ABSTRACT

Electrocautery, also known as hot cautery, refers to the process by which a current is passed through a metal wire electrode resistance, to produce heat. The electrode is heated then applied on living tissue to achieve hemostatis or various levels of minor surgical procedures in dermatology, ophthalmology, THT, plastic surgery and urology. (Mir, Mohsin R, 2015)

It is equipped with automatic flow monitoring supplied with a 12 V battery with results displayed on LCDs immersed in an electrocautery device. When compared to previous generations, this tool is equipped with a battery indicator to monitor battery power and electric shock protection where the user as a user of the appliance and patient will be safe from electric shock when the circumcision procedure runs.

Based on the results of testing and retrieval of data on 5 kinds of filament nikelin with measurements as much as 20 times in each condition with comparator digital multimeter obtained average value which is not much different from the comparison, that is with error of 2.19% the current on the filament with no load and 1.29% of the current on the filament with the load.

Keywords : Electrocautery, Microcontroller, Nikelin, Circumcision