

BS 7121-5:2019



BSI Standards Publication

Code of practice for safe use of cranes

Part 5: Tower cranes

bsi.

Publishing and copyright information

The BSI copyright notice displayed in this document indicates when the document was last issued.

© The British Standards Institution 2019

Published by BSI Standards Limited 2019

ISBN 978 0 539 00983 5

ICS 53.020.20

The following BSI references relate to the work on this document:

Committee reference MHE/3/11

Draft for comment 19/30377513 DC

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

Contents

	Page
Foreword	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
Section 1: General management of lifting operations with tower cranes	5
4 Management of installation and lifting operations	5
4.1 Safe system of work	5
4.2 Control of the installation or lifting operation	5
<i>Figure 1 — Flow of information between personnel involved in lifting operations</i>	6
4.3 Duties of the person appointed to control the lifting operation	7
<i>Table 1 — Example load and environmental hazards associated with lifting operations</i>	9
<i>Figure 2 — Relationship between complexity index and lift category</i>	10
<i>Table 2 — Illustration of the categorization of lifts based on environmental and load complexities</i>	11
5 Planning of the lifting operation	13
5.1 General	13
5.2 Risk assessment	15
5.3 Method statements	15
5.4 Team briefing/induction	16
5.5 Selection of cranes	16
5.6 Siting of crane	17
5.7 Contracts	17
6 Selection and duties of personnel other than the appointed person	18
Section 2: Selection of tower cranes	19
7 Selection of tower cranes	19
7.1 General	19
7.2 Remote controls	22
8 Siting of crane	22
8.1 General	22
8.2 Crane standing and support conditions	23
8.3 Out-of-service wind speed	23
<i>Figure 3 — UK out-of-service wind region map for tower cranes</i>	25
8.4 Tower crane foundations	26
8.5 Proximity hazards	29
Section 3: Safety and operational considerations	32
9 Safety	32
9.1 Modifications and materials	32
9.2 Product modifications and updates	32
9.3 Identification of person directing crane movements	32
9.4 Personal protective equipment (PPE) and safety equipment	32
9.5 Work at height	33
9.6 Access and egress (including emergency escape)	34
<i>Figure 4 — Base enclosure</i>	38
<i>Figure 5 — Anti-climb panels</i>	39
<i>Figure 6 — Trapdoor</i>	39
<i>Figure 7 — Trapdoor and base enclosure lock</i>	40
9.7 Fire risk assessment and fire extinguishers	40
9.8 Attachments	41
9.9 Limiting and indicating devices	42