

Platinum-30 w/o Iridium-to-Platinum-30 w/o Iridium

Self bonding of platinum-30 w/o iridium alloy is readily accomplished at 1200° C. and 10,000 psi for 3 hrs. The surface-preparation treatment used for the specimen shown in Fig. 9 was an etch in Aqua Regia. Similar results have been achieved with pure platinum and platinum-20 w/o iridium. Excellent strength and ductility are achieved with all of these materials.

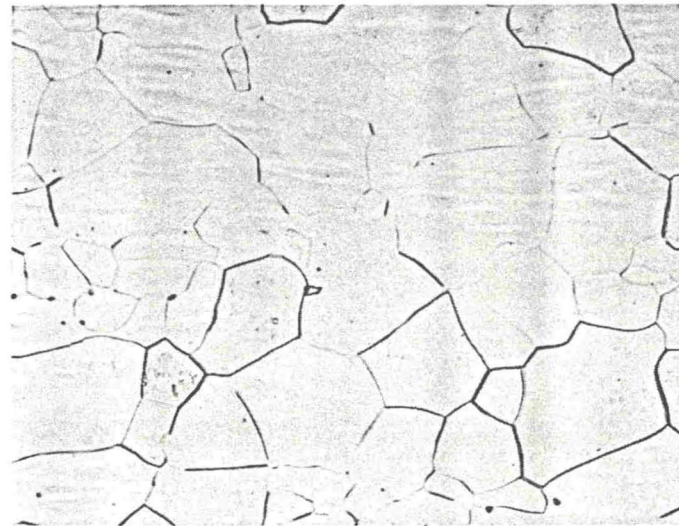


Fig. 9. Platinum-30 w/o iridium self bond. × 500.



Fig. 10. Tantalum self bond. × 100.