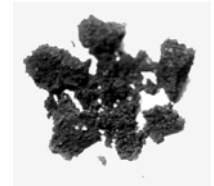




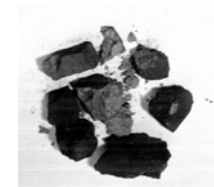
Alloying elements and alloys obtaining from oxidized and hydro-oxidized compounds

Developed technology of alloying elements and alloys from oxidized and hydro-oxidized compounds by the mean of recovery melting in electric furnaces with plasma heating allows:

- ❖ To use as charge materials products of galvanic production slurries, scales of metallurgical and forge shops;
- ❖ To reduce prime cost of melting alloyed steels and cast irons at the expense of cheap alloying elements using;
- ❖ To reduce squares of refusing slurries;
- ❖ To improve ecology situation in the regions of refusing slurries.

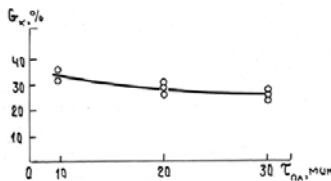


Galvanic bath slurries

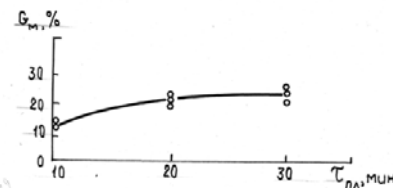


Slurries of electro-chemical treatment

Chemical content of electro-chemical treatment slurry of parts, made of chromium-nikel alloys of obtained metallic base after remelt



Influence of melting time on yield of hard concentrate obtained from slurry



Influence of melting time on metal base yield obtained from hard concentrate

Compounds	Content, % weight	Yield of metal base, %	Elements	Content, % weight
TiO ₂	0.22	23 - 25	Fe	20.5
Ni(OH) ₂	10.0		Mn	0.05
Fe(OH) ₂	0.15		Cr	14.9
SiO ₂	0.05		Ni	61.2
Cr(OH) ₃	2.0		Mo	1.42
Mn(OH) ₂	0.05		Nb	0.87
WO ₃	0.07		W	0.55
MoO ₃	0.05		Ti	0.43
Cl	5.0			
H ₂ O	70			
інші				

Please forward your proposals and suggestions to:

34/1 Vernadsky Avenue, 03680, Kiev-142, Ukraine, Physico-Technological Institute of Metals and Alloys of the National Academy of Sciences of Ukraine. Tel. (044) 444-35-15. Fax (044) 459-50-29. E-mail: metal@otima.kiev.ua