

DIN EN 17397-1:2021-03 (E)

Railway applications - Rail defects - Part 1: Rail defect management

| Contents | | Page |
|---|--|-------------|
| European foreword | | 3 |
| 1 | Scope | 4 |
| 2 | Normative references | 4 |
| 3 | Terms and definitions | 4 |
| 4 | Abbreviations | 7 |
| 5 | Defect management system | 7 |
| 5.1 | General | 7 |
| 5.2 | Defect types | 7 |
| 5.3 | NDT inspection of rails | 7 |
| 5.4 | Management of NDT inspection results | 8 |
| 6 | Limits of rail condition | 8 |
| 6.1 | General | 8 |
| 6.2 | Definition of limits | 8 |
| 6.3 | Rail defect immediate action limits LIA | 10 |
| 7 | Risk mitigation | 10 |
| Annex A(informative) Description of rail defects | | 11 |
| A.1 | Definition and description of rail defects | 11 |
| A.2 | Characterization of rail defects | 15 |
| A.2.1 | Transverse cracking | 15 |
| A.2.2 | Horizontal cracking | 19 |
| A.2.3 | Longitudinal vertical cracking | 25 |
| A.2.4 | Squat | 29 |
| A.2.5 | Head checks | 33 |
| A.2.6 | Other rail head surface conditions | 35 |
| A.2.7 | Corrosion | 50 |
| A.2.8 | Wear | 54 |
| A.2.9 | Other rail defects | 59 |
| Annex B (informative) Immediate action limits LIA | | 67 |
| Bibliography | | 69 |