

ISO 14347:2008-12 (E)

Fatigue - Design procedure for welded hollow-section joints - Recommendations

Contents		Page
Foreword		iv
1	Scope	1
1.1	General	1
1.2	Materials	1
1.3	Types of joints	1
2	Normative references	1
3	Terms and definitions	2
4	Symbols and abbreviated terms	7
5	Cumulative fatigue damage	12
6	Partial safety factor	12
7	Fatigue design procedures	12
7.1	Hot-spot stress method	12
7.2	Design procedures	13
8	Fatigue strength	13
8.1	Member forces	13
8.2	Nominal stress ranges	14
8.3	SCF calculations	14
8.4	Hot-spot stress ranges	14
8.5	Fatigue strength curves	15
9	SCF calculations for CHS joints	17
9.1	Uniplanar CHS T- and Y-joints	17
9.2	Uniplanar CHS X-joints	18
9.3	Uniplanar CHS K-joints with gap	18
9.4	Multiplanar CHS XX-joints	19
9.5	Multiplanar CHS KK-joints with gap	20
9.6	Minimum SCF values	21
10	SCF calculations for RHS joints	21
10.1	Uniplanar RHS T- and X-joints	21
10.2	Uniplanar RHS K-joints with gap	22
10.3	Uniplanar RHS K-joints with overlap	23
10.4	Multiplanar RHS KK-joints with gap	24
10.5	Minimum SCF values	25
Annex A (normative)	Quality requirements for hollow sections	26
Annex B (normative)	Weld details	27
Annex C (informative)	A fatigue assessment procedure	29
Annex D (normative)	SCF equations and graphs for CHS joints	31
Annex E (normative)	SCF equations and graphs for RHS joints	47
Bibliography		67