

# ISO 14346:2013-03 (E)

## Static design procedure for welded hollow-section joints - Recommendations

---

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