A Survey on the Ship Loading Problem

Recent statistics show that large container terminals can process more than 30 million containers a year, and are constantly in search for the better ways to optimize processing time, deliver high quality and profitable services. Some of the terminal decisions are, however, dependent on externalities. One of those is the ship loading process. Based on the stowage plan received by liner shippers, terminal operators plan the execution of load and discharge operations. In this paper we present a literature review for the Ship Loading Problem, where stowage and loading sequencing and scheduling are integrated to improve the efficiency of the ship handling operations. We present a survey of the state-of-the-art methods and of the available benchmarking data.