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Brakes

Regulations concerning the manufacture of brake components

Self-adjusting load-proportional braking system and automatic "empty-loaded" control device



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CONTENTS

Foreword	1
Executive summary	3
Field of application	4
Reference documents	5
Abbreviations and Symbols	6
Concepts, terms and definitions	7

General Application

1 – Scope of application	9
2 – Requirements	10
3 – Tests to be carried out for the approval of self- adjusting load-proportional braking equipment for use in international traffic	11
4 – Approval of self-adjusting load-proportional braking equipment for use in international traffic	12
Appendix A: Reserved	13
Appendix B: Reserved	14
Appendix C: Self-adjusting load-proportional braking equipment accepted in international traffic	15
Appendix D: Self-adjusting load-proportional braking systems with a characteristic inflected curve approved for international traffic	16
Appendix E: Automatic "empty-loaded" control mechanisms accepted in international traffic	17
Regulatory listing	18

Foreword

An International Railway Solution (IRS) is a document drawn up by consensus and applied on a voluntary basis which aims to facilitate and harmonise railway operation.

IRSs are gradually replacing UIC Leaflets.

Members of the International Union of Railways (UIC) participate in the creation of IRSs, of which they benefit in full. Furthermore, marketing to railway stakeholders contributes to the sharing and harmonisation of good practices, in accordance with UIC's primary goal.

While IRSs do not have the force of law, they are created and published in a professional manner and with technical approval on the basis of UIC procedures, and have full technical legitimacy in the railway sector.

The "General application" section constitutes the heart of the IRS and contains the working group's expertise applicable in the broadest manner. The addition of a "Specific application" aims to cover factors specific to a region, a type of service, etc.

Some provisions shall be implemented in all cases to ensure correct application and maintain the system's cohesiveness. Certain operational circumstances require that specific provisions be systematically applied by all users of the document.

For the purposes of understanding, the user acknowledges that the expression of:

- obligation indicates requirements to be respected in order to comply with the expertise expressed in the document (usually "shall");
- recommendation indicates options that are favourable but not essential (usually "should");
- permission indicates options that are recognised but without consequence (usually "may");
- capacity indicates possibilities from a technical standpoint and not permissions or probabilities (usually "can").

Obligation, recommendation and capacity can be expressed in the negative to indicate prohibiting, non-recommendation and incapacity.

If applicable, notably for the purposes of compliance with a UIC approval, passages that are recommended or mandatory for the cohesiveness of the system will be accompanied by the letters "R" and "MCS" respectively.

This IRS reflects the following UIC working group expertise:

Rail System Forum - Rolling Stock Sector - SET_07 "Braking"

It integrates in full or in part the following UIC Leaflets:

- 541-04 - 4th edition, October 2014

It complements the following standards:

- none

The following IRSs constitute a complementary series:

- none

Executive summary

The International Union of Railways (UIC) develops and distributes International Railway Solutions (IRSs) in order to help railway stakeholders, achieve further harmonisation and collaboration.

This IRS lays down the requirements for self-adjusting load-proportional braking devices, empty/loaded changeover devices, and continuously-operative automatic load-sensing devices (weigh valves) for indirect compressed-air brakes in accordance with *EN 14198*.

It is made for the Railway Undertakings.

it integrates in full or in part the following UIC Leaflets:

- *541-04 - 4th edition, October 2014*

It complements the following standards:

- none