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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- Literature Review -- Slipstream Experiment Setup -- Slipstream Data Processing Methodology -- Slipstream Data Analysis, Results and Discussion -- Aerodynamic Load Experiment Setup -- Aerodynamic Load Experiment Processing Methodology -- Aerodynamic Load Analysis, Results and Discussion -- Conclusions and Recommendations for Further Work.
Sommario/riassunto	This outstanding thesis characterises the aerodynamic flow around a container freight train; investigating how changing container loading configurations affect the magnitude of aerodynamic forces measured on a container. 1/25th scale moving-model freight train experiments were carried out at the University of Birmingham's TRAIN rig facility to investigate slipstream velocities and static pressure, as well as measuring, using a specifically designed on-board pressure monitoring system, the aerodynamic loads on containers. Results were compared

with full scale data and assessed in terms European standards for trackside worker and passenger safety limits. Rail vehicle aerodynamic studies have tended to previously focus on high speed passenger trains in line with increases in train speed. The research presented within this thesis highlights the issues associated with the aerodynamic development around a freight train, providing the foundations for further research and a basis from which to develop international safety standards in relation to freight, as well as high speed trains.
