

Answer on Question #41123, Chemistry, Physical Chemistry

Question

Compute the time required to pass 36000 C through an electroplating bath using..

3 hr

2 hr

2 min

2.5 min

Answer

$$q = I \cdot t$$

$$t = q/I$$

$$t \text{ (seconds)} = q \text{ (Coulombs)} / I \text{ (Amperes)}$$

$$t = 36000/I.$$

Since the value of the current I was not given in the question, we can't derive the answer. Just substitute your value of I in amperes to the last formula, then account for 1 min = 60 s and for 1 h = 3600 s.