THE INFLUENCE MO ON THE DENSITY AND MECHANICAL PROPERTIES OF THE HEAVY ALLOYS

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Proceedings of Proceeding of Third International Conference on Materials and Technologies, MATEHN'02, Acta Technica Napocensis, vol. 45, p.587-590.

Abstract: The mechanical resistance and the tensile of tungsten heavy alloys (AGW) are strongly influenced by the composition of the binder and by hid amount. They are also influenced by their changing. The improvement of these properties changing the binder composition from AGW W-Ni-Fe being done, it appears the idea of a suplimentary alloying of matriceal alloy Ni-Fe. The optimum rate was found 7:3 with elements which will reduce the density only is reasonable limits, and will contribute at improvement of mechanical properties. These elements many be Re, Co, Cr and Mo [1], [2], [3] and [4]. The most efficient sums to be Mo and Re. In almoust all study the Mo added to replace an amount of W. It was determinated that in the same with the raiting of the Mo amount, the values of tensile strength, yielding limit and hardness increase, but the density and the tensile will be diminish. The Re addition in the AGW composition has a bigger effect than the addition of the same quantity of Mo. So, this was done so study the ways in which the Mo may added, to avoid the alloying with Re, and also to obtained a maximum alloing effect.

References:

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