## Analysis of Inventory Control, Lot Size and Reorder Point for Engro Polymers and Chemicals

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**Abstract :** The purpose of this study is to determine safety stock, maximum inventory level, reordering point, and reordering quantity by rearranging lot sizes for supplier and customer in MRO (maintenance repair operations) warehouse of Engro Polymers & Chemicals. To achieve the aim, physical analysis method and excel commands were carried out to elicit the customer and supplier data provided by the company. Initially, we rearranged the current lot sizes and MOUs (measure of units) in SAP software. Due to change in lot sizes we have to determine the new quantities for safety stock, maximum inventory, reordering point and reordering quantity as per company's demand. By proposed system, we saved extra cost in terms of reducing the time of receiving from vendor and in issuance to customer, ease of material handling in MRO warehouse and also reduce human efforts. The information requirements identified in this study can be utilized in calculating Economic Order Quantity.

**Keywords:** carrying cost, economic order quantity, fast moving, lead time, lot size, MRO, maximum inventory, ordering cost, physical inspection, reorder point

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