Lean Certification Portfolio Information & Instructions

Congratulations!
You are taking an important step on your lean journey. The Lean Certification path offers you the opportunity to:

- Assess your personal progress
- Evaluate results you've achieved versus planned
- Reflect upon your experiences
- Identify personal growth & development opportunities
- Document your lean achievements

This document includes instructions for completing your portfolio, and critical information about the knowledge and competencies that should be demonstrated by certification candidates at each level. Please read through the instruction set before starting your portfolio work.

*Note: You must have taken and passed the appropriate examination portion of the Lean Certification before submitting your portfolio for review. (For example, you must have taken and passed the bronze-level examination before submitting your bronze portfolio. See the Lean Certification Process Illustrated section below)

Overview

The Society of Manufacturing Engineers (SME), the Association for Manufacturing Excellence (AME), and The Shingo Prize for Excellence in Manufacturing (Shingo Prize) have partnered to facilitate industry–based, leading lean practitioners in the development of this new standard. The standard assesses your lean knowledge (exam), the application of that knowledge (portfolio) and mentoring and coaching or others. Three levels of certification progress with practitioners through their career:

- **Bronze Certification is focused on tactical lean.** Tactical lean is the deployment and application of lean principles, concepts and methods locally, within a work cell, work group or value stream. This may be a workshop or project focused on implementation of specific lean concepts or techniques.

- **Silver Certification is focused on integrative lean.** This is the integration of lean activities, coupled with organizational restructuring, necessary for transformation and sustainable lean operation of a complete value stream.

- **Gold Certification is focused on strategic lean.** This is a lean transformation of a business or organization. This requires at least two business transformation projects. Each project must include two or more of the classic value streams of:
  1. new product development
  2. order through delivery
  3. supply chain
  4. administrative functions

For purposes of this certification:
> *VALUE STREAM is defined as any process that has a defined customer and supplier (including internal), material flow and information flow. The process should include multiple operations or tasks that require the use of several people, machines or equipment.*

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Lean Certification Candidate Profiles

The candidate profiles are intended to help you identify the knowledge and skills needed to achieve a specific level of Lean Certification. They may also help you identify appropriate projects for inclusion in your portfolio.

Bronze (Tactical), Silver (Integrative), Gold (Strategic) Defined

Certification Level	Description	Affect
Bronze	**Tactical Lean** Tactical lean is the deployment and application of lean principles, concepts and methods locally, within a work group or value stream. This may be a workshop or project focused on implementation of specific lean concepts or techniques.	**Local:** Processes within a work group or value stream. Candidates are operating under the guidance of others. Much focus is on usage of lean tools.
Silver	**Integrative Lean** This is the integration of lean activities, coupled with organizational restructuring, necessary for transformation and sustainable lean operation of a complete value stream.	**Value Stream:** Value Stream is defined as any process that has a defined customer and supplier (including internal), material flow and information flow. The process should include multiple operations or tasks that require the use of several people, machines or equipment.
Gold	**Strategic Lean** This is a lean transformation of a business or organization. This requires at least two business transformation projects. Each project must include two or more of the classic value streams of: 1. new product development 2. order through delivery 3. supply chain 4. administrative functions	**Enterprise:** A business or organization systematically working toward a common goal. This may be an entire company, a plant, a business unit, a satellite office, and may include external suppliers and customers.

WHAT DOES A LEAN BRONZE CANDIDATE LOOK LIKE?

A Lean Bronze Certification candidate possesses a solid understanding of the basic principles and tools of Lean, and the ability for tactical implementation that drives improvements and shows measurable results. They also have an ability to teach the basic tools of Lean.

What knowledge & skills do I need?
Lean Bronze candidates must be fully capable of applying lean principles and tools to drive improvements and show measurable results. They need knowledge of the basic principles and techniques of lean as applied to:
- Factory, Office and Service
- Team Facilitation
- Project Management
- Appropriate Measurement of Results

Additionally, Lean Bronze candidates are expected to demonstrate skills and knowledge of:
- Lean Basics:
    o Activities where the work happens
    o Cause and Corrective Actions
    o Cellular Layout/Concepts
    o Flow
    o Jidoka
    o Mistake Proofing
    o Problem solving
    o Pull/Kanban
    o SMED (Single Minute Exchange of Dies)
    o Standard Work
    o Tactical results measurement (initial goal, results to goals, discussion on gaps)
    o Takt time/customer demand
    o Total Productive/Preventative/Predictive Maintenance (TPM)
    o Value
    o 5S
    o Visual Management
    o Waste (Value Added/Non–Value Added)
- Gap analysis
- Team dynamics
- Planning methods/control methods (e.g. evaluate project risks, communication, and logistics; describe how you use A3, etc.)
- Assessing level and trend of improvement (candidate is capable of evaluating and communicating progress to plan/goal, progress to previous checks, maintaining stability)

See the Lean Certification Body of Knowledge for a topical outline of examination subjects.

WHAT DOES A LEAN SILVER CERTIFICATION CANDIDATE LOOK LIKE?

Lean Silver Certification candidates possess an expanded knowledge and understanding of Lean principles and tools, and apply them in a structured and systemic approach to achieve value stream–level results. Their expertise focuses on value stream integration. Lean Silver candidates also possess a keen ability to teach lean integration of the value stream, and deploy that knowledge throughout the value stream.

For purpose of this certification, a **VALUE STREAM** is defined as any process that has a defined customer and supplier (including internal), material flow and information flow. The process should include multiple operations or tasks that require the use of several people, machines or equipment.

Candidates at the Silver-level are expected to be working at an integrative-level of lean. An understanding of The Shingo Prize Model is extremely helpful for candidates. The model can be found at www.shingoprize.org as a free download. The Shingo Prize Model is an excellent foundation for organizational transformation – regardless of industry - and to extend your understand of the basis for the Lean Certification body of knowledge.

What knowledge & skills do I need?

In addition to the knowledge and skills that you have demonstrated and achieved by earning your Bronze Certification, Lean Silver Certification candidates must be capable of orchestrating the transformation of a value stream through the application of lean principles and methodologies, including the ability to connect multiple projects and organizational restructuring necessary to facilitate the transformation and sustainability. Candidates must demonstrate improvements and show measurable results. Silver–level candidates must be fully capable of:

- Aligning support activities
- Analyzing and understanding organizational dynamics
- Applying lean tools at a tactical level and integrating the tools into a value stream.
- Awareness of external assessment vehicles (e.g. Shingo Prize, etc.)
- Benchmarking
- Cell development, implementation and integration
- Creating basic pull relationships for beginning and ending of the value stream
- Creating Lean financial models for their value stream
- Creating, managing and tracking improvement results within a value stream
- Effective communication
- Employee/supplier/customer involvement and empowerment
- Environment/Sustainability within the value stream
- Establishing information flows
- Evaluating human capabilities, identifying skill gaps and developing multi–skilled people with basic understanding of Lean
- Influencing the organization to align with and support the value stream
- Lean in Administration/Transactional
- Leveling
- Managing for daily improvement
- Mentoring (coaching and developing) others on the lean journey
- Planning lean workshops and events
- Point of use: material and information (Basic pull with suppliers)
- Selecting, organizing and leading multiple cross-functional teams
- Value stream mapping and analysis
- Value stream visuals

See the Lean Certification Body of Knowledge for a topical outline of examination subjects.

WHAT DOES A LEAN GOLD CERTIFICATION CANDIDATE LOOK LIKE?

Lean Gold Certification candidates possess strategic focused knowledge and understanding of Lean principles and tools, and apply them in a structured and systemic approach to achieve significant business results. Their expertise results in the strategic transformations of extended enterprises. They also possess a keen ability to teach lean strategy and lean leadership, and deploy that knowledge throughout the extended enterprise.

What knowledge & skills do I need?
Gold Candidates must be intimately aware of all aspects of developing and implementing business vision, mission, value strategies and, especially, resource allocation. This individual must provide guidance at all levels of the organization. Gold–level candidates must be fully capable of:

- applying lean principles and tools to drive improvements.
- showing measurable, positive results for an enterprise (e.g. economic value add, growth, etc.).
- orchestrating the transformation of multiple and extended value streams.
- defining and leading enterprise strategic transformation.

In addition to the knowledge and skills that you have demonstrated and achieved by earning both your Bronze and Silver-level Certifications, Lean Gold candidates are expected to demonstrate skills and knowledge of:

- 3P (Production Process Preparation)
- Advanced lean financial models
- Capital structure
- Knowledge transfer
- Developing a learning organization
- Organizational design & development
- Enterprise value stream mapping & analysis
- Human resource planning
- Integration of other methodologies including 6-sigma, TOC, TQM, etc.
- Lean supply chain development
- Market strategy
- Mentoring and coaching
- Organization training strategy and delivery
- Product development/project value stream mapping
- Rewards, Recognition and Empowerment
- Right sized operation, equipment and facility capacity planning
- Strategy deployment
- Value stream organizational alignment
- Effective communication and planning
- Risk management
- Social responsibility
- Environmental/sustainability
- Respect for the individual and humanity

See the Lean Certification Body of Knowledge for an outline of the topics covered on the exam.
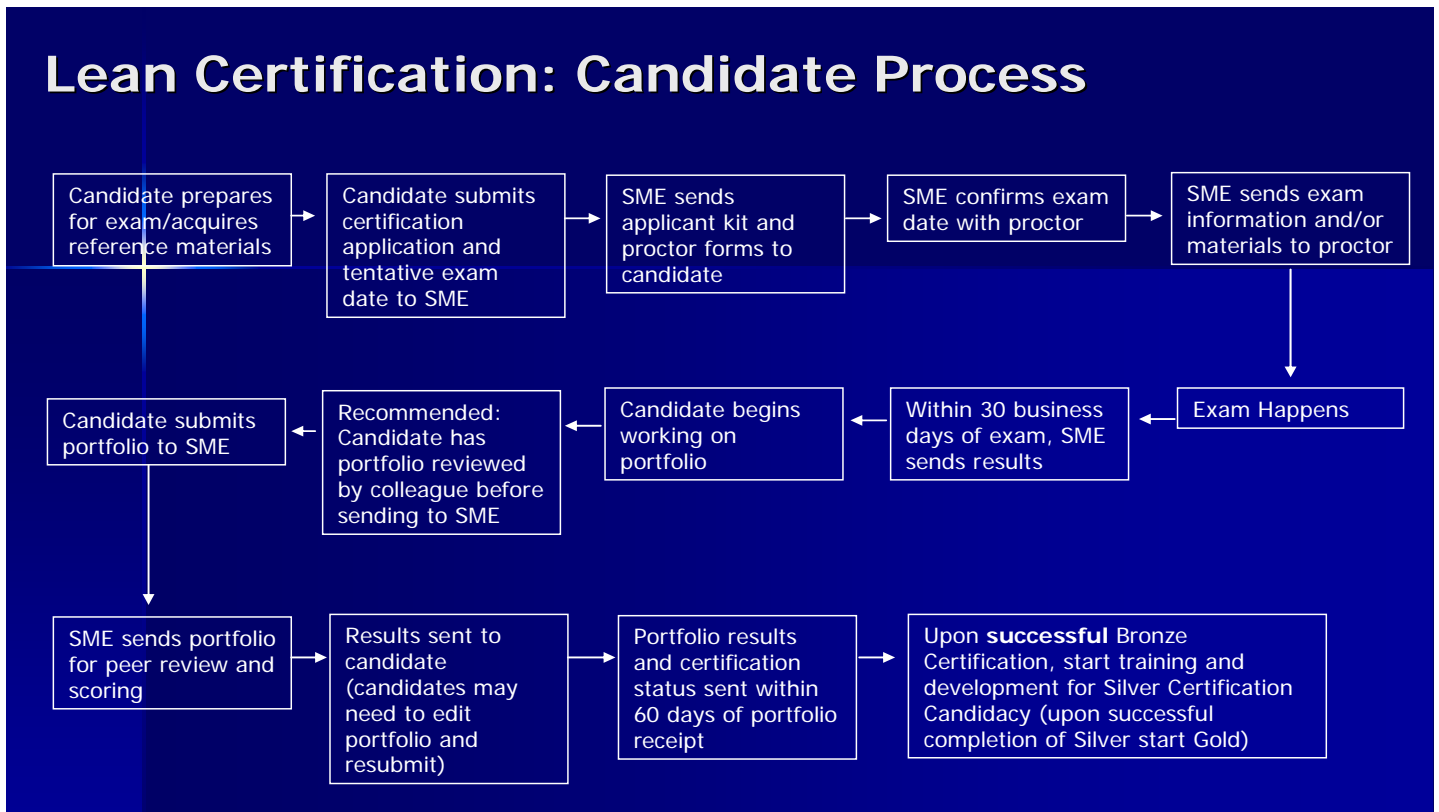
Lean Certification Process

The Lean Certification is a progressive program. If you are applying to become Gold Certified, you must first complete the Bronze requirements, then the Silver, and lastly the Gold.

For Bronze and Silver Certification

- Submit your certification application. Visit www.sme.org/leancert and select the "apply now" option or download a PDF application form to mail or fax in.
- Set up your Exam date; contact the SME Certification Department at 800–733–4763 or e–mail certification@sme.org
- Take the Exam (if you do not pass the exam, you must wait 60 days before attempting the exam again)
- After passing the exam, submit your portfolio to certification@sme.org
- Upon receiving your passing portfolio results, you earn your Certification

Progress to Gold (after completing Bronze and Silver Requirements)

- Submit your certification application
- Set up your Gold Exam date
- Take the Gold Exam (if you do not pass the exam, you must wait 60 days before attempting the exam again).
- After you pass the exam, submit your Gold portfolio
- Once your portfolio is reviewed **and ACCEPTED**, you will be contacted to set up your interview.
- Upon receiving your portfolio and interview results, you receive your Gold-Level Lean Certification

Lean Certification Portfolio: why a portfolio?

As you saw in the candidate profiles, knowing about lean is just a part of the lean journey. Lean is about how you apply that knowledge every day, for the continuous improvement of your organization and yourself. It's how you help others along their journeys. It's about more than tools — **it's about creating a system and culture that can sustain continuous improvement through employee and customer involvement.**

Industry practitioners agreed that an exam–only Lean Certification program wouldn't cut it. The evaluation of an individual based on the natural progression of the application and demonstration of lean in practice was essential. Actual experience was critical to this certification. And, industry wanted to develop a portfolio that could grow with a certification candidate as they progress in their careers — a way to document both results and personal growth & development. ***The portfolio is a reflection of projects that candidates undertook, and demonstrates the ability to: sustain the project; look for future improvement opportunities; show the ability for continuous learning and improvement; and illustrate how the candidate plans to progress on their own lean journey.***

The Portfolio is About YOU

Using the Plan–Do–Check–Act (Adjust) cycle, the portfolio requires you to:
- Document **your** lean–related education, training and development activities.
- Describe a selection of projects **you** have been or are involved with, appropriate to the certification level that you are pursuing.
- Complete **your** detailed value stream project report(s) at the Silver and Gold levels of certification.
- Document **your** mentoring and coaching of others at the Silver and Gold levels of certification.
- Reflect on your portfolio and experience and build **your** development plan for your recertification cycle. Please visit www.sme.org/lrecertification to see recertification requirements

TIPS:

- Your portfolio is about **you** and what **you** have contributed to lean efforts. Focus on what **you** did as part of the projects on which you are reporting. Emphasize what **you** have accomplished and provide actual results.
- Avoid the use of unrealized future improvements. Reviewers cannot evaluate activity that has not yet occurred.
- Be certain you have met all criteria specified in the project summaries, value stream summaries (Silver & Gold) and strategic transformation (Gold). Your portfolio will be returned to you if you have not met these requirements.
- **Your projects should be filled with "I" language – I did, I facilitated, I led, etc.** Your portfolio will be returned to you if the reviewer does not have a clear picture of your contributions to the projects. You will have ONE opportunity to revise to address the specific project deficiencies and submit the portfolio for reconsideration. If you do not pass the portfolio on the second attempt, you will need to wait one year to reattempt the portfolio (additional fees apply).
- **DO NOT include pictures, graphs, or any other type of images in the portfolio**. First, many email systems reject large size files. Secondly, the reviewers need to understand what **YOU** specifically did and what **YOU** learned through the project process. Pictures tell a wonderful story about the team's efforts, they do not indicate what **YOU** specifically did.
- You may keep company names confidential on your projects, however you MUST indicate at a minimum the industry you worked in and the part of the organization that was effected by the project.
- Your portfolio MUST be submitted in a Microsoft Word format only. All other formats will be rejected.
- Use the following naming convention for your portfolio file: certification ID–Last Name First Name–Portfolio Type.doc (e.g. 1111111–Dokevich Jane –Bronze Portfolio.doc)

Education, Training & Development

Document the Lean–related education, training & development activities in which you have participated. They may include training (public or company–sponsored), conference attendance, hands–on workshops, kaizen events, books, videos, etc.

Your education, training & development **MUST** include **3 or more** of these various types of professional development activities:

- For classroom training, hands–on programs, web-based seminars and conference programs, indicate the **number of hours spent in session** (instructor or attendee). Document training you have delivered by attaching a syllabus or curriculum outline.
- For videos, indicate the **length of the video**.
- Books are valued at **four (4) hours of education, training & development per title read**.
- Plant tours **(actual length up to a maximum of 3 hours)**.

As part of your documentation, you must indicate the parts of the Lean Certification Body of Knowledge covered in the training. Please refer to the Lean Certification Body of Knowledge for the topics covered under each major module. **You can download the Lean Certification Body of Knowledge at www.sme.org/leancert .**

Education, training & development documentation **MUST** demonstrate continuing investment in your lean education over time. For example, if you started your lean journey in 2001, illustrate how you've invested in your education, training and development from 2001 to the present.

NOTE: If you are including Kaizen events or other "hands–on" events as training, they may not be used for your portfolio projects. You may only count each activity or event one time within your portfolio.

Training, Education & Development Hours Guideline:
- **Bronze Candidates**: 80 hours minimum
- **Silver Candidates**: 160 hours (80 hours from Bronze + 80 additional) minimum
- **Gold Candidates**: 200 hours (160 hours from Silver + 40 additional) minimum

SAMPLE: Education, Training & Development Form

This is a sample of a completed Education, Training & Development Form for the Bronze–level. It provides an idea of the types of activities you may want to document and how to indicate what the areas of the Lean Certification Body of Knowledge were covered. **Please refer to the Lean Certification Body of Knowledge for the topics covered under each major module. You can download the Lean Certification Body of Knowledge at www.sme.org/leancert .**

Education, Training & Development Activities & Descriptions	Year	Hours	Place an X in the cells below to indicate the Lean Certification Body of Knowledge areas covered by your training, education & development activities				
			Enablers	Core Operations	Support Functions	Quality, Cost, Delivery	Business Results
Hands–on Kaizen training: part of a 10 person team to receive internal training on kaizen planning and participation	2001	15	X	X			X
LMNO Training: lean strategic planning & implementation training	2002	24	X	X	X	X	X
Lean Production Simplified	2003	4	X	X			
ABC Annual Conference: attended sessions on the human side of lean, lean culture, lean for the office, lean metrics	2005	12	X		X	X	
Toast Kaizen Video	2005	0.5		X	X		
Hitchhikers Guide to Lean (book)	2006	4	X	X	X	X	X
QRS Web Seminar: effective lean leadership	2006	1	X				X
XYZ Company Internal Training: factory floor Kaizen Blitz facilitation	2006	24		X			X
TOTAL EDUCATION, TRAINING & DEVELOPMENT HOURS		**84.5**					

Portfolio Requirements: Bronze (Tactical), Silver (Integrative), Gold (Strategic)

Documentation Requirements for each Certification Level:

Certification Level	Role in Projects	Portfolio Requirements	Form Name
Bronze	Participant, leader, co–leader, facilitator, co–facilitator	▪ 80 hours of education, training & development ▪ 5 tactical (local) projects (1 page) ▪ 1 portfolio reflection on the entire portfolio (1 page) *All projects MAY be part of a single value stream*	Education, Training & Development Form Tactical (Local) Project Form Bronze Portfolio Reflection Form

Silver	Leader, facilitator, team leader, module leader, project leader, co–leader, co–facilitator	▪ 160 hours of education training & development (80 from Bronze + 80 additional)
		
		▪ Successful completion of bronze requirements plus 5 additional projects consisting of:
		   o 3 tactical (local) projects
		   o 2 value stream projects that demonstrate integration of tactical projects
		▪ 1 report on individual mentoring or team coaching
		▪ 1 portfolio reflection/reflection on the entire portfolio (1-2 pages)
			Education Training & Development Form
			
			Tactical (Local) Project Form
			Integrative (Value Stream) Project Form
			Mentoring/Coaching Form
			Silver Portfolio Reflection Form

Gold	Leader or facilitator of lean policy deployment and transformation activities for a business or organization via proven best practices	▪ 200 hours of education, training & development (160 from Silver + 40 additional)
		▪ Successful completion of silver requirements plus 5 additional projects*
		   • 1 tactical (local) project
		   • 2 value stream projects that demonstrate integration of tactical projects
		   • 2 strategic projects. These projects must demonstrate change and continuous improvement in **at least 2** of the classic value streams areas of:
		     o new product development
		     o order through delivery
		     o supply chain
		     o administrative functions
		▪ 1 report on individual mentoring or team coaching
		▪ 1 portfolio reflection/reflection on the entire portfolio (2-3 pages)
			Education Training & Development Form
			
			Tactical (Local) Project Form
			Integrative (Value Stream) Project Form
			Strategic (Enterprise) Project Form
			
			Mentoring/Coaching Form
			Gold Portfolio Reflection Form

Portfolio Review

All portfolios are peer reviewed. These individuals are certified either at the level you are attempting, or higher. They may also be representatives of the Lean Certification Oversight Committee. Portfolios will be evaluated and scored against the criteria outlined under the Portfolio Requirements. Reviewers will evaluate each portfolio to determine if they are able to score it. If the reviewer determines that they are unable to score the portfolio, it will be returned to the candidate with comments/feedback.

BRONZE Portfolios:
- Bronze candidate portfolios will be evaluated by a single reviewer. If a portfolio does not pass on the first submission, it will be sent back to the candidate with a completed score sheet and comments. A candidate has one opportunity to address portfolio deficiencies and resubmit the portfolio for a second review. Your revised portfolio will be sent to the original reviewer. As a system of checks and balances, if a portfolio does not pass on the second review, it will be sent to one additional reviewer for review and score verification. If a second reviewer is required, a conference call between reviewers will be held to reach consensus on the portfolio score before results are returned to the candidate.

SILVER Portfolios:
- Silver candidate portfolios will be evaluated by a team of two (2) reviewers and one alternate. The alternate will score the portfolio if the initial two reviewers cannot reach a consensus on portfolio scoring. The review team will provide a collective evaluation and summary comments to Silver candidates.

GOLD Portfolios:
- Gold candidate portfolios will be evaluated by a team of three (3) reviewers regardless. The review teams will provide a collective evaluation and summary comments to Gold candidates. At Gold, the portfolio will be **ACCEPTED or REJECTED (based on the scoring guidelines)**. A formal portfolio score will be provided after completion of the interview, along with an interview summary. Ideally, the Gold portfolio review team will function as the Gold candidate interview panel as well. Once your portfolio has been accepted, an SME representative will contact you to set up your interview. The preferred forums for interviews will be at SME, AME or Shingo Prize public events.

Expect that the portfolio review may take up to 60 days to complete during the initial growth of this program.

All Portfolios: Tactical (Local) Projects

Download a Tactical Project samples from a Bronze portfolio at www.sme.org/leancert.

BRONZE CANDIDATES:

Bronze–level candidates are focused on the tactical (local) application of lean, and must report out on five (5) lean projects. Tactical (local) lean is the deployment and application of lean principles, concepts and methods within a work cell, work group or value stream. A project may be a workshop, event or activities focused on implementation of specific lean concepts or techniques.

For the Bronze–level Certification projects, please use the "Tactical (Local) Project Form" to document each of your projects. Describe the five (5) most significant Lean projects you have lead or participated in (one per page). It is assumed that a Bronze–level candidate will have lead or actively participated in more than five (5) projects, and should select the best projects from that experience. Projects should reflect both the depth and breadth of your lean knowledge and experience.

SILVER CANDIDATES:

Silver–level candidates are focused on integrative (value stream) lean, however they still must demonstrate the ability to implement tactical (local) application of lean, and must report out on three (3) lean projects. Tactical (local) lean is the deployment and application of lean principles, concepts and methods within a work cell, work group or value stream. A project may be a workshop, event or activities focused on implementation of specific lean concepts or techniques.

For the Silver–level Certification projects, please use the "Tactical (Local) Project Form" to document each of your projects. Describe the three (3) most significant Lean projects you have lead or participated in (one per page). **Projects used in the Bronze–level portfolio may not be reused for the Silver level. It is expected that Silver–level candidates will present a new set of projects.**

GOLD CANDIDATES:

Gold–level candidates are focused on strategic (enterprise) lean, however they still must demonstrate the ability to implement tactical (local) application of lean, and must report out on one (1) tactical (local) project. Tactical (local) lean is the deployment and application of lean principles, concepts and methods within a work cell, work group or value stream. A project may be a workshop, event or activities focused on implementation of specific lean concepts or techniques.

For the Gold–level Certification projects, please use the "Tactical (Local) Project Form" to document your project. Describe the most significant Lean tactical project you have lead or participated in. **Tactical projects used in the Bronze–level or Silver–level portfolio may not be reused for the Gold level. It is expected that Gold–level candidates will present a new set of projects.**

ALL CANDIDATES:

Projects **should** demonstrate continuing practice in lean. For example, if you are applying for certification in 2006, and you started your lean practice in 2001, you may choose to include projects from 2002, 2004 and 2006 in your portfolio to demonstrate that you are still practicing lean.

PASS POINT: Each tactical project must score 12 out of 15 possible points. Each project must pass for successful portfolio completion.

The Plan–Do–Check portion of your project is limited to one total page.
The Act (Adjust) portion of your project is limited to 250 words (1/2 page) maximum.

All Portfolios: Portfolio Reflection

Continuous improvement and human development are at the heart of the lean journey. The portfolio reflection is intended to capture your personal lean developmental journey, and your reflection about what you have learned through the portfolio and certification process. Your portfolio reflection assesses:

- Your lessons learned through completing this portfolio process
- Your greatest challenge in your lean journey and how you addressed it
- Changes you could make in your lean implementation process that could make you more effective
- Your three to five year developmental plan
- Greatest challenges to achieving your developmental plan and how you intend to overcome them

You have one (1) page maximum to complete your Portfolio Reflection.

PASS POINT: Your reflection must score 20 out of 25 possible points for successful portfolio completion.

Silver & Gold Portfolios: Integrative (Value Stream) Projects

SILVER CANDIDATES:

Silver–level candidates are focused on integrative (value stream) lean — the integration of lean activities, coupled with organizational restructuring, necessary for transforming and sustaining lean operation of a complete value stream. *For purposes of this certification, Value Stream is defined as any process that has a defined customer and supplier (including internal), material flow and information flow. The process should include multiple operations or tasks that require the use of several people, machines or equipment.*

It is expected that a Silver–level candidate will be a leader, facilitator, team leader, module leader, project leader, co–leader, or co–facilitator of the value stream transformation. Silver candidates must report out on two (2) value stream transformations.

GOLD CANDIDATES:

Gold–level candidates are focused on strategic (enterprise) lean. As part of this focus, great attention must be paid to integrative (value stream) lean and the effect of the value stream efforts in transforming and sustaining an enterprise.

It is expected that a Gold–level candidate will be a leader, facilitator, team leader, module leader, project leader, co–leader, or co–facilitator of the value stream transformation. Gold–level candidates must report out on two (2) value stream transformations. **Integrative projects used in the Silver–level portfolio may not be reused for the Gold level. It is expected that Gold–level candidates will present a new set of projects.**

SILVER & GOLD CANDIDATES:

For the Integrative (Value Stream) Projects, please use the Integrative (Value Stream) Project Forms to document each of your value stream transformations. Describe the two (2) most significant **INTEGRATIVE** Lean projects you have lead or participated in (one per page).

Projects **should** demonstrate continuing practice in lean. For example, if you are applying for certification in 2006, and you started your lean practice in 2001, you may choose to include projects from past years in your portfolio to demonstrate that you are still practicing lean.

PASS POINT: Each integrative (value stream) project must score 24 out of 30 possible points. Each project must pass for successful portfolio completion.

The Plan–Do–Check portion of your project is limited to two total pages.
The Act (Adjust) portion of your project is limited to one page maximum.

Silver & Gold Portfolios: Mentoring/Coaching Report

Silver and Gold–level candidates are expected to mentor and/or coach others in the principles of Lean. While it is every Lean practitioner's responsibility to apply Lean tools and techniques, Silver and Gold candidates are expected to seek out others on the lean journey and help them develop and grow — to apply Lean knowledge, share that knowledge with others, and develop the community of professional Lean practitioners.

Silver and Gold candidates are in essence sensei's — ones who have gone before. Their role is to both teach others and continue their own learning. Additionally, it is through mentoring/coaching that future Silver and Gold–level candidates will be born.

Mentoring and/or coaching should be demonstrated as a planned activity, with measurable outcomes, and reported as such in the portfolio.

PASS POINT: The Mentoring/Coaching report must score 12 out of 15 possible points. Each project/report must pass for successful portfolio completion.

Gold Portfolios: Strategic (Enterprise) Projects

Gold–level candidates are focused on strategic (enterprise) lean. *For purposes of this certification, Strategic (enterprise) Lean is a lean transformation of a business or organization. This requires at least two business transformation projects that include two or more of the classic value streams of:*

1. *new product development*
2. *order through delivery*
3. *supply chain*
4. *administrative functions*

It is expected that a Gold–level candidate will be a leader or facilitator of lean policy deployment and transformation activities for a business or organization via proven best practices

For the Strategic (Enterprise) Projects, please use the Strategic (Enterprise) Project Form to document each of your business transformations. Describe the two (2) most significant **STRATEGIC** Lean projects you have lead or facilitated in (one per page).

Projects **should** demonstrate continuing practice in lean. For example, if you are applying for certification in 2006, and you started your lean practice in 2001, you may choose to include business transformation from past years to demonstrate that you are still practicing lean.

PASS POINT: Each strategic (enterprise) project must score 24 out of 30 possible points. Each project must pass for successful portfolio completion.

The Plan–Do–Check portion of your project is limited to two total pages.
The Act (Adjust) portion of your project is limited to one page maximum.

Bronze Portfolio Scoring

Each element of the portfolio is scored individually. To successfully pass the Bronze portfolio, you must receive:
- a "pass" on the education, training & development requirements
- a score of 12 out of 15 possible points on EACH project (all 5 projects must pass)
- a score of 20 points out of 25 possible for your portfolio reflection

If an element of your portfolio does not pass, your portfolio will be returned to you and you have one opportunity to update the element that did not meet the requirements. Upon resubmission, only that element will be reviewed. Elements that already passed will not be re–evaluated. If you have questions regarding the feedback provided to you by your reviewer please contact SME with your specific questions. We will contact the reviewer and they will either 1) provide you with feedback via SME or 2) contact you directly to coach you through your concerns.

Bronze Scoring Matrix

Portfolio Component	Scoring	Pass Point
Education, Training & Development	Pass/Fail	Pass
Tactical Projects (5)	15 points per project	12 points per project*
Tactical Portfolio Reflection	25 points	20 points

*each project must receive a score of 12 or higher for successful portfolio completion.

Silver Portfolio Scoring

Each element of the portfolio is scored individually. To successfully pass the Silver portfolio, you must receive a:
- "pass" on the education, training & development requirements
- score of 12 out of 15 possible points on EACH tactical project (all 3 projects must pass)
- score of 24 out of 30 possible points on EACH value stream project (both value streams must pass)
- score of 12 out of 15 possible points on mentoring/coaching
- score of 20 points out of 25 possible for your portfolio reflection

If an element of your portfolio does not pass, your portfolio will be returned to you and you have one opportunity to update the element that did not meet the requirements. Upon resubmission, only that element will be reviewed. Elements that already passed will not be re–evaluated.

Silver Scoring Matrix

Portfolio Component	Scoring	Pass Point
Education, Training & Development	Pass/Fail	Pass
Tactical Projects (3)	15 points per project	12 points per project*
Integrative (Value Stream) Projects (2)	30 points	24 points per project*
Mentoring/Coaching	15 points	12 points
Integrative Portfolio Reflection	25 points	20 points

*each tactical project must receive a score of 12 or higher for successful portfolio completion; each integrative project must receive a score of 24 points or higher for successful portfolio completion.

Gold Portfolio Scoring

Each element of the portfolio is scored individually. To successfully have your portfolio ACCEPTED, you must receive a:
- "pass" on the education, training & development requirements
- score of 12 out of 15 possible points on EACH tactical project
- score of 24 out of 30 possible points on EACH value stream (integrative) project (both value streams must pass)
- score of 24 out of 30 possible points on EACH strategic (enterprise) project (both strategic projects must pass)
- score of 12 out of 15 possible points on mentoring/coaching
- score of 20 points out of 25 possible for your portfolio reflection
- "pass" on the candidate interview portion of the Gold portfolio

If an element of your portfolio does not pass, your portfolio will be returned to you and you have one opportunity to update the element that did not meet the requirements. Upon resubmission, only that element will be reviewed. Elements that already passed will not be re–evaluated. Upon acceptance of your Gold Portfolio you will be contacted to set up your interview, which is the last phase for passing/failing your Gold Portfolio.

Gold Scoring Matrix

Portfolio Component	Scoring	Pass Point
Education, Training & Development	Pass/Fail	Pass
Tactical Projects (1)	15 points per project	12 points
Integrative (Value Stream) Projects (2)	30 points	24 points per project*
Strategic (Enterprise) Projects (2)	30 points	24 points per project*
Mentoring/Coaching	15 points	12 points
Integrative Portfolio Reflection	25 points	20 points
Interview	Pass/Fail	Pass

*each integrative project must receive a score of 20 points or higher for successful portfolio completion; each strategic project must receive a score of 24 points or higher for portfolio acceptance.

Submitting Your Portfolio

- E-mail completed portfolios to certification@sme.org with "Lean Certification Portfolio" in the subject line. Please submit in word format using this file naming convention: certification #- last name, first name, level of portfolio being submitted (e.g. 111111–Dokevich Jane–Bronze Portfolio.doc)
- An acknowledgement will be sent when your portfolio is received. If you do not receive an acknowledgement within 48 hours, please assume your portfolio was not received.
- Review of your portfolio may take up to 60 days at the initial launch of this program.
- Questions? Contact the Society of Manufacturing Engineers (SME) by e-mail certification@sme.org or phone 800–733–4763 or 313–271–1500.

LEAN CERTIFICATION GLOSSARY

TERM	DEFINITION (as applies to the Lean Certification program)
Bronze (tactical)	Tactical lean is the deployment and application of lean principles, concepts and methods locally, within a work cell, work group or value stream. This may be a workshop or project focused on implementation of specific lean concepts or techniques.
Coaching	Coaching is a two-way relationship over an extended period of time in which more experienced individuals assist teams or workgroups through a development process that provides as-needed support and guidance. The primary objective of coaching is to enhance team knowledge and abilities so that the team is better able to perform a function, in this case, to deliver results using lean principles, tools and techniques. An additional objective of coaching is to refine the coach's knowledge and abilities through the process of teaching.
Enterprise	A business or organization systematically working toward a common goal. This may be an entire company, a plant, a business unit, a satellite office, and may include external suppliers and customers.
Event	A structured, focused, multi–day activity (3–5 days)that targets a process for waste elimination and improvement. Events can include kaizen blitz, value stream mapping, radical change event, Five S, etc.
Facilitator	A facilitator is someone who skillfully orchestrates successful group efforts. They help people understand their common objectives and work with them to create and implement plans to achieve them. Much like a conductor, a facilitator must guide and direct efforts towards a successful lean transformation of a project, process, value stream or the entire enterprise.
Gold (strategic)	This is a lean transformation of a business or organization. This requires at least two business transformation projects that include two or more of the classic value streams of: 1. new product development 2. order through delivery 3. supply chain 4. administrative functions
Leader	A leader is a person who can influence and guide others through lean projects, value streams and/or transformations. They have an ability to accomplish objectives and direct lean efforts that align with organizational goals.
Mentoring	Mentoring is a relationship between two individuals over an extended period of time in which the more experienced individual assists the other person through a development process that provides as-needed support and guidance. The primary objective of mentoring is to enhance an individual's knowledge and abilities so that they are better able to perform a function, in this case, to deliver results using lean principles, tools and techniques. An additional objective of mentoring is to refine the mentor's knowledge and abilities through the process of teaching. The mentor also fulfills an important social role necessary in all professions: sharing acquired knowledge for the betterment of the professional society, as a whole.
Participant	A participant is an individual who shares in the responsibility of a lean project. They have an active role in the project, and are responsible for elements of the implementation as well as measurable outcomes.
Project	A project is a focused effort to support a Lean transformation of a process or resource. A project may be a subcomponent of a larger value stream Lean transformation, with clear, defined parameters. A project must have defined objectives and measurable outcomes.
Silver (integrative)	This is the integration of lean activities, coupled with organizational restructuring, necessary for transformation and sustainable lean operation of a complete value stream.

TERM	DEFINITION (as applies to the Lean Certification program)
Value Stream	Value Stream is defined as any process that has a defined customer and supplier (including internal), material flow and information flow. The process should include multiple operations or tasks that require the use of several people, machines or equipment.