

# DIN EN 14439:2010-03 (E)

## Cranes - Safety - Tower cranes (includes Amendment A2:2009)

---

<b>Contents</b>	<b>Page</b>
Foreword .....	3
Introduction .....	4
1 Scope.....	5
2 Normative references .....	5
3 Terms and definitions.....	7
4 List of significant hazards.....	7
5 Safety requirements and/or protective measures .....	10
5.1 General .....	10
5.2 Design requirements on the load bearing structure .....	10
5.3 Design requirements for equipment .....	11
5.4 Design requirements for health and safety .....	12
5.5 Noise reduction .....	21
6 Verification of the safety requirements and/or protective measures .....	21
6.1 General .....	21
6.2 Method of verification.....	21
6.3 Fitness for purpose.....	23
6.4 Noise measurement .....	23
7 Information for use.....	23
7.1 General .....	23
7.2 Instructions handbook .....	23
7.3 Marking.....	25
Annex A (normative) Stability requirements .....	27
Annex B (informative) Requirements for the provision of anti-collision on tower crane .....	28
Annex C (normative) Outside indicators on the crane .....	30
Annex D (normative) Verification of the safety requirements and/or protective measures .....	31
Annex E (normative) Noise test code .....	34
Annex F (normative) $\boxed{A_1}$ Climbing system $\langle A_1 \rangle$ .....	40
Annex G (informative) Marking - Example of layout .....	47
Annex H (informative) Selection of a suitable set of crane standards for a given application .....	52
Annex ZA (informative) $\boxed{A_2}$ Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC $\langle A_2 \rangle$ .....	53
Annex ZB (informative) $\boxed{A_2}$ Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC $\langle A_2 \rangle$ .....	54
Bibliography .....	55