



DEPARTMENT OF LABOR

Occupational Safety and Health Administration

[Docket No. OSHA-2007-0003]

RIN 1218-AC98

Mechanical Power Presses Update

AGENCY: Occupational Safety and Health Administration (OSHA), DOL.

ACTION: Request for information (RFI).

SUMMARY: OSHA requests information and comment on issues related to the mechanical power presses standard. The standard was issued in 1971 based upon the 1971 American National Standards Institute (ANSI) industry consensus standard for mechanical power presses. This ANSI standard has been updated a number of times since 1971. OSHA is seeking information regarding whether it should update the mechanical power presses standard and, if so, how closely the standard should follow the current ANSI standard for mechanical power presses. It is also seeking information on the types of presses that should be covered, the use and certification of equipment, and other topics such as presence-sensing device initiation (PSDI) systems, and requirements for press modifications, training, and injury reporting. OSHA will use the information received in response to this RFI to determine what action, if any, it may take to reduce regulatory burdens while maintaining worker safety.

DATES: Submit comments on or before **[INSERT 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. All submissions must bear a postmark or provide other evidence of the submission date.

ADDRESSES: Comments may be submitted as follows:

Electronically: You may submit comments, including attachments, electronically at <http://www.regulations.gov>, the Federal eRulemaking Portal. Follow the online instructions for submitting comments.

OSHA will place comments and requests for a hearing, including personal information, in the public docket, which will be available online. Therefore, OSHA cautions interested parties about submitting personal information such as Social Security numbers and birthdates.

Docket: To read or download comments or other material in the docket, go to <http://www.regulations.gov>. Documents in the docket are listed in the <http://www.regulations.gov> index; however, some information (e.g., copyrighted material) is not publicly available to read or download through this website. All submissions, including copyrighted material, are available for inspection through the OSHA Docket Office. Contact the OSHA Docket Office for assistance in locating docket submissions.

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SUPPLEMENTARY INFORMATION:

Copies of this Federal Register notice: Electronic copies are available at <http://www.regulations.gov>. This *Federal Register* notice, as well as news releases and other relevant information, also are available at OSHA's webpage at <http://www.osha.gov>.

References and Exhibits: Documents referenced by OSHA in this RFI, other than OSHA standards and *Federal Register* notices, are in Docket No. OSHA-2007-0003

(Mechanical Power Presses Update). The docket is available at <http://www.regulations.gov>, the Federal eRulemaking Portal. For additional information on submitting items to, or accessing items in, the docket, please refer to the “**ADDRESSES**” section of this RFI. Most exhibits are available at <http://www.regulations.gov>; some exhibits (e.g., copyrighted material) are not available to download from that webpage. Contact the OSHA Docket Office for assistance in locating docket submissions; telephone: (202) 693 2350; email: technicaldatacenter@dol.gov.

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I. Background

A. Introduction: OSHA’s Existing Mechanical Power Presses Standard

A mechanical power press is a mechanically powered machine that shears, punches, forms, or assembles metal or other material by means of cutting, shaping, or use of combination dies. A mechanical power press is a two-part system: the first part is a movable upper part, called the ram; and the second part is a stationary bed or anvil. A die or punch is placed on the ram and the ram descends into a die block attached to the anvil. The punch and die block are known as the die set. A mechanical power press can be

either full-revolution or part revolution. A full-revolution press cannot be stopped once the cycle begins. A part-revolution press has a brake that can stop the press mid-cycle.

In 1971, OSHA published the standard for mechanical power presses, § 1910.217, based on the 1971 edition of ANSI B11.1, the industry consensus standard on mechanical power presses.¹ The OSHA standard includes requirements for inspecting, maintaining, and modifying mechanical power presses to ensure that they are operating safely and includes a special reporting requirement for injuries to employees operating mechanical power presses. The standard also includes requirements for safeguarding the point of operation. OSHA's standard does not cover press brakes, hydraulic and pneumatic power presses, bulldozer presses, hot bending and hot metal presses, forging presses and hammers, riveting machines, or similar types of fastener applicators.

There are numerous ways to guard mechanical power presses, including point of operation guards, die enclosures, fixed barrier guards, movable barrier guards, presence sensing devices (PSDs), and presence sensing device initiation (PSDI) systems. PSDs are electronic units designed to automatically stop the machine from cycling when an intrusion is detected in the danger zone (point of operation) between the fixed bed of a press and the ram. PSDs are in wide use and are permitted under the OSHA standard as a safeguard to prevent operation of the press when an employee's hands or other part of the body are at the point of operation. PSDI is a system that permits the PSD to initiate the stroke of the press when it senses that all parts of the body are clear of the point of operation. The ability to stop the press mid-cycle is considered essential for the safe operation of a press in PSDI mode; when something enters the point of operation while the ram is in motion, the PSDI system stops the press. Full-revolution power presses cannot use PSDI because these machines cannot be stopped mid-cycle.

As initially adopted in 1971, the OSHA standard did not permit PSDI, but instead

¹ See 36 FR 10466, 10643 (May 29, 1971), reprinted at 39 FR 23502 (June 27, 1974).

required that an operator physically initiate the stroke of a power press by using hand controls or a foot pedal. In 1976, OSHA granted an experimental variance to Interlake Stamping Company of Willoughby, Ohio, to allow the company to use PSDI on mechanical power presses. In granting the variance, OSHA stated that the PSDI system reduced worker fatigue, a recognized cause of accidents.² After using PSDIs for five years, Interlake Stamping found that a PSDI improved press productivity by 30 percent.³ During the 26 years of using PSDI, no Interlake Stamping workers were injured while using the PSDI system.⁴

In 1988, OSHA added paragraph (h) to § 1910.217 to allow the use of PSDI on part-revolution mechanical power presses.⁵ Among other requirements, OSHA required that OSHA-approved third parties validate the PSDI systems upon installation and at least annually thereafter.⁶ OSHA believed that national testing laboratories and industry organizations would conduct the third-party validation. To date, however, no third party has sought OSHA approval to conduct third-party validation.

In 2011, Interlake applied for a permanent variance for relief from the third party validation requirements. OSHA responded with additional conditions for alternative means to provide additional protection to employees operating in PSDI mode. This included descriptions of the power press and light curtains in use; equipment guarding means and worker training; and inspection, testing and maintenance procedures. Due to cost concerns, Interlake withdrew its request for the permanent variance and then removed its PSDI system in 2013.⁷ OSHA is not aware of any remaining facility that operates mechanical power presses in PSDI mode.

² See 41 FR 36702 (August 31, 1976).

³ See 79 FR 13078 (March 7, 2014).

⁴ See https://www.osha.gov/dea/lookback/psdi_final2004.html.

⁵ See 53 FR 8322 (March 14, 1988).

⁶ See § 1910.217(h)(11).

⁷ See Interlake Stamping Corp.; Revocation of an Experimental Variance and Interim Order, 79 FR 13078 (March 7, 2014).

B. Regulatory History

OSHA's Section 610 Review of the PSDI Requirements.

OSHA is required by the Regulatory Flexibility Act, 5 U.S.C. 610, to conduct periodic reviews of its safety and health standards ("Section 610 Reviews"). The purpose of these reviews is to determine whether OSHA should change, amend, or rescind standards consistent with the objectives of applicable statutes, to minimize any significant economic impact of the standards on a substantial number of small entities. OSHA conducted a Section 610 Review of the PSDI section of the mechanical power press standard (29 CFR 1910.217(h)) to determine why PSDI had not been implemented and to identify how the standard could be changed to facilitate PSDI use in a manner that protects worker safety.⁸ In the *Federal Register* notice (67 FR 55181, August 28, 2002) informing the public about the Section 610 Review and soliciting comments, OSHA sought comments on four options for revising the standard:

Option 1--Update all of § 1910.217 to make it consistent with ANSI B11.1-2001 or something similar.⁹

Option 2--Revise the third-party validation requirements.

Option 3--Eliminate all requirements for third-party validation and possibly replace them with a self-certification requirement and leave the other PSDI requirements intact.

Option 4--Replace OSHA's current PSDI requirements with the PSDI requirements in ANSI B11.1-2001.

Responses to the Section 610 Review.

Based on analyses and information obtained during the Section 610 Review, OSHA concluded it should pursue Option 1, to update all of § 1910.217 to make it

⁸ The review also included a review under Section 5 of Executive Order 12866.

⁹ At the time OSHA initiated its Section 610 Review in 2002, ANSI B11.1-2001 was the most recent version of the consensus standard.

consistent with ANSI B11.1-2001 or something similar (Ex. OSHA-2007-0003-0002).
2007 Advance Notice of Proposed Rulemaking Request for Data, Information, and Comments.

In 2007, the agency published an Advance Notice of Proposed Rulemaking (ANPRM) on mechanical power presses.¹⁰ The ANPRM discussed a broad range of issues concerning the possible update of the mechanical power presses standard. The issues to be considered went beyond those of the current mechanical power presses standard and included broadening the scope of the standard to include other types of presses, equipment, and processes not previously addressed. OSHA invited comments on 37 questions, which were organized into the following six topic categories:

1. The Scope of the Mechanical Power Presses Standard,
2. Consensus Standards Related to Mechanical Power Presses,
3. Technical Issues,
4. Cost Issues,
5. Training Requirements, and
6. Reporting and Recordkeeping Requirements.

Commenters were encouraged to address any aspect of power presses, including pneumatic, hydraulic, and other presses, and provide information that would assist the agency in its consideration of what actions were appropriate. The agency was particularly interested in ways to incorporate flexibility into the standard to make it more protective, and to make compliance more straightforward.

The Scope of the Power Presses Standard

OSHA's first broad area of questioning in the 2007 ANPRM was on whether to broaden the scope of the mechanical power press standard including questions related to whether to:

¹⁰ See 72 FR 30729 (June 4, 2007).

- include other types of presses, such as hydraulic and pneumatic power presses;
- regulate all power presses under one standard or under multiple standards; and
- ensure general machine guarding requirements in § 1910.212 adequately protect employees using non-mechanical power presses.

Respondents agreed that the existing mechanical power presses requirements in § 1910.217 were outdated. However, they varied in their comments regarding how to regulate various types of power presses. Suggestions included the following:

- Updating the standard based on the ANSI B11.1 standard;
- Developing an OSHA specific standard for each type of press;
- Considering adopting ANSI standards for other types of presses; and
- Expanding § 1910.212 to cover other types of presses beyond mechanical.

Consensus Standards Related to Mechanical Power Presses

The agency also sought comment on whether the revised OSHA standard should include information from the appendices or the explanatory information columns contained in the ANSI B11.1 standard. Commenters did not agree on exactly what information an OSHA standard should contain. Some commenters suggested that explanatory material should be non-mandatory. Others suggested that some explanatory material could be included as regulatory text.

Technical Issues

In response to questions regarding technical issues, commenters stated the following:

- Mechanical power presses are in decline;
- OSHA should consider the role of automation on safety and production;
- ANSI B11.1 permits modification and reconstruction of presses; and
- PSDI validation is useful, but third-party validation may not be necessary.

Training Requirements

Commenters expressed widespread support for strengthened training requirements. Many respondents stated that OSHA should require semiannual or annual training. Commenters were split on whether OSHA should change its existing performance-oriented approach with specific training provisions.

Reporting and Recordkeeping Requirements

OSHA requested comment on whether to eliminate the requirement in § 1910.217(g) that employers report point-of-operation injuries to OSHA within 30 days. One commenter questioned why OSHA singled out injuries involving mechanical power presses and required a special procedure for reporting injuries when there is already a general recordkeeping and reporting standard. Other comments, including an industry trade group, stated that OSHA should retain the requirement, and that employers find this injury data useful.

C. Hazards and Incidents

OSHA looked at several sources of data to understand the hazards that led to injuries involving mechanical power presses. These include injury reports required by § 1910.217(g), Bureau of Labor Statistics (BLS) injury data, and OSHA severe injury reporting data.

29 CFR 1910.217(g) Injury Reports.

OSHA's standard (29 CFR 1910.217(g)) requires employers to report, within 30 days of an occurrence, all point-of-operation injuries to operators or other employees. These reports must contain, among other things, the injury sustained (amputations, lacerations, crushes, etc.), the task being performed (operation, set-up, maintenance, or other), the type of safeguard being used, and the cause of the accident. Although OSHA has collected this data, it has not been subject to any verification for accuracy or completeness. As explained further below, OSHA believes these reports may undercount the number of incidents.

OSHA received 204 reports of incidents related to mechanical power presses from 2007 through 2015—an average of about 23 per year. These incidents resulted in a reported 388 injuries (an average of 43 per year) with finger amputations being the most prevalent injury—accounting for 39 percent of all injuries over that period.

Table 1 - Mechanical Power Press Incidents and Injuries, 2007 - 2015

	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total	Percent of Total
Crush	17	5	6	14	12	10	6	9	6	85	22%
Finger Amputation	29	10	16	19	26	24	9	10	10	153	39%
Fingertip Amputation	18	6	8	11	1	6	7	8	1	66	17%
Fracture	3	3	8	0	1	2	5	3	1	26	7%
Laceration	10	6	7	0	6	2	4	3	4	42	11%
Other/Unspecified	4	0	2	1	2	2	3	0	2	16	4%
Total Injuries	81	30	47	45	48	46	34	33	24	388	
Total Incidents	37	15	20	27	26	24	20	21	14	204	

Note: Multiple injuries can result from a single incident. For example, a worker that suffered a single finger amputation would be considered to have one injury as a result of one incident. However, if a worker suffered amputation of five fingers, that would be considered five injuries as a result of one incident.

BLS Injury Data

Using BLS data, OSHA estimated the number of injuries that result from accidents involving mechanical power presses. BLS publishes data on all press injuries involving days away from work, but such data do not differentiate between mechanical or other types of power presses. BLS reports injury data by type of press including unspecified presses, assembly presses, brake presses, punch presses, and presses not elsewhere classified. According to BLS, from 2011 through 2016, there were 7,030 nonfatal occupational injuries involving days away from work due to presses—an average of 1,172 annually. Unfortunately, BLS' classification scheme does not allow OSHA to identify which injuries occur during the use of mechanical power presses versus other types of presses. OSHA believes it is possible that some occupational injuries reported in the BLS data may be attributable to mechanical power press operations but are not being reported to OSHA under OSHA's existing standard at 29 CFR 1910.217(g).

OSHA Severe Injury Reporting Program.

On September 18, 2014, OSHA issued a final rule that implemented a Severe Injury Reporting Program (SIR), which requires, among other things, that employers report all amputations resulting from a work-related incident to OSHA within 24 hours of the employer becoming aware of the incident (79 FR 56130). From 2015 to 2017, OSHA received about 8,200 reports of amputations under the SIR program. In 2015, OSHA received 246 reports of amputations in the fabricated metal product manufacturing industry (NAICS 332), 109 reports in primary metal manufacturing (NAICS 331), 123 reports in machinery manufacturing (NAICS 333), and 134 reports in transportation equipment manufacturing (NAICS 334). There is no further breakdown of the data into how many amputations occurred on power presses, much less mechanical power presses; however, research from the late 1980s suggested that about 10 percent of all reported amputations occur among power press operators (Injuries and Amputations Resulting from Work with Mechanical Power Presses; <https://www.cdc.gov/niosh/docs/87-107/>) (Ex. OSHA-2007-0003-0025).

OSHA research from the late 1980s suggested that about 49 percent of injuries on mechanical power presses resulted in an amputation causing about 557 injuries to power press operators on average each year (<https://www.cdc.gov/niosh/docs/87-107/>). Based on estimates in the Section 610 Review of the PSDI standard, OSHA estimates that large mechanical power presses account for 9.5 percent of power presses used in the United States (https://www.osha.gov/dea/lookback/psdi_final2004.html). OSHA believes that these manufacturing industries are likely to include power press operators and that it is possible that some amputations attributable to mechanical power press operations are not being reported to OSHA under OSHA's existing standard at 29 CFR 1910.217(g).

D. Consensus Standards

The American Engineering Standards Committee, a predecessor of ANSI,

released its first consensus standard for mechanical power presses in 1922. The standard has been updated periodically. The most recent ANSI consensus standard for mechanical power presses is ANSI B11.1-2009 (R2020), “Safety Requirements for Mechanical Power Presses”; (Ex. OSHA-2007-0003-0026). Hydraulic and pneumatic power presses are both covered under a different consensus standard, ANSI B11.2, which was originally released in 1982. The most recent consensus standard for hydraulic and pneumatic power presses is ANSI B11.2-2013 (R2020), “Safety Requirements for Hydraulic and Pneumatic Power Presses”; (Ex. OSHA-2007-0003-0027).

E. Training and Certification

The OSHA mechanical power presses standard spells out training requirements in several sections. Section 1910.217(e)(3) requires training of maintenance personnel, and provides that it is the responsibility of the employer to ensure the original and continuing competence of personnel caring for, inspecting, and maintaining power presses. Section 1910.217(f)(2) requires the employer to train and instruct the operator in the safe method of work before starting work on any operation covered by this section, and to ensure by adequate supervision that correct operating procedures are being followed. Section 1910.217(h)(13) requires that training for operators using presses in PSDI mode must be provided before the employee initially operates the press and as needed to maintain competence, but not less than annually thereafter. Such training must also include certain enumerated instructions specific to presses used in PSDI mode. In addition, OSHA requires that employers certify employee training in the use of the PSDI mode.

The training provisions in ANSI B11.1-2009 require the employer to meet the following:

- train personnel associated with press production systems in safe working procedures and ensure they are qualified to perform the functions to which they are assigned;

- instruct all operators in the operation of the press production system including the proper method of operation for each production set-up before the press production system is placed into production and that all operators demonstrate their knowledge of the press production system;
- instruct all die setters in the proper procedures for selecting, inspecting, and installing dies appropriate to the operations;
- ensure that maintenance personnel are trained in safe working procedures for inspecting and maintaining press production systems;
- ensure that supervisors are trained in safe working procedures for set-up, operation, and maintenance of press production systems; and
- train personnel, as required by assigned functions, in the safe working procedures for lockout/tagout of hazardous energy sources in accordance with ANSI Z244.1.

ANSI also requires a trained designated supervisor to continually supervise the press production system operation to ensure that the proper point-of-operation safeguarding is installed, activated, and operational for each job set-up and prior to release for production by the operator. The designated supervisor must also ensure that operators follow the correct operating procedures and use the press production system as intended within the rated capacities of the press and associated system components.

F. Economic Impacts

In addition to the specific questions posed in other parts of this RFI, OSHA is requesting data and information on the potential economic impacts should OSHA decide to make changes to the mechanical power presses standard. When responding to the questions in this RFI, OSHA requests, whenever possible, that stakeholders discuss potential economic impacts in terms of the following:

1. Quantitative benefits (e.g., reductions in injuries, fatalities, and property damage);
2. Costs (e.g., compliance costs or decreases in productivity); and

3. Offsets to costs (e.g., increases in productivity, less need for maintenance and repairs).

OSHA also invites comments on any unintended consequences and consistencies or inconsistencies with other policies or regulatory programs that might result if OSHA revises the mechanical power presses standard.

OSHA welcomes all comments but requests that stakeholders discuss economic impacts in specific detail, if possible. For example, if a provision or policy change would necessitate additional employee training, it is most helpful to OSHA to receive information on the following:

1. the training courses necessary;
2. the topics training would cover;
3. the types of employees who would need training and what percent (if any) of those employees currently receive the training;
4. the length and frequency of training;
5. any retraining necessary; and
6. the training costs, whether conducted by a third-party vendor or by an in-house trainer.

For discussion of equipment related costs, OSHA is interested in all relevant factors:

1. the prevalence of current use of the equipment;
2. the purchase price;
3. the cost of installation and training;
4. the cost of equipment maintenance and upgrades; and
5. the expected life of the equipment.

The agency also invites comment on the time and level of expertise required if OSHA were to implement the potential changes this RFI discusses, even if dollar-cost estimates are not available.

II. Request for Data, Information, and Comment

A. Hazards and Incidents

OSHA seeks comments on hazards associated with the operation of mechanical power presses and presses other than mechanical power presses, i.e., hydraulic and pneumatic presses. CDC last studied Injuries and Amputations Resulting from Work with Mechanical Power Presses in the late 1980s and this study was specific to Mechanical Power Presses. OSHA requests additional studies or data on workplace injuries or fatalities related to mechanical power presses and presses other than mechanical power presses, particularly recent studies or data. 1) Is there more recent information about the risks and hazards associated with the operation of power presses? 2) Based on a review of accident and injury data (see Table 1), OSHA has identified finger and fingertip amputations, crush injuries, lacerations, and fractures as the main types of injuries caused by mechanical power presses. Please supply any additional information on these and other injuries associated with power presses? 3) How frequently are workers using power presses injured? How frequently are workers using power presses severely injured? How frequently are workers using power presses fatally injured? 4) Do injury rates and severity vary based on the type of press used or other factors? 5) Have injury rates associated with the use of power presses increased or declined over time? If so, why?

B. Power Presses Standard

OSHA seeks comment on how it should update the mechanical power presses standard. 6) Should OSHA use ANSI B11.1 as the basis for a standard update? 7) Are there provisions in the ANSI standard not in the OSHA standard that are important for providing worker protection? 8) If the agency bases a revised standard on ANSI B11.1, should OSHA add explanatory material in the form of non-mandatory appendices? 9) Would employers find a non-mandatory appendix useful if it addressed similar subjects

as the explanatory text in the latest ANSI standard? 10) What material, if any, should be in the appendices?

The current OSHA mechanical power presses standard specifically excludes press brakes, bulldozer presses, hot bending and hot metal presses, forging presses and hammers, riveting machines, and similar types of fastener applicators. The ANSI B11.1-2009 standard excludes these as well; however, it also excludes cold headers and formers, eyelet machines, high-energy-rate presses, iron workers and detail punches, metal shears, powdered metal presses, press welders, turret and plate-punching machines, wire termination machines, and welding machines. 11) If OSHA updates the standard to be consistent with the provisions of ANSI B11.1-2009 or its equivalent, should OSHA exclude all of the machines that ANSI B11.1-2009 excludes? 12) If so, why? 13) Alternatively, should OSHA continue to exclude only the machines currently excluded by the OSHA standard? 14) Should OSHA exclude any other machines that ANSI B11.1-2009 does not specifically excluded? 15) What are these other machines and why should OSHA exclude them?

16) Is your firm currently complying with the ANSI B11.1 standard? 17) Is compliance with any of the provisions in the ANSI standard prohibitively costly? If so, please specify which provisions are prohibitively costly. 18) Do you believe it would be less costly for your firm to comply with the ANSI standard as opposed to OSHA's existing standard? 19) If so, in what areas do you anticipate savings, including reduced compliance costs and/or improved efficiency?

C. Standards other than ANSI Consensus Standards

In the 2007 ANPRM, OSHA asked whether there are other consensus standards, international standards, or other references that OSHA should consider in updating the mechanical power presses standard. The majority of commenters discussed the B11.1 standard however, they also suggested considering standards from the International

Organization for Standardization (ISO), Canadian Standards Association (CSA), as well as other European standards. In this RFI, OSHA again seeks comment on these standards and whether OSHA should consider them as a basis for an updated OSHA's standard on power presses.

D. Presses other than Mechanical Power Presses

In this RFI, OSHA seeks comment on whether it should regulate other types of presses, i.e., hydraulic and pneumatic presses. 20) Should these presses be covered under a new standard written in the fashion of the existing mechanical power presses standard, § 1910.217? 21) Should OSHA base any new requirements for hydraulic and pneumatic presses on ANSI B11.2-2013 (R2020), Safety Requirements for Hydraulic and Pneumatic Power Presses? 22) Does compliance with the ANSI B11.2-2013 (R2020) consensus standard provide adequate protection for workers using hydraulic and pneumatic presses? 23) Are there any ANSI B11.2-2013 (R2020) provisions or other protections critical to protecting workers that OSHA should include if the agency decides to propose a rule addressing non-mechanical power presses? 24) If so, which ones?

25) Do you currently follow other ANSI consensus standards corresponding to any other types of presses (for example, ANSI B11.4, Safety Requirements for Shears)? 26) Are any provisions in this ANSI standard especially costly or difficult to comply with? 27) If so, which ones?

OSHA also seeks data and information about the proportion of pneumatic and hydraulic presses among all presses in use today.

E. Presence-Sensing Device Initiation

Both the ANSI B11.1-2009 standard and the existing OSHA mechanical power presses standard, § 1910.217, contain requirements for PSDI. However, unlike the ANSI standard, OSHA's standard requires third-party validation for PSDI. As previously noted, no third party has stepped forward to issue such certification.

28) Should OSHA revise or eliminate its requirements regarding the use of PSDI systems? 29) Should OSHA base its PSDI requirements on the PSDI requirements in ANSI B11.1-2009? 30) Are there any types of operations that should not allow PSDI? 31) If so, which operations and why? 32) Should OSHA consider an option that includes regulating other types of power presses? 33) Are there any types of power presses that should not allow PSDI? 34) If so, which ones and why? 35) Should OSHA eliminate the third-party validation requirement? OSHA also seeks comment on whether it should continue to include mandatory and/or non-mandatory appendices with additional requirements for PSDI.

36) If OSHA were to eliminate the existing requirements for PSDI systems, would you incorporate this technology on your existing power presses? 37) What would it cost to incorporate PSDI technology into your presses? OSHA previously estimated that the average cost to convert to PSDI technology would cost between \$1,650 and \$6,600 per press in 1988 dollars (https://www.osha.gov/dea/lookback/psdi_final2004.html). OSHA believes that simply inflating that price to 2020 dollars would not adequately reflect the estimated cost of converting to PSDI technology today because the cost of this technology has not increased at the same rate as the cost of other goods.

The agency believes that continuing to allow employers to use PSDI systems will increase productivity. The economic analysis accompanying the 1985 proposed rule for mechanical power presses estimated that allowing PSDI systems would result in productivity improvements ranging between 10 and 50 percent depending on the type of press (50 FR 12700, Mar. 29, 1985) (<https://www.regulations.gov/document?D=OSHA-S225-2006-0706-0168>). The analysis of the 1988 final rule estimated that allowing employers to convert existing presses to PSDI systems would increase the productivity of each press by an average of about 24 percent (53 FR 8322)

(<https://www.regulations.gov/document?D=OSHA-S225-2006-0706-0173>). 38) Do you agree that PSDI devices would improve productivity? 39) If so, to what extent? OSHA welcomes any studies or information on the productivity effects of using PSDI systems.

F. Existing Presses

OSHA seeks comment on the number of power presses in use today including information on their characteristics. 40) How many power presses do you use at your facility? 41) What type of presses are they (mechanical, hydraulic, and pneumatic), and, if any are mechanical, how many do you use and what percentage of those mechanical power presses have part-revolution clutches? The agency seeks comment on the service life of mechanical power presses. 42) What type of press would you purchase to replace a mechanical power press? 43) What proportion of those mechanical power presses would you replace with presses equipped with part-revolution clutches?

44) If OSHA based a new standard on ANSI B11.1-2009 (R2020), how many presses currently in use would be out of compliance? 45) Would you upgrade any of your presses to meet the ANSI B11.1 consensus standard, or would you replace the presses? 46) What percentage of your presses would you upgrade versus replace?

OSHA welcomes all data, studies, inventories, or information on the number of power presses of all types in use and/or the relative proportion of each type of press.

G. Modifying and Repairing Existing Presses; Records of Maintenance

The current OSHA standard permits any person to reconstruct or modify a mechanical power press as long as the reconstruction or modification is performed in accordance with § 1910.217(b).

OSHA seeks comment regarding the modification and repair of power presses. 47) Should OSHA require that only competent persons perform these tasks? 48) If so, how should OSHA define the term “competent person” with respect to mechanical power presses? OSHA also seeks comment on how to handle documentation of maintenance on

power presses. 49) Should OSHA require documentation and, if so, should OSHA require document retention and access? 50) Who should maintain the documentation: the manufacturer, the owner, or a third party?

H. Reporting and Recordkeeping Requirements

OSHA requires that employers keep separate records and submit reports for injuries to employees operating mechanical power presses. These records are specific to OSHA’s mechanical power presses standard and were put in its standard to allow OSHA to track the effectiveness of its mechanical power presses standard. 51) Are employers aware of these specific reporting requirements, and that they are additional to BLS occupational injury data collections and OSHA SIR reporting? 52) Should OSHA retain these requirements? 53) Should OSHA modify these requirements and, if so, how?

I. Affected Industries and Economic Impacts

OSHA believes that all power press workers fall into the BLS Occupational Employment Statistics (OES) aggregate Standard Occupational Code (SOC) Metal and Plastic Workers (occupational code 51-4000), and specifically into the four occupations denoted in Table 2. OSHA assumes that all workers in these occupations, in most industries, are using power presses of all kinds.

Table 2 - Occupations of Power Press Operators by Standard Occupational Code

SOC	Occupation Title
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic
51-4041	Machinists
51-4199	Metal Workers and Plastic Workers, All Other

Source: BLS, Occupational Employment Statistics.

For this RFI, OSHA identified affected industries as those employing workers in the Forging Machine Setters, Operators, and Tenders, Metal and Plastic (SOC 51-4022) occupation; the Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic (SOC 51-4031) occupation; and the All Other Metal Workers and Plastic Workers (SOC 51-4199) occupation. Although the BLS data show workers in

these SOC categories employed in retail and wholesale trade, rental and leasing companies, and various service industries, OSHA believes these workers are likely performing tasks that do not utilize mechanical power presses and therefore OSHA did not include them in the universe of affected industries. The agency welcomes comment on whether these industries should be included. OSHA included Machinists (OES 51-4041) in the sum of power press employees (but only in industries that employed one of the three other occupations) and included all workers in the above SOC categories in temporary employment agencies and repair and maintenance industries. These industries and affected employees appear in Table 3.

Overall, OSHA estimates there are about 550,000 workers working with power presses. This is probably an overestimation because each of the selected occupations likely include workers who do not use power presses.

Based on data from OSHA's 2004 Section 610 Review, the agency determined that, between 1996 and 2002, large mechanical power presses (which included all new, part-revolution, mechanical power presses) represented 9.5 percent of total press production (https://www.osha.gov/dea/lookback/psdi_final2004.html). OSHA has assumed that this share of press production is roughly equal to the share of power press workers using mechanical power presses. Therefore, of the estimated 565,000 power press workers, OSHA estimates that about 53,600 of them operate mechanical power presses.

OSHA acknowledges that this is an imprecise estimate that makes a number of assumptions, including that large mechanical power presses are replaced at the same rate as all other power presses and that workers are evenly distributed among all press types. The agency's affected mechanical power press employment calculation is an overestimate if, for example, large mechanical power presses last longer than other power presses, large mechanical power presses are increasingly being replaced by other types of

presses (non-mechanical), or if it takes more employees to operate a large mechanical power press than it does any other press. The agency is also aware that mechanical power presses are being used less frequently than in the past, and therefore, OSHA’s estimate, which applies an estimation methodology developed as part of OSHA’s Section 610 Review in 2004 to current employment and establishment data, may not accurately reflect current mechanical power press employment numbers.

OSHA seeks comments on what occupations employ power press workers. 54) Do the job titles listed above encompass all power press workers? 55) If not, what job categories or job titles should OSHA include? 56) What are the job titles of workers who use power presses at your facility? 57) Would you classify your facility’s power press workers in one of the occupations listed above or is there a more appropriate occupational category for them? 58) How many total workers are at your establishment and how many of those workers use power presses as part of their job? 59) What types of power presses do they use (mechanical, pneumatic, hydraulic, or other)? 60) If those employees work on mechanical power presses, how many (or what percentage) of those presses have part-revolution clutches?

Table 3 shows total employment and total establishments in the affected industries.

Table 3 - Selected Characteristics of Industries that Employ Mechanical Power Press (MPP) Operators

NAICS	NAICS TITLE	Total Power Press Employees ¹	Affected (Large MPP) Employees	Total Employment ²	Total Establishments ²
236000	Construction of Buildings	260	25	1,391,532	222,751
237100	Utility System Construction	340	32	607,919	19,156
238000	Specialty Trade Contractors	2,280	217	4,423,714	472,803
311400	Fruit and Vegetable Preserving and Specialty Food Manufacturing ³	0	0	159,258	1,924
316900	Other Leather and Allied Product Manufacturing	160	15	11,256	770
321000	Wood Product Manufacturing	1,540	146	415,151	14,463
322000	Paper Manufacturing	2,350	223	344,537	3,999
323000	Printing and Related Support Activities	840	80	438,516	24,809
325000	Chemical Manufacturing	2,730	259	798,028	13,615
326000	Plastics and Rubber Products Manufacturing	27,070	2,572	785,794	12,065

327000	Nonmetallic Mineral Product Manufacturing	2,990	284	399,572	15,076
331000	Primary Metal Manufacturing	26,450	2,513	374,837	4,112
332000	Fabricated Metal Product Manufacturing	209,230	19,877	1,437,086	55,020
333000	Machinery Manufacturing	93,600	8,892	1,057,407	23,060
334100	Computer and Peripheral Equipment Manufacturing	560	53	40,392	916
334200	Communications Equipment Manufacturing	970	92	82,857	1,260
334400	Semiconductor and Other Electronic Component Manufacturing	6,070	577	257,700	3,789
334500	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	8,170	776	383,979	5,201
335000	Electrical Equipment, Appliance, and Component Manufacturing	15,640	1,486	345,470	5,549
336000	Transportation Equipment Manufacturing	89,580	8,510	1,585,194	11,567
337000	Furniture and Related Product Manufacturing	4,340	412	372,286	14,581
339000	Miscellaneous Manufacturing	19,810	1,882	550,598	25,811
493000	Warehousing and Storage	310	29	967,386	16,919
561300	Employment Services	40,160	3,815	6,771,435	53,657
561900	Other Support Services	460	44	296,453	20,123
811000	Repair and Maintenance	8,140	773	1,303,518	217,830
	Totals:	564,050	53,585	25,601,875	1,260,826

Source: OSHA, Office of Regulatory Analysis 2020.

1. BLS Occupational Employment Survey 2019.
2. County Business Patterns, U.S. Census, 2018.
3. OSHA seeks comment regarding possible MPP use in this industry.

OSHA seeks comment on the industries that employ mechanical power press workers, and, if possible, those that use mechanical power presses with part-revolution clutches. 61) Are there any affected industries that the agency has not included in Table 3? 62) If so, which ones and how are those industries using mechanical power presses?

Estimates based on earlier years of OES data indicated that mechanical power presses are used in NAICS 311400, Fruit and Vegetable Preserving and Specialty Food Manufacturing, while estimates based on more recent data suggest that there are no mechanical power presses in use in that industry. Since OSHA derives its estimates from more aggregate data, the agency recognizes that the updated estimates may be inadvertently eliminating an industry that should be included in the scope of an updated mechanical power presses rulemaking. OSHA seeks comment on the current use of mechanical power presses in the NAICS 311400 industry.

As mentioned earlier, part of OSHA's estimate of large mechanical power presses

depends on information about the service life of mechanical power presses, and the rate of mechanical power press replacement relative to other types of presses. To further refine this estimate, the agency seeks comment on the service life of mechanical power presses. 63) What type of press do you typically purchase to replace a mechanical power press? 64) What proportion of those replacement mechanical power presses are replaced with presses equipped with part-revolution clutches?

The Regulatory Flexibility Act (5 U.S.C. § 601, as amended) requires OSHA to assess the impact of proposed and final rules on small entities. OSHA requests small entities to comment on the expected impacts of a revision to the mechanical power presses standard based on current consensus standards, including ANSI, CSA, or ISO standards. Please give specific examples of resource requirements in terms of additional staffing or time commitments (per job category), costs for purchase or rental of equipment or materials (dollar cost per unit), and costs for energy usage and any other additional expenses. 65) Would small entities face economic or technological feasibility concerns in complying with a revised standard that references current consensus standards? 66) If OSHA promulgated standards similar to the mechanical power presses standard for hydraulic and pneumatic presses, would this raise any economic or technological feasibility concerns specific to small businesses? 67) If you identify as a small entity in your industry, what is the basis for that identification (for example, reliance on Small Business Administration size standards; <https://www.sba.gov/>)? If you are uncertain as to your qualifications as a small entity, please provide details on your establishment size in terms of number of employees and categories of employee occupations; industry identification (by North American Industrial Classification System 6-digit code if available); and the primary types of goods or services produced by your company. Please describe in detail the technical or financial concerns that you or other small employers may encounter when implementing consensus standards addressing

mechanical or other power presses.

J. Other Issues

68) Are there any other issues related to mechanical, hydraulic, or pneumatic power presses that OSHA should address? Include issues remaining from, or not sufficiently addressed in, the 2007 ANPRM.

OSHA encourages comments from manufacturers, owners, and operators of presses, labor organizations, worker centers, government safety agencies, standards organizations, and other interested parties. Those who responded to the original 2007 ANPRM are especially encouraged to comment, either to confirm their original opinions or to tell us how those opinions have changed. OSHA invites those who did not respond to the original 2007 ANPRM to examine the relevant files at *www.regulations.gov*.

Authority and Signature

James S. Frederick, Acting Assistant Secretary of Labor for Occupational Safety and Health, authorized the preparation of this notice pursuant to 29 U.S.C. 653, 655, and 657, Secretary's Order 08-2020 (85 FR 58393, Sept. 18, 2020), and 29 CFR part 1911.

Signed at Washington, DC.

James S. Frederick,

Acting Assistant Secretary of Labor for

Occupational Safety and Health.