

ISO 14346:2013-03 (E)

Static design procedure for welded hollow-section joints - Recommendations

Contents		Page
Foreword	v	
1 Scope	1	
2 Normative references	1	
3 Terms and definitions	1	
4 Symbols and abbreviated terms	2	
5 Requirements	5	
6 Materials	12	
7 Joint types	13	
8 Joint classification	19	
9 Limit states design	23	
10 Partial load and safety factors for loads and resistances	24	
11 Static design procedures	24	
11.1 General	24	
11.2 Design member forces	24	
11.3 Design resistance	24	
11.4 Design criteria	25	
12 Design member forces	25	
12.1 Analysis methods	25	
12.2 Design member forces	26	
13 Design criteria	26	
13.1 Failure modes	26	
13.2 Uniplanar joints	26	
13.3 Uniplanar overlap joints with a CHS, RHS, I- or H-section chord	28	
13.4 Special uniplanar joints	29	
13.5 Multiplanar joints	30	
14 Design resistance of uniplanar CHS braces to CHS chord joints	30	
14.1 Design axial resistance	30	
14.2 Design moment resistance	31	
15 Design resistance of uniplanar gusset plates, I- or H-section braces or RHS braces to CHS chord joints	32	
16 Design resistance of multiplanar joints with CHS chord	33	
17 Design resistance of uniplanar RHS braces or CHS braces to RHS chord joints	34	
17.1 Design axial resistance	34	
17.2 Design moment resistance	36	

18	Design resistance of uniplanar SHS or CHS braces to SHS chord joints	37
18.1	Design axial resistance	37
18.2	Design moment resistance	38
19	Design resistance of uniplanar gusset plate to RHS joints	38
20	Design resistance of multiplanar joints with RHS chord	39
21	Design resistance of uniplanar CHS or RHS braces to I- or H-section chord joints	40
21.1	Design axial resistance	40
21.2	Design moment resistance	42
22	Design resistance of uniplanar overlap joints with a CHS, RHS, I- or H-section chord	42
Annex A (informative) Quality requirements for hollow sections		46
Annex B (informative) Weld details		48
Annex C (informative) Partial safety factors on static strength		50
Bibliography		52