

The Manufacturing Skill Standards Council (MSSC) is the nation's leading industry-led training, assessment and certification organization focused on the **core technical competencies** needed by the nation's frontline production and material handling workers. The nationwide MSSC certifications, based upon industry-defined and federally-endorsed national standards, offer both entry-level and incumbent workers the opportunity to demonstrate that they have acquired the knowledge and skills increasingly needed in the technology-intensive advanced manufacturing and logistics jobs of the 21st century. MSSC applies to all frontline manufacturing production jobs (6 million) and all front-line material handling and distribution jobs (6.1 million). MSSC has developed two nationally portable certifications for this workforce:

Certified Production Technician (CPT): The CPT Certification addresses the core technical competencies of higher skilled production workers in all sectors of manufacturing. MSSC awards certificates to individuals who pass any of its five Production Modules: Safety, Quality Practices & Measurement, Manufacturing Processes & Production, Maintenance Awareness and Green Production and a full CPT Certification to those who pass all four core modules (Note: Green is not required for full-CPT certification.)

Certified Logistics Technician (CLT): The CLT Certification addresses the core technical competencies of higher skilled, frontline material handling workers in all supply chain facilities: in factories, warehouses, distribution centers and transportation companies. MSSC awards the foundational-level Certified Logistics Associate (CLA) certificate and the mid-level CLT certification. CLA is a prerequisite for CLT.

CPT and CLT are the only national industry certifications, for both manufacturing and logistics, accredited under ISO 17024 (personnel certification) and endorsed by the National Association of Manufacturers.

"20/20" Vision: Approved by its Board in 2010, MSSC's vision is to credential 20% of individuals entering or employed in the nation's front-line manufacturing production and material handling workforce in 20 years—2.4 million workers by 2030. To achieve that goal, MSSC offers industry a new set of tools to ensure that both entering and incumbent workers are flexible, easily trainable, and highly motivated *knowledge workers* able to keep pace with technological change—the **"Industrial Athlete of the Future."**

MSSC benefits to employers include:

- A pipeline of skilled workers by embedding MSSC certification training into schools
- Decreased recruitment costs by providing job candidates with industry-recognized credentials
- Elimination of remedial training costs by providing well prepared workers
- A new ISO standard in certificates companies can use as a common practice throughout their global operations
- Increased ROI for training by targeting it against the gaps identified by the MSSC Diagnostic Tool
- An aid to attracting, motivating and retaining qualified employees

The federal National Skill Standards Board formally recognized MSSC as the standards and certification "Voluntary Partnership" for all manufacturing sectors in 1998 and officially endorsed MSSC's national standards in 2001 which were developed and nationally validated by 700 companies, 378 educational organizations and most industrial unions. MSSC has since been used by the U.S. Departments of Labor, Education, Defense and Veterans Affairs, as well as Job Corps and both Federal and State Prison Systems. MSSC is a Founding Partner in the National Association of Manufacturers (NAM)-endorsed Skills Certification System, which has endorsed both CPT and CLT.

MSSC provides annually updated standards, courses, computer-based training materials, textbooks, instructor authorization, assessment center authorization, a national registry, assessments, credentials and diagnostic tools for employers. Companies may use these tools themselves or work through their local community colleges, high schools, unions or other training providers. Individuals can also earn college credit for MSSC courses (3 hours each for core CPT modules, 2 hours for GPM and 4 hours for full-CLT) based upon the National College Credit Recommendation Service (NCCRS) course review.

MSSC's delivers these tools through a nationwide network of over 2,121 trained instructors and 1,394 authorized assessment centers in 49 states, DC, and 8 centers internationally. To date, MSSC has given over 180,256 assessments and issued over 132,368 credentials.

To obtain a full description of MSSC certification system tools and price sheets, including volume discounts, please contact Neil Reddy, Executive Director, at reddyn@msscusa.org or at 703-739-9000, ext. 2221.

Key Work Activities for Standards, Training and Assessments

SAFETY

1. Work in a Safe and Productive Manufacturing Workplace
2. Perform safety and environmental inspections
3. Perform emergency drills and participate in emergency teams
4. Identify unsafe conditions and take corrective action
5. Provide safety orientation for all employees
6. Train personnel to use equipment safely
7. Suggest processes and procedures that support safety of work environment
8. Fulfill safety and health requirements for maintenance, installation, and repair
9. Monitor safe equipment and operator performance
10. Utilize effective, safety-enhancing workplace practices

MANUFACTURING PROCESSES & PRODUCTION

1. Identify customer needs
2. Determine resources available for the production process
3. Set up equipment for the production process
4. Set team production goals
5. Make job assignments
6. Coordinate work flow with team members and other work groups
7. Communicate production and material requirements and product specifications
8. Perform and monitor the process to make the product
9. Document product and process compliance with customer requirements
10. Prepare final product for shipping or distribution

GREEN PRODUCTION

1. Train workers in environmental issues
2. Implement and promote environmental programs, projects, policies or procedures
3. Conduct environmental incident & hazard investigations
4. Conduct preventive environmental inspections

QUALITY PRACTICES & MEASUREMENT

1. Participate in periodic internal quality audit activities
2. Check calibration of gages and other data collection equipment
3. Suggest continuous improvements
4. Inspect materials and product/process at all stages to ensure they meet specifications
5. Document the results of quality tests
6. Communicate quality problems
7. Take corrective actions to restore or maintain quality
8. Record process outcomes and trends
9. Identify fundamentals of blueprint reading
10. Use common measurement systems and precision measurement tools

MAINTENANCE AWARENESS

1. Perform preventive maintenance and routine repair
2. Monitor indicators to ensure correct operations
3. Perform all housekeeping to maintain production schedule
4. Recognize potential maintenance issues with basic production systems, including knowledge of when to inform maintenance personnel about problems with:
 - Electrical systems
 - Pneumatic systems
 - Hydraulic systems
 - Machine automation systems
 - Lubrication processes
 - Bearings and couplings
 - Belts and chain drives

5. Monitor environmental aspects at each stage of production
6. Implement continuous improvement in environmental assurance practices
7. Use advanced materials to reduce waste
8. Reprocess materials by recycling and reuse throughout product life cycle to optimize waste reduction

Key Work Activities for Standards, Training and Assessments

Foundation-level Certified Logistics Associate(CLA)

1. Demonstrate an understanding of the various roles in the global supply chain logistics life cycle
2. Demonstrate an understanding of the logistics environment
3. Operate and use equipment
4. Practice safety principles
5. Practice safety principles in the handling of materials and operation of equipment
6. Practice quality control principles
7. Employ work communication practices
8. Practice teamwork and good workplace behavior to solve problems
9. Use relevant computer systems and applications to increase productivity

Mid-level Certified Logistics Technician(CLT)

1. Receive products
2. Stock products
3. Process product orders
4. Prepare packages for shipment and ship products
5. Maintain control of inventory
6. Handle hazardous materials in a safe manner
7. Evaluate transportation modes
8. Perform dispatch, routing and tracking operations
9. Understand U.S. measurements and metric system conversions