

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

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

---

<b>Contents</b>		<b>Page</b>
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