamics Committee

phase diagrams, alloy phase stability, thermodynamic aspects, properties and special features : proceedings of the TMS Alloy Phase Committee, the TMS Thermodynamics Committee, and the American Society for Metals Alloy Phase Diagram Data Committee, held at the Metallurgical Society of AIME Annual Meeting, February 24-28, 1985. Noble metal alloys: phase diagrams, alloy phase stability, thermodynamic aspects, properties and special features : proceedings of the TMS Alloy Phase Committee, the TMS Thermodynamics Committee, and the American Society for Metals Alloy Phase Diagram Data Committee, held at the Metallurgical Society of AIME Annual Meeting, February 24-28, 1985. Modified with data from ASM Binary Alloy Phase Diagrams, 2nd Edition T. B. Massalski et al., ASM International, Materials Park OH, 1990 (plus updates to date of publication). (10). Reprinted with permission from ASM Binary Alloy phase Diagrams, 2nd Edition T. B. Massalski et al., ASM International, Materials Park OH, 1990 (plus updates to date of publication). (11). 12.1 Phase Diagram Compilations. From 1979 to the early 1990s, the American Society for Metals undertook a project to evaluate critically all binary and ternary alloy phase diagrams. All available literature on phase equilibria, crystal structures and, often, thermodynamic properties were critically evaluated in detail by international experts. TMS-138A, TMS-196 and TMS-238 were designed by using the Alloy Design Program [9] developed by NIMS. TMS-138A [10] is a 4th generation superalloy containing 5.8 wt% Re and 3.6 wt% Ru. TMS-196 is a 5th generation superalloy containing higher content of Re and Ru (6.4 wt% Re and 5.0 wt% Ru) to realize better mechanical properties than TMS-138A and to improve the oxidation properties by adding Cr. The advantage of TMS alloys is much more pronounced at lower temperatures/higher stress and higher temperatures/lower stress conditions. Microstructure observations of crept specimens at 1100°C/137 MPa are shown in Fig. Figure 1. Larson-Miller diagram of creep properties of the investigated alloys. CMSX-4. MX-4/PWA1497. No data available in table. Add another edition? Noble Metal Alloys Phase Diagrams Alloy Phase Stability Thermodynamic Aspects. Subjects. Metals technology / metallurgy, Precious metal alloys, Alloys, Congresses. Edit. Noble Metal Alloys Phase Diagrams Alloy Phase Stability Thermodynamic Aspects. Photocopy edition. This edition was published in January 1986 by Tms. Additional research on phase diagrams is expected for these systems. Great care was taken to eliminate errors in phase diagrams and crystal structure data with the elaborative assistance of Japanese Alloy Phase Diagram Committee members Professor Seiji Miura of Hokkaido University and Professor Hiroshi Ohtani of Kyushu Institute of Technology. Nevertheless, it is very likely that there are still typing errors and drawing errors in this handbook. Therefore, some figures in this article and the previous section are similar, but different in some details.