

Scheduling of Vessel Transportation and Sales Distribution for Exporting Refinery Product

Bai Chunmei, 김 영¹, 박선원*
카이스트; ¹한국기계연구원
(sunwon@kaist.ac.kr*)

This work addresses the scheduling model for exporting refinery product to global markets. Global supply-network usually involves special features such as exchange rate and tariffs. An MILP model is developed for inventory management of storage tanks at global ports, vessel transportation scheduling among countries, and distribution management for global markets. The exchange rates and product prices are considered as uncertainties here with several scenarios and finally a robust scheduling decision is proposed with the method of bi-level optimization to minimize opportunity cost of each scenario realization.