

Reverse Logistics in Steel Production – A Case Study of Processing and Logistics of Steel Scrap

Professor

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Professional Experience

University of Oulu, Finland

- Professor (1998 - present)
- Head of Department (2004-2012)
- Director of the Finnish Virtual University Development Unit (2001-2003)
- Director of the Continuing Education Centre (1996-1998)
- Associate professor (1994-1995)

Abstract

The scope of the research was to examine the current state of the steel scrap related activities and their problems. Steel recycling activities refers to activities and tasks which aims to meet the steel scrap need of the steel mill. The purpose was also to find out precisely the reasons for the problems and consider ways to eliminate them. Furthermore, the aim was to investigate the opportunities to develop steel recycling activities in a wider perspective and considering the future considerations.

The research method applied here was the case study research. Gathering of the data involved interviews, observations, reports and database data. Description of the present state and its problems is based on acquired information.

One of the main problems was inventory management and reporting. These were caused by outdated warehouse management system and its improper use, which is due to a lack of guidance. It was also found that the lack of description of the activities and material flows caused extra work and increased uncertainty. Uncertainty was also due to lack of descriptions of common concepts. Another problem was the fluctuation of the quality of scrap. Significant part of execution of activities is outsourced.

The survey showed that the technical specifications of the contracts between the case company and vendors were ambiguous. Although despite the current problems the daily functions of steel scrap process worked surprisingly well.

The root cause of problems and the factor that prevents the development of activities, however, was the fact that steel recycling activities have not been seen as inter-dependent events, which are an important part of case company's supply chain.

The steel recycling activities open the way to extend the reverse logistics of steel scrap to cover the entire supply chain. This contains other locations and customers of the case company.

Time

2014/04/25 (Friday) 14:00~16:00

Venue

教育學院 階梯教室 I (C128)

Organizer