

Teleconference

Dial-in Number: 209 647-1075

Access code: 1013004#

Webcast

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Master Trainer

This webcast deals with how to select and develop master trainers for managed processes. It discusses roles and responsibilities for the master trainer. The duration is one hour.

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Objectives

- ➔ What are the knowledge and skills required for a master trainer?
- ➔ What are the tasks performed by a master trainer?
- ➔ What are examples of work product for a master trainer?
- ➔ What are the options and resources for training master trainers?

Definitions

- ➔ **Standard Work** – The organization and specification of uniform work steps to be performed in a process. The steps are documented in the form of Work Instructions. Work Instructions should be used anywhere there is a definable and repeatable process.
- ➔ **Master Trainer** – A person trained and certified to train and certify others. The master trainer documents work instructions, trains and cross-trains those who will work in a particular process, and certifies that they can perform the work and quality checks according to the work instructions in the time allowed.

Knowledge & Skills

- Strong knowledge and experience in the subject/process
- The ability to communicate with Trainees
- An expressed willingness to train others
- The ability to teach

It can be anyone who is capable and willing

Roles & Responsibilities

- ➔ Develop effective work instructions, job aids, and training materials
- ➔ Give effective training presentations
- ➔ Be patient with trainees
- ➔ Plan the training
- ➔ Lead trainees through the learning process
- ➔ Act as a mentor for the trainees
- ➔ Help others achieve standard work

The Job Skills Certification Process Tasks

- ➔ Identify source processes/jobs/skills
- ➔ Identify SME's and Master Trainers
- ➔ Identify the One Right Way
- ➔ Prepare a Training Plan
- ➔ Prepare Training Materials/Work Instructions
- ➔ Identify Trainees
- ➔ Schedule and Conduct the Training
- ➔ Provide Testing and Feedback
- ➔ Certify Trainees

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Training Plan

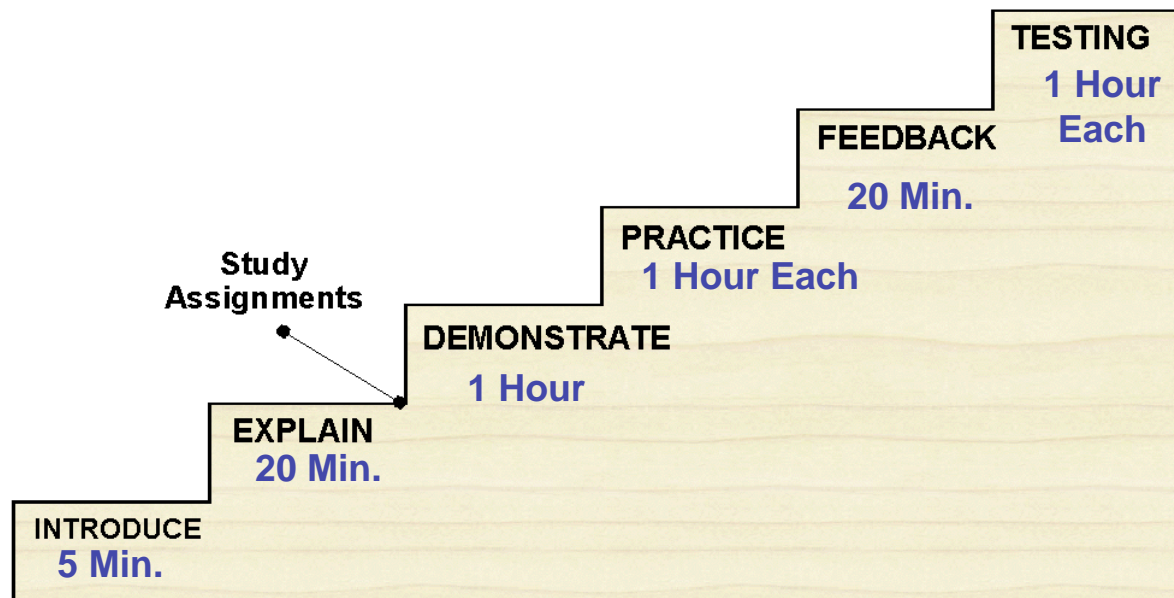
TASKS ⇒ TRAINEES ↓	MILLING	GRINDING	GEAR HOB	MECHANICAL INSPECTION	TEAM PROBLEM SOLVING
HARRY CAMBDON	X			X	X
CHILL WILLS		X		X	X
BRENT COMAN	X			X	X
DEXTER BERN			X	X	X
LISA GIBB	X			X	X
HENRY SELLS			X	X	X
BRIAN ESCOBAR	X			X	X
LINDA CAMP			X	X	X
JAMES ELMOS		X		X	X
CHUCK GEAR		X		X	X
JOHN SEFERT		X		X	X
ELOISE KEMP	X			X	X
JEFF BRIDGE		X		X	X
OWN WILSON		X		X	X
JAMIE FAR	X			X	X
NEBRY WILSON			X	X	X
STEVEN WORTH		X		X	X
JOE GRAVES				X	X
PETER NOON					X
JOHN KEMPER			X	X	X
ED BANKS					X
PETER GOODING					X
ELMER FOX					X
OMAR EPPS					X
HENRY GIVENS					X

Course Length

Effective Training can take 3 to 4 times longer than doing the task

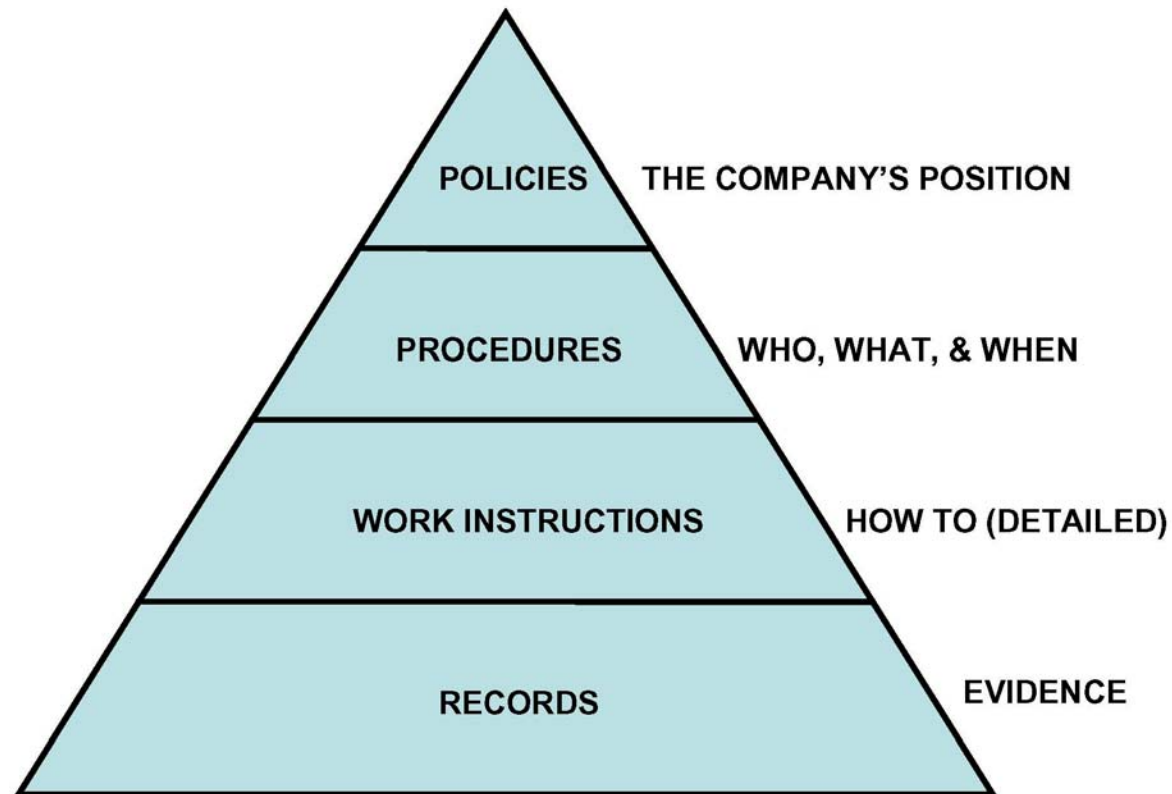
- Example: The Trainer can setup the machine in one hour

TOTAL TIME: 3 HRS. 45 MIN. PER TRAINEE



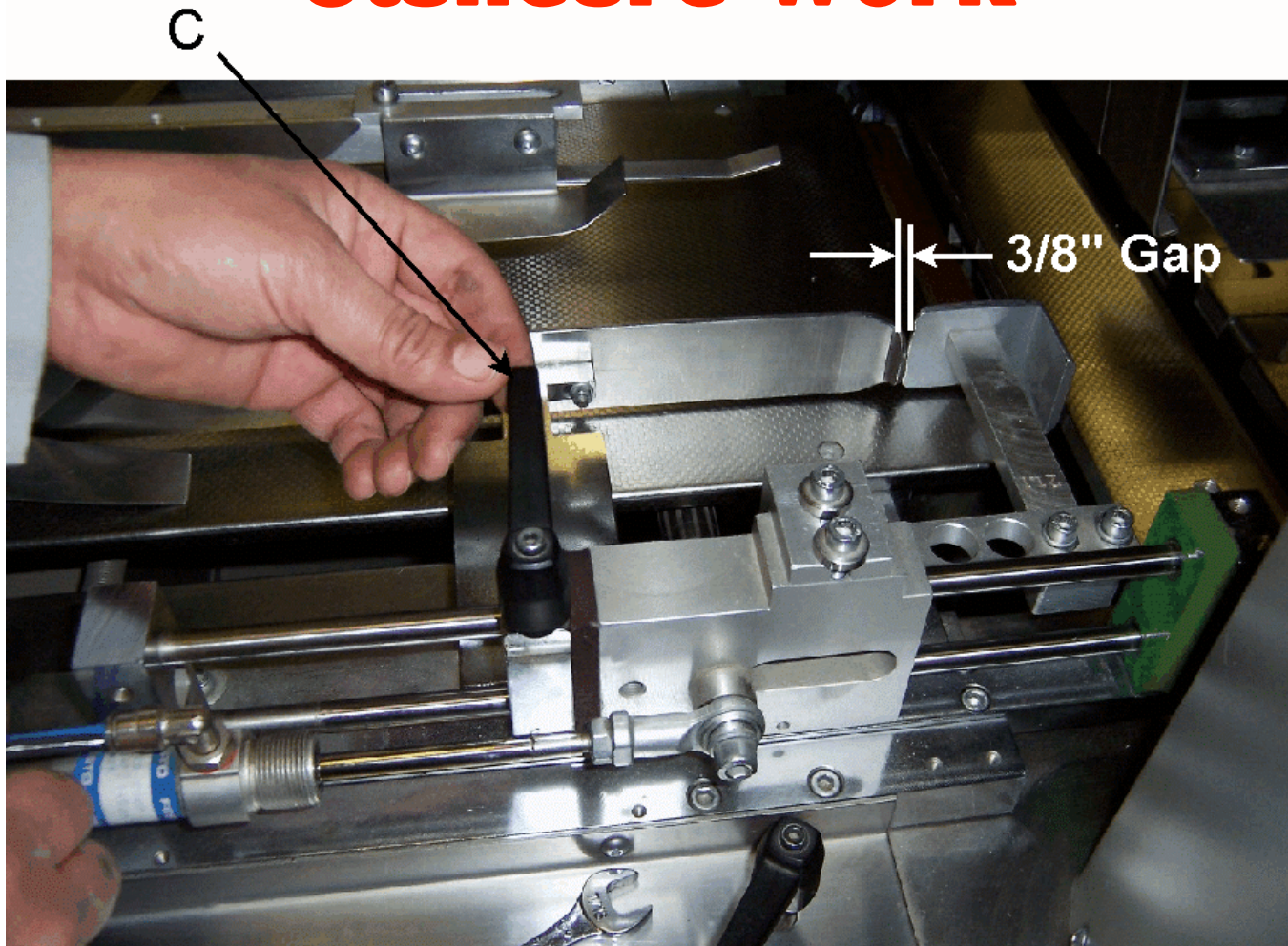
Work Instructions

HIERARCHY OF DOCUMENTS

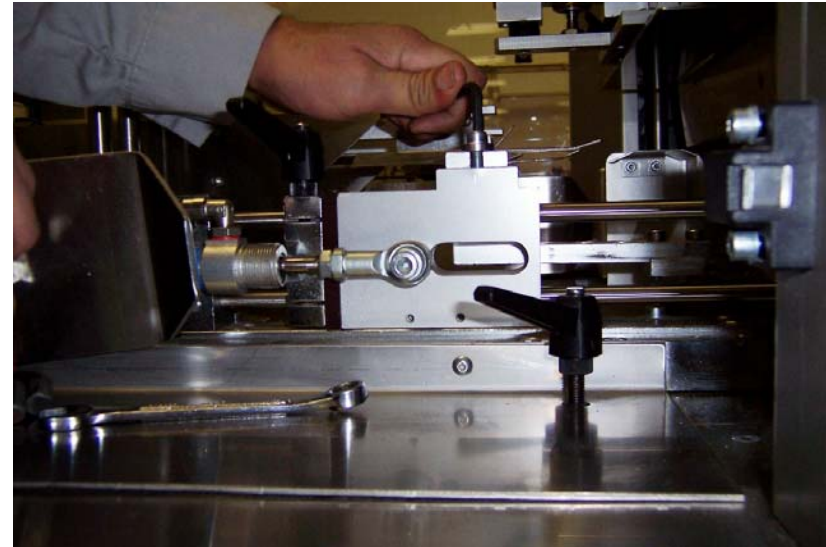
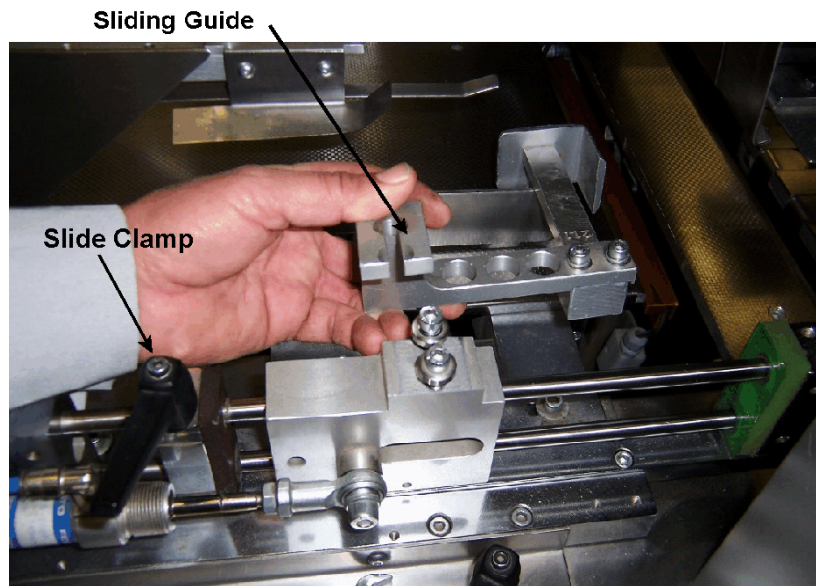


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Standard Work



Visual Work Instructions



Step 4:

Install the required Sliding Guides for the next setup

Slide the Guide under the two bolt heads and hand-tighten. Hold the Guide against the backstop while tightening the two bolts.

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Physical Training Aids

Physical training on the job is best
for learning, practice, and performance testing
AFTER NECESSARY CLASSROOM TRAINING!

Models

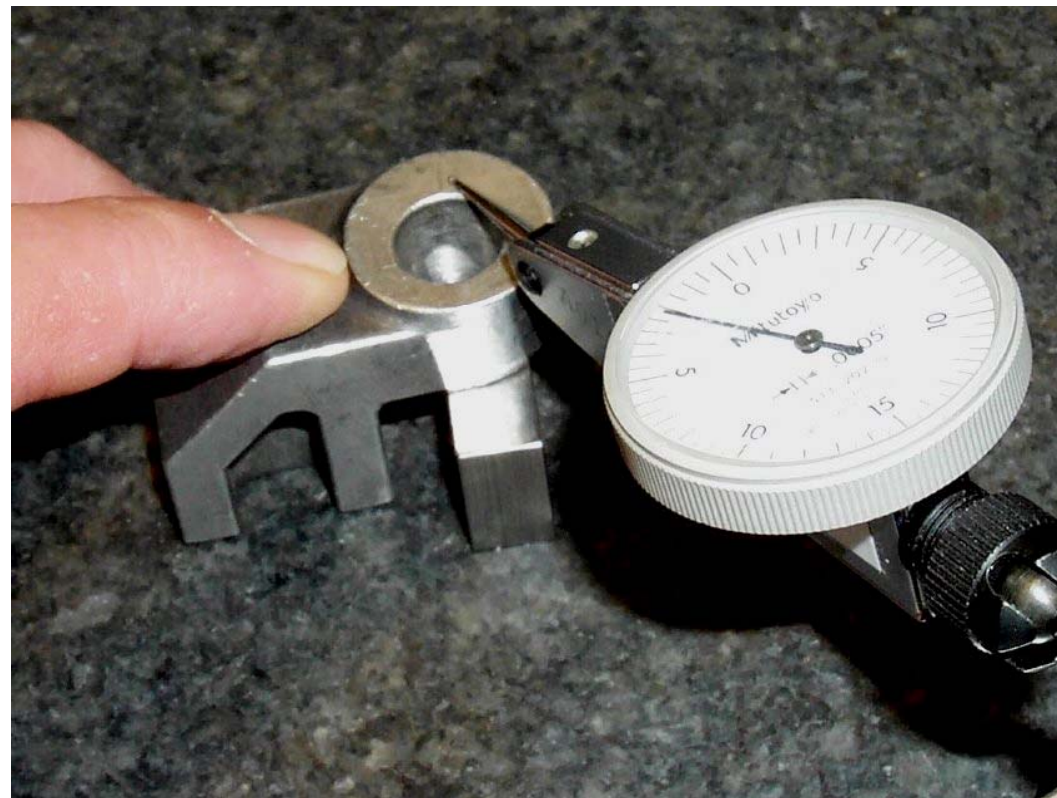
Examples

Parts

Tools

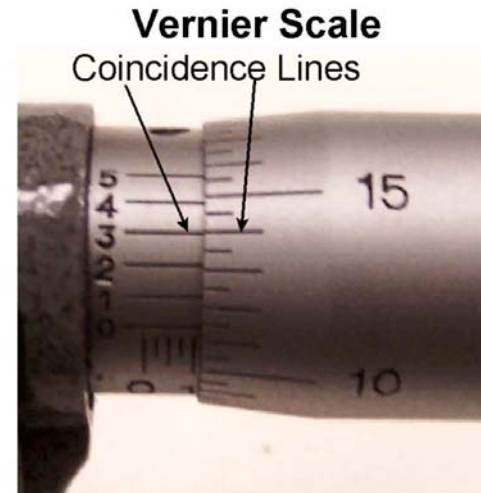
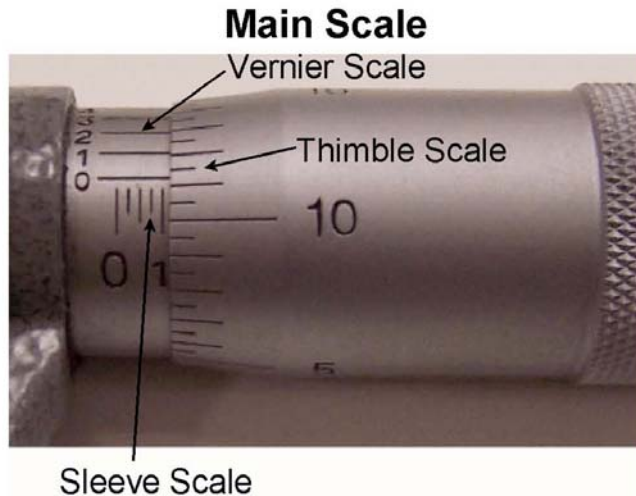
Machines

Equipment



Visual Training Aid

READING A VERNIER MICROMETER

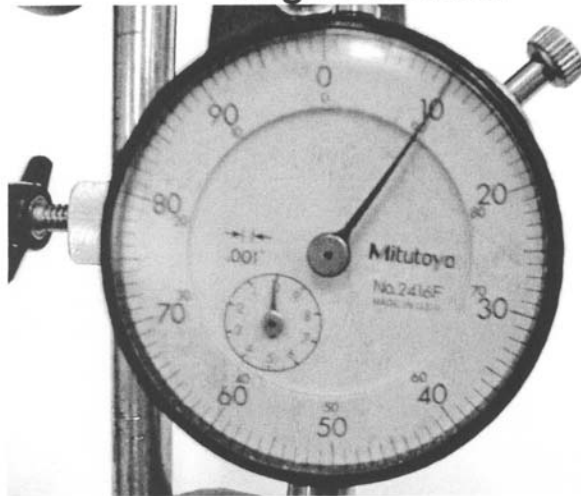


1. Each line on the Sleeve is equal to .025".
2. Read the main scale on the sleeve using the edge of the thimble. (.100" plus)
3. Each line on the thimble is .0005" (e.g. the 10 is .010")
4. Add the amount on the thimble that lines up with the main line on the sleeve. In this case, .011" plus.
5. The Vernier scale helps us to sub-divide between the lines on the thimble. On this tool, the Vernier lines are each .0001"
6. Find any line on the thimble that lines up exactly with any line on the Vernier scale. In this case, it is the 3. This means to add another .0003" to the measurement.
7. Results are .100" + .011" + .0003" equals .1113"

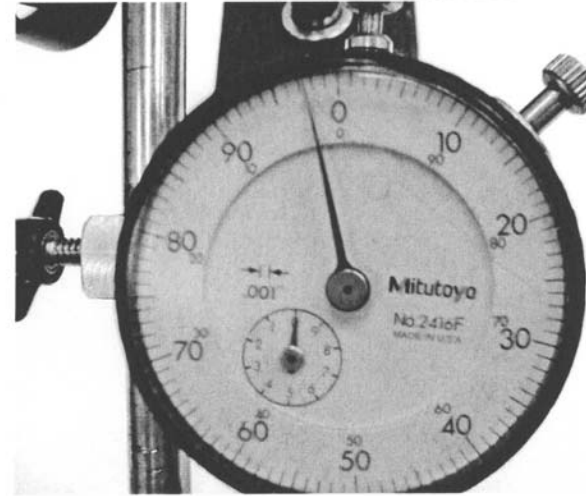
Visual Training Aid

TOTAL INDICATOR READING (TIR) MEASUREMENTS

High Position



Low Position

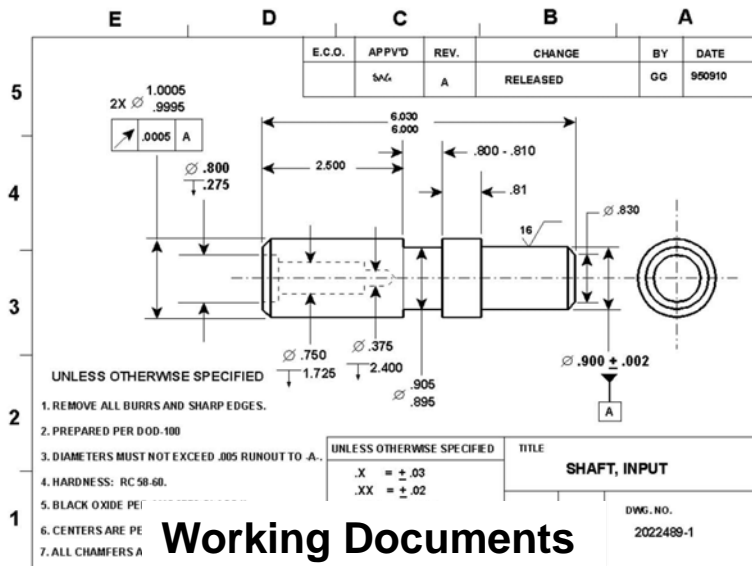


Total Indicator Reading (TIR) is defined as the total travel of the indicator needle during a dynamic (moving) measurement. It is used in various measurements. An alternative term is FIM (Full Indicator Movement).

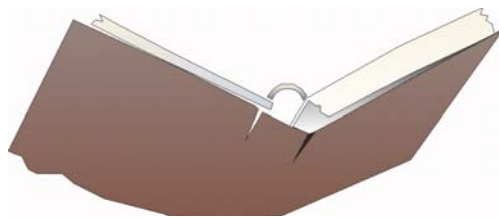
The above Drop Indicator discriminates to .001" (which is the finest measurement line on the dial).

1. During the measurement, the indicator needle was as high as plus .010" as shown (see High Position).
2. In the end, the lowest point where the needle rested was minus .003" as shown (see Low Position).
3. Therefore, during the measurement, the needle traveled .013". This is the TIR (or FIM).

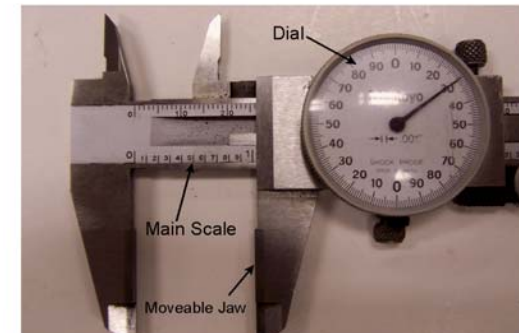
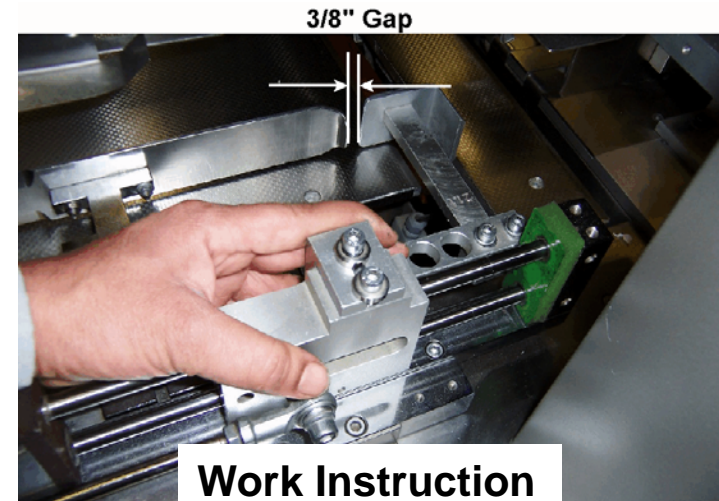
Training Materials/Work Instructions



Working Documents



Study Materials



Tools / Equipment

Final Test - Certification

- The Trainee is put into a situation where they must perform the job on their own
- The emphasis is:
 - Doing the job right
 - Acceptable results
- Final Certification depends on achieving standard times



Courtesy of Roberts Tool

Job Skills Certification Matrix

Job Skills Training Matrix

Name	Skill													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Tim Jones														
Henry Alcott														
Jeff Hatcher														
Susan Ames														
Joe Smith														
John James														



Skills listed below for Job Group: _____

- | | | | |
|----------------------|--------------------|-----------|-----------|
| 1. Shop Math | 5. Gages | 9. _____ | 13. _____ |
| 2. Blueprint Reading | 6. Setup Machine | 10. _____ | 14. _____ |
| 3. Geo. Tolerancing | 7. Mach. Operation | 11. _____ | |
| 4. Measuring Tools | 8. _____ | 12. _____ | |

Courtesy of Michael G. Beason - L5 Performance Systems

Developing Master Trainers

- SEA provides 9 days of training including how to develop visual work instructions, how to assess and plan training, how to develop job aids and training materials, and how to train and certify employees
- SEA certifies master trainers who successfully complete the above course
- Master trainers are able to train other master trainers

Other Resources

- ➔ Trade Schools
- ➔ University Programs
- ➔ Industry Training Centers
- ➔ Customers
- ➔ Consultants Specializing in Job Skills Training Programs

Reading Materials

✈ The Industrial Trainer by Gary Griffith

The book is available on Amazon.

Most of the slides in this presentation are courtesy of Gary Griffith.

The SEA website has webcast workshops that give specific information about various aspects of implementing the SEA Roadmap. Got to <http://seaonline.org/Briefings/webcasts.html>

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Thank You



<http://seaonline.org/ContactSEA/contactus-form.htm>