سیویلیکا - ناشر تخصصی مقالات کنفرانس ها و ژورنال ها
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عنوان مقاله:

Effect of grinding media on pulp chemistry and flotation of TAKNAR Cu- Zn sulphide complex ore

محل انتشار:

اولین کنفرانس ملی فناوریهای معدنکاری ایران (سال: 1391)

تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

A complex massive sulphide Cu-Zn sample from TAKNAR mine from Iran was used for all the experiments. The main aim of this study was to investigate the effect of grinding media (dry or wet) on the pulp chemistry and recovery of Cu and Zn in bulk concentrate. After crushing stages, a 1100 g of ore sample was milled. Mill products with d80=85 and 75 micron in wet and dry grinding methods were produced. Rougher bulk flotation experiments were performed with 550 g ore samples, at 30% solids. Sodium Iso Propyl xanthate (SIPX) in conjunction with Aero238 in 1:2 ratio (48 g/t) was used as mixed collector system, and copper sulphate (200 g/t) and MIBC (20 g/t) were employed as sphalerite activator and frother. Sodium hydroxide and High purity Oxygen gas were used for adjusting pH at 8.5 and aeration. The results have shown that, more positive pulp potentials were measured when the feed had been ground in a dry media and the difference in pulp potentials between the dry and wet ground feed was approximately 250 mV. Compared to wet grinding method, in dry grinding method the recovery of Cu and Zn increased approximately 5 and .10%, respectively

کلمات کلیدی:

grinding media, pulp potential, Cu-Zn massive sulphide, bulk flotation

لینک ثابت مقاله در پایگاه سیویلیکا:

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