

This invention is related to non-ferrous metallurgy, in particular, to the structure of electrolyzer for magnesium and chlorine obtaining. Invention is based on the problem of decreasing capital expenses through decreasing cost of transforming station and the leading bus. Bath of the electrolyzer being claimed is additionally divided by heat-proof electro-insulating wall, installed in normal position with respect to the long axis of the electrolyzer, into two half-baths, electrically connected in series. This makes it possible to decrease in each half-bath electrode surface by two times, and to make current at each half-bath twice smaller as well. At that, total productivity of half-baths shall correspond to productivity of the whole electrolyzer. Connection of same electrodes of the half-baths in parallel, and of the anodes of one half-bath to cathodes of the other half-bath in series, makes it possible to decrease direct current being used and to decrease, respectively, expenses for transforming station and mains of leading bus.