General Fabrication Machines Safety Guide

(For employers and employees)

This safety guide is an English translation of Japanese safety guide based on Japanese laws and regulations.
Please comply with your country's laws and regulations if you are outside of Japan.

AMADA®

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1. Preface

This safety guide provides employers and employees with important safety information they should know when they take safeguarding measures for general fabrication machines we sell. Safety information for using general fabrication machines is also available in the operator's manuals of general fabrication machines and the warning labels affixed to the general fabrication machines. Before you use the machine, fully understand all of these pieces of safety information.

Fully recognize hazards associated with machine installation, workpiece and tool setup, machine operation, inspection, cleaning and maintenance, and other tasks. On your own responsibility as employer, take safeguarding measures to suit the environment of your shop and the method of using your machine. Also conduct safety and health education for your operators.

The Industrial Safety and Health Act states that employers must take machine safeguarding measures.
(See "Responsibilities of employer" on the next page.)

For machine safeguarding procedures, etc., refer to "Guidelines for the Comprehensive Safety Standards of Machinery" published by the Ministry of Health, Labour and Welfare (LSB Notification No. 0731001, revised on July 31, 2007).

To see the guidelines, go to the website of the Japan Advanced Information Center of Safety and Health (https://www.jaish.gr.jp), click the "Laws, Regulations and Notifications" button, enter "No. 0731001", and find the LSB Notification No. 0731001.

When you retrofit safeguarding devices to your already installed machine, you may have to modify the machine and its controls. When you study what safeguarding devices to adopt, please contact AMADA.

2. Responsibilities of employer

The Industrial Safety and Health Act (hereinafter referred to as Act) and Ordinance on Industrial Safety and Health (hereinafter referred to as Ordinance) mainly impose the following duties on employers who have their workers use machines, in order to reduce industrial accidents.

(1) Notifying of plans

- Notify the Labour Standards Office of plans.

The IW (Ironworker) is a hydraulic press.

Notify the Labour Standards Office of plans to install, relocate or alter machines, etc. (Article 88 of Act and Article 85 of Ordinance)

Notify the Labour Standards Office of such plans, have the plans checked for safety, and receive guidance about the plans.

Regarding other general fabrication machines, no obligation of “Notifying of plans” is provided in the current laws and regulations. If you are instructed from the competent Labor Standards Office, follow it.

- Notify the competent government office of a specified facility and apply to the competent government office for permission to use the specified facility.

If the specified facility falls under the provisions of the Noise Control Act, the Vibration Control Act and the environmental conservation ordinance of the competent local government, notify the competent environmental conservation contact office of the specified facility.

Since the notification duties, control values, etc., vary from region to region, check the details at the competent environmental conservation contact office.

(2) Investigating hazardousness and harmfulness

Investigate the hazardousness and harmfulness of tasks and duties (or assess the risks of tasks and duties). Take necessary measures to prevent hazards to workers or prevent the health disorders of workers. (Article 28-2 of Act)

For data concerning residual risks peculiar to specific machines and required to perform risk assessment, contact AMADA.

(3) Preventing hazards

Take appropriate safeguarding measures to ensure the safety of press operators. (Article 20 of Act and Article 131 of Ordinance)

Protect workers from hazards from machines, hazardous materials, and electricity and other energy sources.

Take measures to prevent the body parts of workers from entering the hazardous area.

(4) Appointing chief operator
Appoint a qualified chief operator. (Article 14 of Act and Article 16 of Ordinance)
In a workplace with five or more power presses, appoint a chief operator from among workers given technical training.

(5) Conducting safety and health education
Conduct safety and health education to workers who operate the machine for the first time. (Article 35 of Ordinance)
Provide special education to workers who change or adjust tools. (Article 36 of Ordinance and Article 3 of Rules on Special Safety and Health Education)

(6) Inspecting before start of day's work
Inspect the machine before the start of the day's work. (Article 136 of Ordinance)
Try to find equipment failures and faults as soon as possible. If a problem is found, repair it or take any other necessary measure to prevent an accident.

(7) Conducting special voluntary inspection and periodical voluntary inspection
Conduct special voluntary inspection or periodical voluntary inspection at least once a year. (Article 135 of Ordinance)
Repair any problems found by the inspection, and file the inspection results and repair records.

3. Observances to use machine safely

General fabrication machines include shearing machines, storages, tapping machines, deburring machines, insertion machines, measuring instruments, welding machines, and machines for opening holes and notching steel materials. Here in this guide, contents common to each type of machines or observances to which particular attentions need to be paid are excerpted and stated. When using a machine, be sure to check the contents of the operator's manual of each machine.
As for the shearing machine, a special safety guide is prepared.

(1) Do not modify safeguarding devices

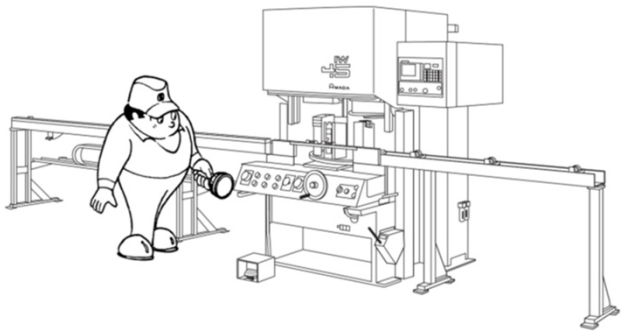
Guards are installed so that hands and fingers do not reach any hazardous area. They prevents the danger of fingers being cut or crushed by the tool or blade. Since the clearance is determined by the shape of the workpiece to be processed and its maximum thickness, do not widen the clearance. Also, make sure that safeguarding devices such as guards and covers are installed in the specified positions.

(2) Do not put part of body in hazardous area

Be careful not to let a part of the body enter the machine operation area or the movement area of the workpiece.
When working in the machine operation area or the workpiece movement area, the moving part may touch your body, injuring you. To prevent such a hazard, turn off the operating device and pull out its key and carry it.
Be sure to shut off the power sources (electric power source, air pressure source, hydraulic pressure source) and lock them out before starting work.

(3) Checking safety before starting operation

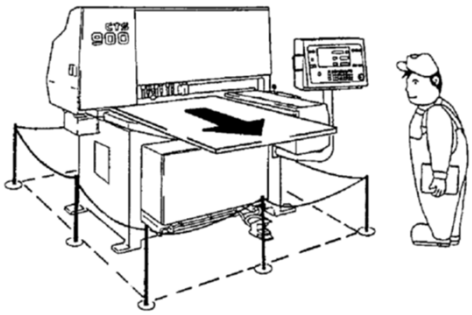
Before starting the operation of the machine, check that there are no other workers within the safety fence and behind the machine.



(4) Precautions on extrusion and fall of workpiece

If the workpiece receiving square pipe is not securely inserted in the storage, the workpiece may slip out of the tracker and fall.

When processing a long workpiece in a tapping machine, install auxiliary tables since the workpiece protrudes from the table, which may create hazard.

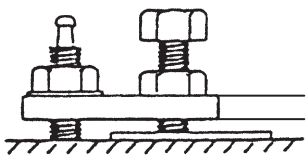


(5) Precautions on fire

When using a welding machine, remove combustible items from the area where spatter is scattered. Also, provide a fire extinguisher near the work place and prepare in case of emergency.

(6) Precautions on overturn and movement of machine

If there is a danger of being pinched, etc. by a machine moved by an earthquake or a machine (welding machine) with its center of gravity at a high place, fix it with wedged-type anchor bolts.



Request for provision of accident information

On April 15, 2014, the Labour Standards Bureau of the Ministry of Health, Labour and Welfare issued the LSB Notification No. 0415-1 “Procedure for Promoting Provision of Disaster Information, etc., from Machine Users to Machine Manufacturers, etc.”.

The notification obligates machine manufacturers to clearly state contact points, contact methods and accident information and other contact items in instruction manuals, etc., and machine users to furnish information to machine manufacturers and to take measures for preventing the recurrence of accidents, etc., in coordination with machine manufacturers.

Following the notification, Amada intends to collect accident information from our customers and use it to prevent the recurrence of similar accidents with our machines and to promote greater safety in the design and manufacturing stages of our machines. We kindly ask for your cooperation.

(1) Contact point

Report accident information, etc., by telephone or otherwise to our sales office service center in your area.

(2) Information to be provided

Furnish to us accident information concerning the contact items described in the following accident report.

Accident report

Date reported mm/dd/yy	● Overview of accident
Classification of accident: 1. Occurrence or likelihood of injury or fatal accident 2. Occurrence or likelihood of fire accident	Date and time of accident occurrence: mm/dd/yy Approximately hh:mm [Injury or fatal accident] Victim: 1. Operator 2. Other than operator ( ) Sex (age): 1. Male 2. Female (xx years old) Accident situation (body part and degree of injury):
● Customer Company name (department name): Name (position):	
Address: Telephone number: Fax number: E-mail address:	[Fire accident] Ignition source and ignited material (if determinable): Burnt range: Work and process leading to accident: Usage of protective equipment:
● Amada machine used (Information stamped on serial plate) Model: Manufacture number: Manufacture date: mm/yy	Comment from customer:

AMADA hopes that this safety guide book will help you to provide a safe workplace for your employees.
If you have something to know about the safeguarding of machines or need more information or proposals, contact AMADA.

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