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## ALUMINUM-BASED COMPOSITION MATERIALS FOR PROCESSING ALUMINUM SCRAP

**Usmonov J.M\*; Shakirov Sh.M\*; Ubaydullayev M.M\*; Parmonov S.T\***

\*Tashkent State Technical University  
UZBEKISTAN

### ABSTRACT

*The article deals with the construction of a mill for the production of aluminum-based structural powder composite materials, its processing process, the effect of the process on the granulometric composition of the powder, the composition of the powder from the mechanical properties of the powder obtained from the mill. The results of the study are presented below. A mill design was developed to extract aluminum powder from scrap. The main working body of the mill consists of two disks, the working surface of the disks is coated with a solid alloy of tungsten carbide cobalt.*

**KEYWORDS:** *Aluminum Alloy, Primary Aluminum, Secondary Aluminum, Cast Aluminum, Rolled Aluminum, Processing, Powder Metallurgy, Construction Materials, Powder Composite Materials, Granulometric Composition, Particle Size, Particle Shape, Mechanical, Operational, Technological Properties, General, Technological Parameters, Technology Residual Porosity, Microstructure, Aluminum, Silicon, Mill, Number Of Revolutions.*

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