

Abstract:**How to Determine Optimal Stock in Production**

RQ: The purpose of the research was to determine the optimal ordering of materials in production, time of ordering and calculating the cost.

Purpose: Determination of the optimal order quantity, time and cost of concrete material and optimize the organization and storage.

Method: Method of data collection was secondary theoretical sources and data collection on projected needs and value of materials as well as data analysis with EOQ model calculations.

Results: The optimal amount of screws was calculated that was estimated at 36,000 pieces that can be ordered every 28 days. In addition, the annual costs of maintaining inventories were calculated to € 357.77.

Organization: By optimizing inventory, stock increases are prevented as well as production halts are avoided.

Society: Introducing the system of optimization and implementing it into practice.

Originality: Originality is in presenting a concrete case of using the EOQ model.

Limitations: Unexpected increase in capacity due to increased demand, inventory stock and state of finances.

Keywords: Production, inventories, optimize inventories, optimize, order, study supplies, determining, EOQ model.