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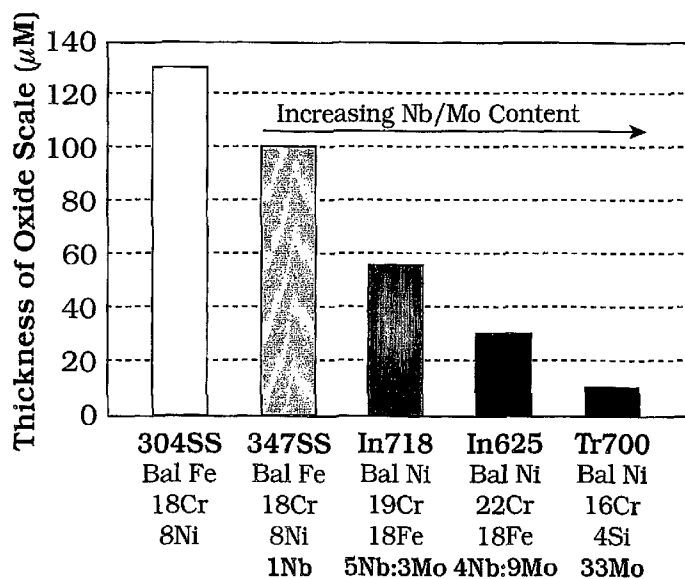
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(54) Title: ADVANCED EROSION RESISTANT CARBIDE CERMETS WITH SUPERIOR HIGH TEMPERATURE CORROSION RESISTANCE



Selected Alloyed Binders Used in TiC Cermets

(57) Abstract: Cermets are provided in which a substantially stoichiometric metal carbide ceramic phase along with a reprecipitated metal carbide phase, represented by the formula M_xC_y , is dispersed in a metal binder phase. In M_xC_y , M is Cr, Fe, Ni, Co, Si, Ti, Zr, Hf, V, Nb, Ta, Mo or mixtures thereof, x and y are whole or fractional numerical values with x ranging from 1 to 30 and y from 1 to 6. These cermets are particularly useful in protecting surfaces from erosion and corrosion at high temperatures.



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