With Al_2O_3 not over five per cent. in the slag, the proportion of MgO is not important. When Al_2O_3 rises to 10 per cent. or over, MgO in excess of twenty per cent. is found to cause viscosity.

It is usual, when sulphur is present, to add limestone *in excess of the slag requirement*, allowing seven *available* CaO to four sulphur (56 : 32). No lime addition, however, will entirely remove sulphur from the pig metal.

In the case above, suppose the fuel contained 0.75 sulphur, the addition of limestone would be 2.45 lbs. for each 100 lbs. fuel. This we leave the student to verify.

In closing this work we again call attention to the fact that we have written mainly for the student.

The method of slag computation by simultaneous equations, first taught by the author in 1883, will be found to be a great labor saver.

The more complex the requirements, the greater will be the *relative* complexity avoided.

The whole of the calculation of "excess" and residual quantities is eliminated.

It is hoped that the publication of this little treatise may prove serviceable to many who have been more or less confused by the irregularities of the methods in vogue.

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