

ECONOMICAL MANUFACTURE OF EARTH ROD

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PROJECT REPORT

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CHAPTER I : INTRODUCTORY

1.1 EARTHING

If somebody touches a bare cable which has connected to a source of current, he may receive an electric shock. this causes a muscular spasm, which will at least be unpleasant and may cause him to be flung across the room or to fall off a ladder, etc. In severe cases a men may be electrocuted, that is the spasm will make his heart stop beating, but accidents due to electric shock are usually indirect, caused by falls.

This dangers must be guarded against by earthing which consists of connecting any exposed metal work, which may accidentally become alive, to the earth. Theoretically, earth means the general mass of the earth, but in practice it is normally sufficient to connect it to a system of metal pipes embedded in the ground or to an earth electrode which consists of a number of copper rods driven into the ground to a depth of about 4 meter or more, depending on the soil conditions.