

ANSI B11.0 2015 Safety of Machinery; General Requirements and Risk Assessment

Pre 2015 Description

New, modified, or rebuilt power driven machines used to shape and or form metal or other materials by cutting, impact, pressure, electrical or other processing techniques (or combination).

2015 Description

New description is expected that will expand the scope.

Who should purchase?

Anyone who needs an overview of the theoretical procedure to do a risk assessment. It includes useful examples in the appendix.

Definitions

If these are terms are used on your plant floor, chances are this standard will give you valuable guidance.

Antirepeat: requires release of all actuating controls before another cycle can be initiated

Bed: stationary member of machine that supports tooling or other associated equipment

Chuck: device used for gripping

Full revolution clutch: when engaged, cannot be disengaged until machine has completed a single cycle

Part revolution clutch: may be engaged or disengaged during the machine cycle

Counterbalance: means to provide balance of reciprocating mass

Foot control: also foot pedal, foot treadle, foot treadle bar, pedal

In-running nip point: location where part of body could be drawn in and injured (i.e. between rotating machine members) also: in-going nip point

Ram: machine member that reciprocates linearly. Also: slide

Safety pin: prevents movement of machine of machine part

Trip: initiation of a machine cycle

Frequently Asked Questions

If I follow the ANSI B11.0 2015 standard, do I automatically comply with ISO 12100?

Yes

If I follow the ISO 12100 standard, so I automatically comply with ANSI B11.0 2015?

No. In principle it is harmonized with ISO 12100 but yet B11.0 has added information.

B11.0 differences: includes requirements for both supplier and end user, additional guidance, and existing machines

Can I use this standard if I have a portable hand machine?

No

Do acceptable safeguarding devices include personal protective equipment (PPE)?

No because a safe guarding device is something that detects or prevents inadvertent access to the hazard. Refer to ANSI B11.19. (PPE should be used in conjunction with other risk reduction measures or when no other control method is available or feasible.)

Where can end users get more information about using design to reduce / eliminate hazards?

ANSI B11.TR7

Can hazards be completely eliminated?

No machine can be completely safe. Through a risk assessment, want to reduce hazards to an acceptable level. Do this by understanding risks and looking at probability of occurrence.

How should hazards be identified?

Hazard identification should be conducted with all risk reduction measures (including safeguarding and specialized training) conceptually removed.

When will the update for this standard be released?

Expected to available mid to late 2015.

When does the standard go into effect?

30 months after the standard is released. It is preferred to be used as soon as it is released. ANSI standards have a long transition time to allow manufactures time to complete existing designs without making significant and costly modifications.

OMRON AUTOMATION AND SAFETY • THE AMERICAS HEADQUARTERS • Chicago, IL USA • 847.843.7900 • 800.556.6766 • www.omron247.com

OMRON CANADA, INC. • HEAD OFFICE

Toronto, ON, Canada • 416.286.6465 • 866.986.6766 • www.omron247.com

OMRON ELECTRONICS DE MEXICO • HEAD OFFICE

México DF • 52.55.59.01.43.00 • 01-800-226-6766 • mela@omron.com

OMRON ELECTRONICS DE MEXICO • SALES OFFICE

Apodaca, N.L. • 52.81.11.56.99.20 • 01-800-226-6766 • mela@omron.com

OMRON ELETRÔNICA DO BRASIL LTDA • HEAD OFFICE

São Paulo, SP, Brasil • 55.11.2101.6300 • www.omron.com.br

OMRON ARGENTINA • SALES OFFICE

Cono Sur • 54.11.4783.5300

OMRON CHILE • SALES OFFICE

Santiago • 56.9.9917.3920

OTHER OMRON LATIN AMERICA SALES

54.11.4783.5300

OMRON EUROPE B.V. • Wegalaan 67-69, NL-2132 JD, Hoofddorp, The Netherlands. • +31 (0) 23 568 13 00 • www.industrial.omron.eu

Authorized Distributor:

Automation Control Systems

- Machine Automation Controllers (MAC) • Programmable Controllers (PLC)
- Operator interfaces (HMI) • Distributed I/O • Software

Drives & Motion Controls

- Servo & AC Drives • Motion Controllers & Encoders

Temperature & Process Controllers

- Single and Multi-loop Controllers

Sensors & Vision

- Proximity Sensors • Photoelectric Sensors • Fiber-Optic Sensors
- Amplified Photomicrosensors • Measurement Sensors
- Ultrasonic Sensors • Vision Sensors

Industrial Components

- RFID/Code Readers • Relays • Pushbuttons & Indicators
- Limit and Basic Switches • Timers • Counters • Metering Devices
- Power Supplies

Safety

- Laser Scanners • Safety Mats • Edges and Bumpers • Programmable Safety Controllers • Light Curtains • Safety Relays • Safety Interlock Switches