



## Consultants in Material Handling Logistics

Operations Design for Warehousing, Manufacturing and Distribution

### **MOBILE EQUIPMENT REPAIR PARTS DESIGN – ORE MINING OPERATION FOR A MAJOR STEEL MANUFACTURER**

#### **CLIENT:**

The taconite ore mining operation for a major steel manufacturer needed to upgrade its mobile equipment support warehouse.

#### **DESCRIPTION OF OPERATION:**

The warehouse was a stand alone operation with 24/7 support requirements. The warehouse stocks about 5,000 parts that range from filters to hydraulic hoses to lamps. Major parts such as engines and transmissions are not stored in the warehouse but may be on the shop floor. There was no data system to support the operation.

#### **OBJECTIVE:**

The objective was to determine the best parts storage and handling system to maximize responsiveness to the needs of the operation at a minimum cost.

#### **CONSULTING SCOPE OF WORK:**

1. Analyze current conditions and operations for the parts storage and handling operations and identify opportunities to improve process efficiencies and control
2. Develop prototype SKU groupings by reviewing the current movement and inventory data, cube/dimensional information and special handling/storage requirements
3. Quantify the design criteria for SKUs, inventory and throughput requirements based on data and projections to be provided for the parts distribution operation
4. Develop alternative operating scenarios including higher levels of mechanization and information systems support for the consolidated facility
5. Evaluate quantitative and qualitative aspects of the alternative operating scenarios including remaining decentralized
6. Recommend operating methods and associated layouts for the recommended parts storage and handling system
7. Develop outline level implementation plans for the recommended system

#### **RESULTS:**

The client is currently implementing Gross & Associates recommendations.