INTERNATIONAL STANDARD

ISO 8686-3

Second edition 2018-09

Cranes — **Design principles for loads** and load combinations —

Part 3:

Tower cranes

Appareil de levage à charge suspendue — Principes de calcul des charges et des combinaisons de charges —

Partie 3: Grues à tour





COPYRIGHT PROTECTED DOCUMENT

© ISO 2018

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Fax: +41 22 749 09 47 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Contents Foreword			Page
			iv
1	Scop	e	1
2	Norn	native references	1
3		ns and definitions	
4	Symbols and abbreviated terms		
5	General		
6	Loads		
	6.1	General	
	6.2	Loads and values for dynamic factors, $\phi_{\rm i}$	
	6.3	Loads due to out-of-service wind	
		6.3.1 General	
		6.3.2 Loads due to out-of-service wind from rear	6
		6.3.3 Loads due to out-of-service wind from front	7
		6.3.4 Loads due to out-of-service wind from side	7
	6.4	Loads caused by erection, dismantling and transport	
	6.5	Loads on means provided for access	9
7	Load combinations		
	7.1	General	
	7.2	Favourable and unfavourable masses	
	7.3	Partial safety factors for the mass of the crane	
	7.4	High risk applications	
	7.5	Load combinations for the proof of strength	
	7.6 7.7	Load combinations for the proof of fatigueLoad combinations for the proof of stability	
	7.7	Resistance to drifting caused by wind (travelling cranes)	
8	Loads on crane support structure		
	8.1	General	
	8.2	Load combinations	
Ann	ex A (no	ormative) Loads and load combinations for climbing systems	21
Ribliography			23