

Energy Management System

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Abstract : This paper presents a formulation and solution for industrial load management and product grade problem. The formulation is created using linear programming technique thereby optimizing the electricity cost by scheduling the loads satisfying the process, storage, time zone and production constraints which will create an impact of reducing maximum demand and thereby reducing the electricity cost. Product grade problem is formulated using integer linear programming technique of optimization using lingo software and the results show that overall increase in profit margin. In this paper, time of use tariff is utilized and this technique will provide significant reductions in peak electricity consumption.

Keywords : cement industries, integer programming, optimal formulation, objective function, constraints

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