



UL 2565

STANDARD FOR SAFETY

Industrial Metalworking and Woodworking Machine Tools

UL Standard for Safety for Industrial Metalworking and Woodworking Machine Tools, UL 2565

First Edition, Dated May 1, 2013

SUMMARY OF TOPICS

This revision of ANSI/UL 2565 dated October 24, 2019 Revisions To Expand The Scope To Cover Larger Industrial Metalworking And Woodworking Type Machines.

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin.

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated May 3, 2019 and August 16, 2019.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form by any means, electronic, mechanical photocopying, recording, or otherwise without prior permission of UL.

UL provides this Standard "as is" without warranty of any kind, either expressed or implied, including but not limited to, the implied warranties of merchantability or fitness for any purpose.

In no event will UL be liable for any special, incidental, consequential, indirect or similar damages, including loss of profits, lost savings, loss of data, or any other damages arising out of the use of or the inability to use this Standard, even if UL or an authorized UL representative has been advised of the possibility of such damage. In no event shall UL's liability for any damage ever exceed the price paid for this Standard, regardless of the form of the claim.

Users of the electronic versions of UL's Standards for Safety agree to defend, indemnify, and hold UL harmless from and against any loss, expense, liability, damage, claim, or judgment (including reasonable attorney's fees) resulting from any error or deviation introduced while purchaser is storing an electronic Standard on the purchaser's computer system.

No Text on This Page

MAY 1, 2013
(Title Page Reprinted: October 24, 2019)



ANSI/UL 2565-2019

1

UL 2565

Standard for Industrial Metalworking and Woodworking Machine Tools

Prior to the first edition, the requirements for the products covered by this standard were included in the Outline of Investigation for Manual and Semiautomatic Metal Sawing Machines, UL 2565.

First Edition

May 1, 2013

This ANSI/UL Standard for Safety consists of the First Edition including revisions through October 24, 2019.

The most recent designation of ANSI/UL 2565 as an American National Standard (ANSI) occurred on October 24, 2019. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at <https://csds.ul.com>.

UL's Standards for Safety are copyrighted by UL. Neither a printed nor electronic copy of a Standard should be altered in any way. All of UL's Standards and all copyrights, ownerships, and rights regarding those Standards shall remain the sole and exclusive property of UL.

COPYRIGHT © 2019 UNDERWRITERS LABORATORIES INC.

No Text on This Page

CONTENTS

INTRODUCTION

1	Scope	5
2	Components	6
3	Units of Measurement	6
4	Undated References	6
5	Glossary	6

CONSTRUCTION

6	Spacings	7
7	Devices	7
8	Strain Relief	7
9	Grounding	8
	9.1 General	8
	9.2 Grounding means	8
10	Printed-Wiring Boards	8
11	Transformers	9
12	Capacitors, Capristors and Varistors	9
	12.1 General	9
	12.2 Isolating components	9
	12.3 Across-the-line components	9
13	Parts Subject to Pressure	9
14	Pressure-Relief Devices	10

PROTECTION AGAINST INJURY TO PERSONS

15	General	11
16	Power Input Test	11
17	Temperature Test	11
18	Dielectric Voltage-Withstand Test	14
	18.1 General	14
	18.2 Secondary circuits (controlled environment) test	15
	18.3 Power transformer test	15
19	Overvoltage and Undervoltage Tests	15
20	Use With Water Test	16
21	Single Phasing Test	16
22	Fan Locked Rotor Test	17
23	Blocked Filter Test	17
24	Drive Motor Locked Rotor Test	17
25	Emergency Stop Operation Test	17
26	Breakdown of Components Test	18
27	Power Loss and Power Restoration Test	18
28	Strain Relief Test	18
29	Push-Back Strain Relief Test	18
30	Resistance of Grounding Path Test	19
31	Flexing Test	19
32	Physical Stability Test	19
33	Lifting/Transportation Means Loading Test	20
34	Parts Subject to Pressure Tests	20
35	Pressure-Relief Devices Test	21
36	Securement of Snap-On Cover Test	21
37	Wheel Or Caster Securement Test	22

38	Component Analysis Test	22
38.1	General	22
38.2	Evaluation program	22
39	Safety-Related Software Analysis.....	23

MARKING

40	General	23
----	---------------	----

APPENDIX A

	Standards for Components	24
--	--------------------------------	----

INTRODUCTION

1 Scope

1.1 This standard covers industrial and commercial metalworking and woodworking machines, either manual or semiautomatic, that cut or change the shape of a work piece and machinery and accessory equipment, used in industrial and commercial applications, having a total connected power of 5 HP (3.7kw) or greater, or having 3-phase wiring.

1.2 This equipment is intended to be installed in accordance with the National Electrical Code, ANSI/NFPA 70 and the Electrical Standard for Industrial Machinery, NFPA 79 and provided with a means for grounding the machine on a branch circuit rated not more than 600 V.

1.3 Machines included in this category are not intended for the handling of hazardous material.

1.4 The use of some equipment involves certain inherent hazards related to the risk of injury that cannot be wholly eliminated by practical design features. These requirements are intended to reduce such hazards to an acceptable level.

1.5 This standard does not cover:

a) Robotics and associated control equipment. This equipment is covered by the Standard for Robots and Robotic Equipment, UL 1740.

b) Automated equipment designed to perform repetitive manufacturing related cutting or sawing tasks, is covered by the Outline of Investigation for Factory Automation Equipment, UL 2011.

c) Cord-connected or permanently-connected stationary and light industrial tools which are covered under Standard for Stationary and Fixed Electric Tools, UL 987.

d) Cord-connected transportable tools which are covered under UL 62841-1 and the applicable Part 3 series of standards.

e) Cord-connected metalworking and woodworking machines used in industrial and commercial applications either having a total connected power of less than 5 HP (3.7 KW) or not having 3-phase wiring.

1.6 Devices covered by this standard are not intended for the handling of hazardous materials in unattended applications.

1.7 In addition to complying with the requirements in this standard, machines covered under the scope shall also comply with:

a) Industrial metalworking machines shall comply with:

1) The applicable requirements in the Standard for Stationary and Fixed Electric Tools, UL 987.

b) Industrial woodworking machines shall comply with:

1) ANSI O1.1 Woodworking Machinery – Safety Requirements series of standards; and

2) The applicable requirements in the Standard for Stationary and Fixed Electric Tools, UL 987.