

ASSEMBLING OF THE 800 W MAGNETRON ANODIC BODY BY BRAZING INTO A CONTROLLED ATMOSHERE OVEN

Traian Buidoș¹, Mircea-Petru Ursu¹, Iulian Stănășel¹

¹University of Oradea, Faculty of Managerial and Technological Engineering

Corresponding author: Traian Buidoş, tbuidos@yahoo.com

Abstract: This paper shows experimental research of the authors concerning the assembling of the 800 W magnetrons anodic bodies, made at the University of Oradea. In order to make the anodic bodies, special materials were used, such as OFHC copper, ARMCO steel, kowar etc. The anodic body is assembled by brazing with Ag72Cu28 alloy in a controlled atmosphere oven, which is made also at the University of Oradea. Several assembling methods have been previously tested, but noone proved itself to be satisfactory, because of the special operating conditions of the magnetron, especially the interior high vacuum, high voltage, intense currents etc.

Keywords: magnetron, anodic body, brazing, controlled atmosphere oven