

Job Safety Analysis

WHAT IS JOB SAFETY ANALYSIS?

Job Safety Analysis (JSA) is a cost effective tool to review job methods and uncover hazards. Once the hazards are known and recorded, solutions can be developed. JSA is a method for studying a job in order to define basic activities that must be followed to complete a particular task. Hazards can then be identified or potential accidents associated with each step. The final step is to develop approaches that will eliminate, minimize or prevent the hazards or accident potentials.

Job Safety Analysis is also known as Job Hazard Analysis (JHA).

HOW TO CONDUCT A JSA

There are four basic steps in conducting a job safety analysis.

1. Select the Job

Consider the following factors when deciding which jobs are good candidates for a JSA.

- Jobs that have caused serious injuries in the past
- Jobs with a high potential to cause serious injuries
- Jobs with a high accident frequency
- New jobs

2. Break the Job Down

Prior to determining the hazards of a given job, it should be broken down into a sequence of steps; each describing what is being done. Be careful not to make the steps unnecessarily detailed or too general. The next steps involve:

- Select the right person to observe
- Brief the employee on the purpose and goal
- Observe the person performing the job and break it down into steps
- Record each of the steps
- Check the steps with the employee performing the job for verification

3. Identify Hazards and Potential Accidents

The purpose of this step is to identify the potential hazards including those produced by the environment and those associated with the job steps. Hazards may include the following:

- Can the employee be caught in, by or between objects?
- Can muscle strains result from pushing, pulling, lifting, bending or twisting?
- Is there potential for a slip, trip or fall?
- Is the environment hazardous due to toxic gases, vapors, mists, fumes or dust?
- Is there a danger of striking against or being struck by objects?

For each step identified above, list the potential hazards, without regard to any controls in place.

4. Develop Solutions

The final step in a JSA is to develop recommended safe job procedures for each task identified to prevent occurrence of accidents. The solutions can vary, but should be considered in the following order:

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Workers'
Compensation
Specialist**

- Find a new way to do the job
- Change the physical conditions that create the hazards
- To eliminate hazards still present, change the work procedure
- Try to reduce the necessity of doing a job or the frequency
- Use of PPE

HOW TO USE JSA EFFECTIVELY

The major benefits of a JSA obviously come after its completion. They can be very useful when training new employees. This can teach them the hazards associated with each job step and what must be done to make it safer. Many jobs are done infrequently or on an irregular basis. The employees who do these jobs will benefit from a JSA that reminds them of the steps and proper precautions. Whenever an accident occurs on a job covered by a JSA, it should be reviewed to determine whether or not it needs to be revised. If it is revised, all employees performing that function should be retrained.

Job Safety Analysis Worksheet (For Reference Purposes Only)

Date of Analysis: December 20, 2009 Reviewed By: Safety Manager

Company Name: ABC Company

Job Title: Machinist

New Job Safety Analysis Revised Job Safety Analysis

Analysis Done By: Joe Safety

Department / Task: Finishing / Grinding castings

Step 1: Sequence of Basic Job Steps	Step 2: Potential Hazards	Step 3: Recommended Procedures
<p>Break the job into a sequence of steps. Each of the steps should accompany some major task. That task will consist of a series of movements. Look at each series of movements within that basic task.</p>	<p>To complete a JSA effectively, you must identify the hazards or potential hazards associated with each step. Every possible source of energy must be identified. It is very important to look at the entire environment to determine every conceivable hazard that might exist. Hazards contribute to accidents and injuries.</p>	<p>Using the Sequence of Basic Job Steps and Potential Hazards, decide what actions are necessary to eliminate, control, or minimize hazards that could lead to accidents, injuries, damage to the environment, or possible occupational illness. Each safe job procedure or action must correspond to the job steps and identified hazards.</p>
<p>1. Right hand reaches into box, grasps casting, carries it to wheel.</p>	<ul style="list-style-type: none"> • Struck against edge of box or casting – cut hand on burr. • Overexertion from lifting of heavy castings. • Struck by falling casting on foot. 	<ul style="list-style-type: none"> • Wear gloves to protect against sharp edges as required when handling raw stock. • Use proper lifting procedures. • Get help if part is too large for one person. • Wear steel toe footwear.

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Job Safety Analysis Worksheet (For Reference Purposes Only)

Step 1: Sequence of Basic Job Steps CONTINUED...	Step 2: Potential Hazards CONTINUED...	Step 3: Recommended Procedures CONTINUED...
2. Left hand grasps left side of casting, right and left hands push casting against wheel.	<ul style="list-style-type: none"> • Struck against burr on castings. • Struck against wheel. • Caught on rotating parts. • Flying sparks, dust, chips, or wheel breakage. 	<ul style="list-style-type: none"> • Wear gloves to protect against sharp edges of castings. • Keep hands clear of rotating parts. Possible use of tool rest. • Do not wear loose clothing. • Do not wear gloves when grinding small pieces. • Wear eye protection. • Ensure all required guards are in place; i.e., side guards and tongue guards are of proper size, tool rests and tongue guards are properly adjusted.
3. Left hand places finished casting in box on side of machine	<ul style="list-style-type: none"> • Struck against box or castings. • Overexertion from lifting of heavy castings. • Foot struck by castings. 	<ul style="list-style-type: none"> • Wear gloves to protect against sharp edges of castings . • Use proper lifting techniques. • Provide for moving of finished stock. • Wear foot protection.

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New Job Safety Analysis Revised Job Safety Analysis

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