ISO/TR 17671-2:2002-02 (E)

Welding - Recommendations for welding of metallic materials - Part 2: Arc welding of ferritic steels

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 References 1

3 Terms and definitions 1

4 Symbols and abbreviated terms 2

5 Parent metal 3

6 Weldability factors 3

7 Handling of welding consumables 3

8 Weld details 4

9 Welds in holes or slots 4

10 Preparation of joint face 4

11 Alignment of butt welds before welding 5

12 Preheating 5

13 Tack welds 5

14 Temporary attachments 6

15 Heat input 6

16 Welding procedure specification 6

17 Identification 6

18 Inspection and testing 6

19 Correction of non-conforming welds 7

20 Correction of distortion 7

21 Post-weld heat treatment 7

Annex A Avoidance of hydrogen cracking (also known as cold cracking) 8

Annex B Guidance on joint detail design (when there is no application standard) 32

Annex C Possible detrimental phenomena resulting from welding of steels, not covered by other annexes **34**

Annex D Heat affected zone toughness and hardness **35**

Annex E Avoidance of solidification cracking **42**

Annex F Avoidance of lamellar tearing **44**

Bibliography **50**