DIN EN 13674-2:2011-01 (E)

Railway applications - Track - Rail - Part 2: Switch and crossing rails used in conjunction with Vignole railway rails 46 kg/m and above (includes Amendment A1:2010)

Contents

Page

Foreword 3

Introduction 5

1 Scope 7

2 Normative references 7

3 Terms and definitions 7

4 Information to be supplied by the purchaser 8

5 Steel grades 9

6 Dimensions, static properties, linear mass and tolerances 9

7 Manufacture 10
7.1 Product integrity 10
7.1.1 Factory production control 10
7.1.2 Best practice manufacture 10
7.2 Blooms 10
7.3 Rails 10
7.4 Identification 10
7.4.1 Branding 10
7.4.2 Hot stamping 11
7.4.3 Cold stamping 11
7.4.4 Other identification 11

8 Qualification of the manufacturer 12

9 Acceptance tests 12
9.1 Laboratory tests 12
9.1.1 General 12
9.1.2 Chemical composition 12
9.1.3 Microstructure 16
9.1.4 Decarburisation 17
9.1.5 Oxide cleanness 17
9.1.6 Sulfur prints 17
9.1.7 Hardness 18
9.1.8 Tensile tests 19
9.1.9 Retest procedures 19
9.2 Dimension tolerances 19
9.2.1 Profile 19
9.2.2 Straightness, surface flatness and twist 20
9.2.3 Cutting and drilling 24
9.3 Gauges 24
9.4 Inspection for internal quality and surface quality 24
9.4.1 Internal quality 24
9.4.2 Surface quality 26

Annex A (normative) Rail profiles 38

Annex B (informative) Comparison of steel designations referred to in this standard compared to those in EN 10027-1 and EN 10027-2 107

Annex ZA (informative) !!!!Relationship between this European Standard and the Essential Requirements of EU Directive 2008/57/EC of the European Parliament and of the Council of 17 June 2008 on the interoperability of the rail system within the Community (Recast)""""" 108

Bibliography 110