

ELECTRICAL MINING INSTALLATIONS

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Electrical Mining Installations by P. W. Freudemacher

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P. W. FREUDEMACHER

**ELECTRICAL
MINING
INSTALLATIONS**

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ELECTRICAL MINING INSTALLATIONS

By
P. W. FREUDEMACHER
A.M.I.E.E.



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PREFACE

THIS volume has been written especially for colliery engineers and contractors engaged in the installation of electrical plant for mining purposes.

The first chapter deals briefly with the elementary principles of electrical engineering, special reference being made to alternate current working. Many readers will already have a sufficient knowledge of these principles and for them the volume will be a guide to the application of electric power for mining work.

Readers who are engineers but not essentially electrical engineers will find this opening chapter of service, and it is hoped that the notes on alternate current working will clear up the many abstruse points on this subject and give a working knowledge of the terms and quantities involved.

The author has described various classes of plant for all mining purposes and has given formula and tables so that the necessary calculations in regard to power, outputs, etc. may be made. It is impossible to avoid mathematics altogether in a practical book for engineers; but examples have been carefully prepared in order to show how the more elaborate calculations are to be accomplished.

The last chapter on electric winding systems has

been included to complete the subject opened up in the previous chapter, and although the installation of a main winding engine is perhaps a matter for experts in this particular branch, the volume would not have been complete without reference to this matter.

P. W. F.

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