



*Proceedings of Iran International Aluminium Conference (IIAC2018)  
April 24-25, 2018, Tehran, I.R. Iran*

## **Producing of 6201, 6101 Wire Rod and AAAC Conductors in Alumtek Corporation as the First Producer & Supplier in IRAN**

Nazanin Javadi\*, Ali. Yousefi, RezaHabibi

ALUMTEK CORPORATION, QAZVIN, P.O. Box: 14717-16883, IRAN

**Abstract:** Since the developing of usage of all aluminium alloy conductor (AAAC) in distribution and overhead lines in the world and also in IRAN, it is obvious that production of this kind of conductors is shown as an important subject in order to reduce the import of AAAC conductors or 6201 & 6101 wire rods from abroad. In this experience, we present the production method, mechanical & electrical specifications of this type of conductor's wire as a first manufacturer in IRAN. In the first phase of production, during a continuous casting process, aluminium alloy wire rod (6201 & 6101) in temper 4 was produced and then after a period of time to stabilize mechanical and electrical properties (natural aging process), the wire rod was drawn to different sizes of alloy wire in a cold work process. In this stage artificial aging as a heat treatment process was done on the wires and finally the wires are stranded as a complete alloy conductor (AAAC) in accordance with purchases' requested standards. Hence, the research described in this paper focuses mostly on indigenous technology of producing AAAC conductor in Alumtek Corporation.

**Keywords:** 6201 & 6101 Wire Rod; AAAC Conductor; Alumtek Corporation.