

# A STUDY ON THE METHODOLOGY OF INCREASING SAFETY FOR COMETTO MSPE SYSTEM

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**Abstract:** In recent years, the heavy transport industry has been developing strongly, the transportation of super long and overweight packages is more advantageous due to modern transportation systems applying the achievements and development of technology. The leading trailer manufacturers in the world such as: Cometto, Nicolas, Kamag, and Goldhofer... increasingly research and manufacture for this heavy transport industry. In Vietnam, leading transport companies have invested in self-propelled tractors from Cometto (Italy) to transport these goods. However, during operation, safety has been revealed. Therefore, in order to further enhance the safety of the entire system when transporting large economic parcels to the required location, a method is proposed that the throttle valve have been attached to appropriate position in the hydraulic pump system. The efficiency of throttle assembly is verified in practice when applying this improved trailer system for transporting the drilling rigs up to 3,200 tons in Vietnam.

**Key words:** MSPE, Heavy transport, Self-propelled trailers, Hydraulic system.

## 1. INTRODUCTION

Recently, the transport of oversized and overweight packages with high safety requirements for people and the cargo is extremely important to businesses in the heavy transport industry. The road surface is the most common object to be damaged during the transportation of these special packages. Therefore, many methods proposed as solutions to solve this road surface problem in [1, 2]. The oversized and overweight packages such as: 1) Oil rig components need to be transported from the installation location to the Barge and then pulled to the sea for completion; 2) Transformers from several dozen tons to nearly 300 tons need to be transported to power stations; 3) Concrete beam girders that need to be transported into a common site are transported using large-capacity tractors to push or pull cargo trailers, which is called the towing method and illustrated in Fig. 1.