## **Table of contents**

## Foreword

| Yvonne Becker, Kassel, Germany  Standardization in the railway sector   | 1    |
|---|------|
| Gilles Bourgeois, Paris, France Application of the new EN 15085 standard package. Experience of one French Body after one year application – Organization and good practices for certification        | 3    |
| DrIng. Manfred Kaßner, Salzgitter, Germany  Fatigue design of welded components of railway vehicles   | 10   |
| DiplIng. SFI Jens Raabe, Kiel, Germany From 3D design to technical drawings according to DIN EN 15085   | 19   |
| DrIng. Roland Rennert, Dresden, Germany  Assessment of fatigue tests on complex structures  | 22   |
| Olaf Tünkers, Ratingen, Germany  Pneumatic an hydraulic operated clamping systems for welding or joining fixtures   | 27   |
| DiplIng. Ulrich Wiescholek, Bonn, Germany State of European Directives for Interoperability and their Technical Specifications regarding their consequences for the European Process of Certification | 35   |
| Prof. DrIng. Steffen Keitel, Halle (Saale), Germany  The new European Committee for Welding of Railway Vehicles   | 58   |
| DiplIng. Thomas Rütti, Basel, Switzerland  Certification bodies with EN 15085-2 – Experiences of the SVS (Switzerland)  | 64   |
| DiplIng. EWE Martin Strothmann, Salzgitter;  Application of EN 15085 from the point of view of the clients  (vehicle manufacturers and operators, resp.)  | 73   |
| Stefano Morra, IIS Italy IIS experience with EN 15085 and the online register   | 77   |
| DiplIng. Thomas Richter, Duisburg, Germany  Adhesive bonding of railway vehicles and parts – quality assurance  according to DIN 6701   | 80   |
| Dr. Herbert Staufer, Wels, Austria  Potential of laser hybride welding for innovative light weight concepts in the rail vehicle construction  | .100 |

| DiplIng. Erik Trostmann, Magdeburg, Germany                           |     |
|---|-----|
| Automatic In-Process Wheelset and Wheel Profile Measurement:          |     |
| Technology and Practical Experience                                   | 108 |
| DiplIng. (BA) Andreas Schirmer, Dresden, Germany                      |     |
| DEKRA Business Line Rail-Welding Standard EN 15085 from an inspection |     |
| bodie's point of view   | 112 |
| List of the authors   | 124 |