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Production of copper concentrate through smelting slag flotation has commenced in 2001. The flotation concentrate is resent to the copper smelter to produce copper cathodes, while the flotation tailings are conveyed to the tailings pond. Copper yield during the smelting slag flotation process reaches the value of some 45-50%. These are introductory explanations provided by the authors Dragan Milanovic, Dragisa Stanujkic and Miroslav R. Ignjatovic, from the Institute for Mining and Metallurgy Bor, Megatrend University - Faculty of Management Zajecar and the Serbian Chamber of Commerce in their paper examining copper flotation.

They further state that the slag in the RTB units is processed in a plant not designed for slag processing, but only adapted for these purposes. As the results were worse than expected, in this paper experts explained the method applied to obtain the smelting slag flotation concentrate while simultaneously achieving better overall copper yield, given that this is the only way to improve the results.

After extensive analyses, the authors came to the following conclusion. Granulated smelting slag is different by its physical, chemical, mineralogical characteristics from the primary smelting slag from the Bor smelter furnace. Basic differences are reflected in the granulometric composition, slag resistance and increased presence of copper. This material, the authors point out, may be further investigated through various methods, such as the investigation of conditions for achieving finer particle size distribution of granulated smelting slag in order to obtain granular smelting slag, which can be directly conveyed to the industrial ball mill. Also, the authors have studied the flotation concentration of smelting slag coming from the furnace in Bor with the previously determined optimal grinding parameters of the latter in order to obtain favourable copper yield results, which in turn during further testing and processing became better and better (from 60.12% over 73.37% to 83.36% of copper yield).

Thus established new smelting slag treatment method is applicable in other pyrometallurgical procedures of copper concentrates flotation processing wherever smelting slag is created as a waste material. Such a procedure is, according to the authors, also applicable to the processing of smelting slag, obtained from the new copper smelter in Bor. Experts and researchers believe that research must continue in order to reach the maximum value of the technological results.