SYSTEM FOR OPTIMIZING TRANSPORTATION SCHEDULING AND INVENTORY MANAGEMENT OF BULK PRODUCT FROM SUPPLY LOCATIONS TO DEMAND LOCATIONS

Abstract

An optimization system for transportation scheduling and inventory management of a bulk product from supply locations to demand locations is provided. The system has a mathematical model containing mathematical programming equations. In one embodiment, the objective function of the mathematical model is to minimize a cost basis of the product transported. The system also has a database system for data input that interfaces with the mathematical model. The last component of the system is a mathematical optimization solver that solves the equations provided by the mathematical model after the mathematical model receives data from the database system. As a result, the optimization system provides optimized or simulated results for the input data.

Figure 1