

Multi-Skill Training Services

Production Operator
Training Program



Do my production operators need training?

- Do your production operators need constant supervision?
- Do you have quality issues related to the lack of operator training?
- Do your operators call for technical support to perform operator duties?
- Do you provide your production operators with machinery specific training but they still struggle to perform setups, changeovers, or operate machines?
- Do you experience excessive unscheduled downtime due to production operator errors?

Why Choose Multi-Skill Training Services

"Customizing the technical training needs of industry"



On-Site Training at Your Facility

- No travel expenses for your employees
- No travel days for your employees
- No scheduling issues for your employees
- We welcome your management to audit classes
- We provide all materials needed for class (All you have to do is schedule your employees).



Any Day

Any Time

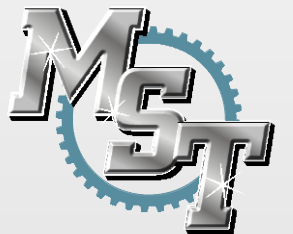
Any Shift

- Employees stay on their regular shift
- Better learning retention with normal sleep patterns
- Easier scheduling for your employees



Customized Training

- Classes only contain skill areas needed in your plant (you don't pay for training not required at your facility).
- Guaranteed employee buy-in
- Real world custom built hands-on exercises
- Custom curriculum
- Custom lab manuals



Individual Education Plan

- Employees only take classes that they need (you don't pay for training that is not required).
- Employee training progress is tracked
- You will have the option to use the training in a pay-for-skills program
- We will target the most important and needed skills that are lacking at your facility.



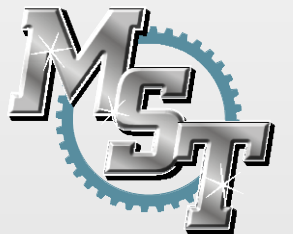
Instructors (Qualified SME)

- MST Services provides real world Subject Matter Experts (SME's)
- Former Directors of Manufacturing, Production Managers, and Production Supervisors – Best of the Best!
- Qualified through extensive MST hiring process
- Trained thoroughly using MST's "Train the Trainer" process
- Field "Qualified" as a MST Subject Matter Expert (SME)



Compliance and Economic Value Added

- Only pay for training needed
- Prospective employee evaluations (validated entrance evaluations)
- We provide all the necessary training equipment
- Instructor expenses billed at cost
- Competitive pricing



3 Phase Approach

Step 1

What training do my production operators need to be successful?

- Identifies required training for the facility's production operations.
- Establishes training curriculum.
- Provides testing criteria.

Step 2

What training do my production operators have now?

Skills Assessments

- Identifies existing training for each member of the facility's production operations.

Identifies training Gaps

- Provides foundation for each production operator's training program.

Step 3

How to address the training gaps?

Custom Training Curriculum

- Identify core classes with customized content.
- Implement Customized training based on the results of the assessment.
- Training Simulators
 - Customized for training areas with hands-on exercises and operating procedures.

Step
1

What training do my production operators need to be successful?

Job Task Analysis: On-site

Deliverables:

- Identifies required training for the facility's production operators.
- Establishes training curriculum
- Provides testing criteria



JTA Survey: Sample

Quality Assurance

Inspection

Do you or any other Line Techs use any of the following items or work with the following as related to Quality Assurance during Line Tech work at your facility?

<i>Job Task Analysis</i>	<i>Check if Used</i>	<i>Degree of Importance</i>	<i>Frequency Performed</i>	<i>Skill Level Required</i>
Product attributes	<input type="checkbox"/>	H M L	D W M I	J A N
Zero defects	<input type="checkbox"/>	H M L	D W M I	J A N
Check sheets	<input type="checkbox"/>	H M L	D W M I	J A N
Standard specifications	<input type="checkbox"/>	H M L	D W M I	J A N
Internal Customers	<input type="checkbox"/>	H M L	D W M I	J A N
External customers	<input type="checkbox"/>	H M L	D W M I	J A N

Prevention

Do you or any other Line Techs use any of the items below, or participate in, or perform the following tasks as related to Quality Assurance during Line Tech work at your facility?

<i>Job Task Analysis</i>	<i>Check if Used</i>	<i>Degree of Importance</i>	<i>Frequency Performed</i>	<i>Skill Level Required</i>
Process Diagram / Flowchart	<input type="checkbox"/>	H M L	D W M I	J A N
Output (finished product)	<input type="checkbox"/>	H M L	D W M I	J A N
Inputs (raw materials, packaging materials, etc.)	<input type="checkbox"/>	H M L	D W M I	J A N
QMS (Quality Management System or similar)	<input type="checkbox"/>	H M L	D W M I	J A N
Continuous Improvement Teams	<input type="checkbox"/>	H M L	D W M I	J A N
FMEA (Failure Mode and Effects Analysis)	<input type="checkbox"/>	H M L	D W M I	J A N

Job Task Rankings from JTA

(identifies key tasks to include in assessments and training)

Skill Category	Job Component (101)	Rating
Setups and Changeovers	Changeover Process	195.23
Basic Computer Skills	Email and Internet Applications	151.23
Communications / Leadership	Effective Delegation	137.33
Basic Computer Skills	Basic Navigation	122.87
Management of Operations	Management	117.99
Setups and Changeovers	Benchmarking / Measurements	116.06
Math and Measurements	Whole Numbers	111.59
Hand Tools	Wrenches and Scewdrivers	109.79
Math and Measurements	Weighing Measurements	104.13
Communications / Leadership	Methods of Communication	97.96
Basic Electricity	Electrical Safety Program Participation	97.08
Basic Computer Skills	Spreadsheet and Word Processing Applications	94.36
Math and Measurements	Decimals	90.96
Math and Measurements	Capacity Measurements	72.73
Communications / Leadership	Resolving Conflict	69.74
Communications / Leadership	Problem Identification and Resolution	66.26
Setups and Changeovers	Procedures (SOP)	54.96
Preventive Maintenance	Goal Setting / Continuous Improvement	52.34
Math and Measurements	Fractions	45.79
Management of Operations	Operation Instruction	40.70
Quality Assurance	Audit	35.51
Communications / Leadership	Information	34.06
Equipment Operation	Testing Equipment Operation	33.35
Setups and Changeovers	Tools and Methods	32.26
Preventive Maintenance	Inspections	31.63
Communications / Leadership	Effective Meetings	30.17
Hand Tools	Measuring Tools	29.46
Equipment Operation	Equipment Operation and Control	28.98
Quality Assurance	Inspection	27.39
Setups and Changeovers	Goal Setting / Continuous Improvement	26.53
Basic Computer Skills	Presentation Applications	24.69
Basic Computer Skills	Database Applications	24.57
Operations Analysis	Operations Analysis	22.15
Lubrication	Oils	19.36
Quality Assurance	Prevention	17.83
Math and Measurements	Linear Measurements	12.47
Gaging	Special Gaging	8.09

Step 2

What training do my production operators have now?

Training Assessments

- Written Assessments: On-site
- Hands-on Assessments: On-site
- Deliverables:
 - Identifies existing training of the facility's production operators (identifies skill gaps)
 - Provides foundation for each individual's training program

Written Assessment

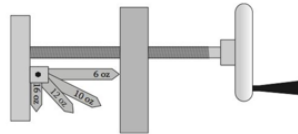
TOOLS AND METHODS- MEASURING DEVICES

41. If there are only two products to be run, or at least only two set positions, _____ are easily mounted.

- A. leaf gauges
- B. mechanical stops
- C. thickness gauges
- D. scales

42. The picture to the right is an example of a _____.

- A. leaf gauge
- B. mechanical stops
- C. thickness gauges
- D. scale



43. Mechanical indicators should not be exposed to _____.

- A. shock
- B. vibration
- C. air
- D. A & B

44. One of the advantages of electronic digital indicators is that they can provide _____.

- A. remote readouts
- B. output can be used as input to PLC
- C. powerless display
- D. A & B

45. All adjustments should be made by _____ the head _____.

- A. raising, up
- B. lowering, down

BENCHMARKING- QUALITY STANDARDS

46. An open-ended approach which often goes under the umbrella of "continuous improvement" is called a _____.

- A. process
- B. project
- C. TYNT
- D. All of the Above

47. What departments should be represented on the Changeover team?

- A. Production only
- B. Maintenance only
- C. Quality only
- D. All departments

48. A useful trait for the key player on the Changeover team is _____.

- A. positive attitude
- B. available time
- C. no vacations planned
- D. management experience

49. Changeover meetings must have _____.

- A. a projector
- B. an audience
- C. a specific agenda
- D. comfortable seating

50. A natural human factor that must be handled is _____.

- A. resistance to change
- B. tardiness
- C. bad attitudes
- D. poor health

Hands-on Assessment

OPERATOR FUNDAMENTALS Hands-On Assessment Scoring Sheet

Task	Task Value	Degree of completion	
		Successful	Unsuccessful
Basic Measurements	20		
Identify Hand Tools	20		
Electrical Safety	20		
Basic Computer Skills	20		
Computer Skills-Spreadsheet Operations	20		
Total Points Earned			

NOTE: Each task must be checked (✓) as either "Successful or Unsuccessful"

QUALITY ASSURANCE Hands-On Assessment Answers

Overall View of Quality

Each participant will be given a box of small fasteners to be assembled into FIVE IDENTICAL assemblies; each carriage bolt will be assembled with two flat washers, one lock washer, and one nut.

Step One: Inspect all parts before assembly and note any issues affecting the quality of the completed assemblies.

Step Two: Assemble FIVE IDENTICAL assemblies and note any issues affecting the quality and function of the completed assemblies.

Step Three: If five identical assemblies cannot be assembled, list the parts needed to complete the task.



Assessment Results

Summary Sheet

- Indicates strengths and weaknesses of needed specific training

Incomplete 69 and below																		
Completed test 70 and above																		
Overall Score	77%	92%	78%	91%	80%	93%	68%	58%	77%	95%	64%	58%	63%	68%	76%	83%	67%	75%
Participants	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9
Areas	Written	Hands On	Written	Hands On	Written	Hands On	Written	Hands On	Written	Hands On	Written	Hands On	Written	Hands On	Written	Hands On	Written	Hands On
Operator Fundamentals	90%	96%	86%	100%	88%	89%	60%	60%	80%	96%	66%	32%	54%	36%	80%	89%	60%	96%
Quality Assurance and Equipment Operation	76%	94%	82%	99%	80%	99%	76%	51%	76%	89%	70%	82%	70%	81%	86%	87%	70%	77%
Setups and Changeovers and Management of Operators	70%	89%	70%	72%	74%	100%	72%	70%	72%	100%	62%	69%	72%	66%	74%	77%	64%	71%
Communications and Leadership	72%	90%	74%	92%	76%	84%	64%	50%	78%	94%	58%	50%	54%	88%	62%	77%	74%	57%

Step 3

How to address the training gaps?

Customized Training Curriculum

- Deliverables:
 - Instructor Guidebooks - Identify core classes, plus customization of content
 - Implement customized training (relates to the plant floor)
 - Training Simulators - Customized for specific areas with hands-on exercises & operating procedures



Customized Training Curriculum

Multi-Skill Training Services, Inc.
Operator Fundamentals 101

Session 1:	Basic Math
Session 2:	Advanced Math
Session 3:	Applied Math Volume
Session 4:	Applied Math Weight
Session 5:	Weighing Measurements and Devices
Session 6:	Basic Measurements
Session 7:	Hand Tools
Session 8:	Electrical Safety
Session 9:	Basic Computers - Navigation
Session 10:	Basic Computers – Email Operations
Session 11:	Basic Computers – Spreadsheet Operations
Session 12:	Review and Assessment

Training Simulators

