

## How to Create TWI Training for any machine or process:

An overview: <https://youtu.be/dNV4mOK5gW4?feature=shared>



Training Within Industry (TWI) is a dynamic program developed during World War II to train workers quickly and effectively in various industries. It's designed to boost worker productivity and efficiency, especially in environments where skilled labor is scarce. The TWI program is built around three primary components:

1. Job Instruction (JI): Focuses on training supervisors in the art of instructing workers on how to perform their tasks quickly, correctly, and conscientiously. It emphasizes breaking down jobs into manageable steps, teaching each step precisely, and ensuring understanding and mastery.
2. Job Methods (JM): Aims to help supervisors and workers improve the way jobs are done. It encourages a continuous search for more efficient methods, reducing waste and increasing productivity.
3. Job Relations (JR): Teaches supervisors how to handle people more effectively, improve workplace relations, and resolve conflicts. It emphasizes understanding and respecting workers, clear communication, and fair problem-solving practices.

TWI's enduring appeal lies in its simplicity, practicality, and its focus on respect for the individual worker. It's as relevant today as it was during its inception, widely applied in various industries to improve training processes, enhance productivity, and foster positive work environments.

**TWI involves several key elements:**



1.       Job Breakdown Sheets: These sheets are crucial. They detail every step of the operation, with a focus on the key points and reasons for each step. This breakdown ensures the training is systematic and thorough.
2.       Skilled Instructors: Supervisors should not only be skilled in machine & operations but also capable of teaching effectively through TWI methodologies.
3.       Hands-On Training Approach: TWI emphasizes learning by doing. Ensure the training includes practical, hands-on experience on the machines.
4.       Standard Operating Procedures and Work Instructions: These documents should cover safety procedures, machine operation, maintenance routines, and quality control measures.
5.       Regular Evaluation and Feedback: Incorporate regular assessments to gauge trainee progress. Provide constructive feedback to help them improve.
6.       Safety Training: Given the nature of manufacturing, safety training is paramount. This should cover both general workshop safety and specifics related to the machines.
7.       Continuous Improvement: Encourage feedback from trainees and instructors to continuously improve the training process.

Creating a training module using Training Within Industry (TWI) principles involves a structured approach that emphasizes clarity, simplicity, and effectiveness.



## **Step-by-Step Guide to Create a Job Breakdown Sheet**

1. Step 1: Define the Job
  - a. Identify the Process or Operation: Clearly specify the job or task you're breaking down.
  - b. Job Title: Write a concise, descriptive title for the job.
2. Step 2: Gather Information
  - a. Observe the Job: Watch an experienced worker perform the job.
  - b. Consult Documentation: Review any existing manuals or SOPs related to the job.
  - c. Interview Experts: Talk to experienced workers to understand nuances and key points.
3. Step 3: Break Down the Job
  - a. List the Major Steps: Break the job into major steps in the order they are performed.
  - b. Keep it Simple: Each step should be simple and easy to understand.
4. Step 4: Identify Key Points
  - a. For Each Step, Identify Key Points: These are crucial for quality, safety, or efficiency.
  - b. Be Specific: Key points should be specific and actionable.
5. Step 5: Explain the Reasons
  - a. Provide Reasons for Key Points: Explain why each key point is important.
  - b. Connect to Consequences: Link the reasons to potential outcomes for better understanding.
6. Step 6: Add Tools and Safety Information
  - a. List Necessary Tools and Equipment: Specify what is needed to perform the job.
  - b. Include Safety Precautions: Highlight any safety gear or precautions required.
7. Step 7: Visual Aids & Videos
  - a. Incorporate Diagrams or Photos / Videos: Visual aids can enhance understanding, especially for complex tasks.
8. Step 8: Review and Refine
  - a. Test the Breakdown: Have someone unfamiliar with the job review your breakdown for clarity and completeness.
  - b. Iterate as Needed: Update the sheet based on feedback and practical testing.
9. Step 9: Finalize and Implement
  - a. Document Final Version: Ensure the sheet is neatly documented and easy to read.
  - b. Train Instructors / Supervisors: Make sure those who will teach the job understand the breakdown sheet thoroughly.
10. Step 10: Continuous Improvement
  - a. Gather Feedback: After implementation, collect feedback from trainees and trainers.
  - b. Update Regularly: Revise the sheet as needed to reflect changes in the job or to improve clarity.


### **Key Takeaways:**



- Detail and Clarity. Simple.
- Focus on Key Points.
- Safety is Paramount: Always highlight safety!



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## Job Breakdown Sheet

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Controlled Document	<WORK INSTRUCTION>	Approved By: Revised By: Released By: Release Date:

Process / Operation	Work Center	Cycle Time	PPE Required	SAFETY POINT	QUALITY POINT
			Safety Glasses, Shoes		

OP	MAJOR STEP	KEY POINT	REASON FOR KEY POINTS
10			
20			
30			
40			
50			
60			
70			
80			
90			


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