(Revision of ASME B30.27-2009)

Material Placement Systems

Safety Standard for Cableways, Cranes, Derricks, Hoists, Hooks, Jacks, and Slings

AN AMERICAN NATIONAL STANDARD



(Revision of ASME B30.27-2009)

Material Placement Systems

Safety Standard for Cableways, Cranes, Derricks, Hoists, Hooks, Jacks, and Slings

AN AMERICAN NATIONAL STANDARD



Date of Issuance: March 26, 2014

The next edition of this Standard is scheduled for publication in 2019.

ASME issues written replies to inquiries concerning interpretations of technical aspects of this Standard. Interpretations are published on the ASME Web site under the Committee Pages at http://cstools.asme.org/ as they are issued.

Errata to codes and standards may be posted on the ASME Web site under the Committee Pages to provide corrections to incorrectly published items, or to correct typographical or grammatical errors in codes and standards. Such errata shall be used on the date posted.

The Committee Pages can be found at http://cstools.asme.org/. There is an option available to automatically receive an e-mail notification when errata are posted to a particular code or standard. This option can be found on the appropriate Committee Page after selecting "Errata" in the "Publication Information" section.

ASME is the registered trademark of The American Society of Mechanical Engineers.

This code or standard was developed under procedures accredited as meeting the criteria for American National Standards. The Standards Committee that approved the code or standard was balanced to assure that individuals from competent and concerned interests have had an opportunity to participate. The proposed code or standard was made available for public review and comment that provides an opportunity for additional public input from industry, academia, regulatory agencies, and the public-at-large.

ASME does not "approve," "rate," or "endorse" any item, construction, proprietary device, or activity.

ASME does not take any position with respect to the validity of any patent rights asserted in connection with any items mentioned in this document, and does not undertake to insure anyone utilizing a standard against liability for infringement of any applicable letters patent, nor assumes any such liability. Users of a code or standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, is entirely their own responsibility.

Participation by federal agency representative(s) or person(s) affiliated with industry is not to be interpreted as government or industry endorsement of this code or standard.

ASME accepts responsibility for only those interpretations of this document issued in accordance with the established ASME procedures and policies, which precludes the issuance of interpretations by individuals.

No part of this document may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.

The American Society of Mechanical Engineers Two Park Avenue, New York, NY 10016-5990

Copyright © 2014 by
THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS
All rights reserved
Printed in U.S.A.

CONTENTS

Foreword		\mathbf{v}
Committee Rost	er	vii
B30 Standard In	troduction	ix
	anges	xii
Chapter 27-0	Scope, Definitions, References, and Personnel Competence	1
Section 27-0.1	Scope	1
Section 27-0.2	Definitions	1
Section 27-0.3	Reference to Other Codes and Standards	3
Section 27-0.4	Personnel Competence	4
Chapter 27-1	Construction and Installation	5
Section 27-1.1	Markings	5
Section 27-1.2	Mobile Material Placing Boom Construction	6
Section 27-1.3	Work Platforms, Access Walkways, and Gangways	6
Section 27-1.4	Electrical Installations	6
Section 27-1.5	Ergonomics	6
Section 27-1.6	Outriggers	7
Section 27-1.7	Controls and Indicators	7
Section 27-1.7	Guards	7
Section 27-1.8 Section 27-1.9		7
	Mobile and Stationary Placing Booms	-
Section 27-1.10	Delivery Systems	8
Section 27-1.11	Loss of Power	8
Section 27-1.12	Remote Starting	8
Section 27-1.13	Manuals	8
Section 27-1.14	Translation of Non-English Documentation Into English	9
Section 27-1.15	Fuel and Exhaust Systems	9
Section 27-1.16	Hoppers	9
Section 27-1.17	Pump Pressure Release	9
Chapter 27-2	Inspection, Testing, and Maintenance	11
Section 27-2.1	Inspection	11
Section 27-2.2	Testing	12
Section 27-2.3	Maintenance	13
Chapter 27-3	Operation	14
Section 27-3.1	Qualifications for and Conduct of Operators and Operating Practices	14
Section 27-3.2	Material Placement System Lockout/Tagout	21
Section 27-3.3	Signals	21
Figures		
27-0.1-1	Material Placement System: Truck-Mounted Concrete Pump With	
	Integrated Placing Boom	2
27-0.1-2	Material Placement System: Separate Placing Boom	2
27-0.1-3	Material Placement System: Truck-Mounted Telescopic Conveyor System	2
27-0.1-4	Material Placement System: Examples of Delivery System	
0.7.4.7.5.4	Components	3
27-1.7.5-1	Standardized Joystick Movement	8
27-1.16-1	Grates and Hoppers	10
27-3.1.5-1	Area of Extended Outriggers	20

27-3.1.6.1-1	Danger Zone for Material Placement Systems and Delivery System	
	Operating Near Electrical Transmission Lines	22
27-3.3.2-1	Material Placement System Hand Signals	23
Table		
27-3.1.6.3-1	Minimum Required Clearances	23