

Credentialing Achievement Record

Industrial Technology Maintenance Maintenance Operations Level I

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ITM CREDENTIALING PROGRAM

Level I Credentialing Achievement Record (CAR)

Name:	Job Title / Student ID:
Duty Cluster Name: Maintenance Operations Level I	
Date Completed:	

Directions

This Credentialing Achievement Record (**CAR**) is the official training and performance document for the above named NIMS credentialing candidate. The CAR is used by the trainer/supervisor and candidate as a record of individual performance. The CAR is the vehicle that will allow eligible candidates to take the NIMS online theory credentialing examination(s). Supervisors, trainers, and candidates should take care of this record and be sure that it is accurate, kept up to date, filled out correctly, and properly stored. All information recorded in the CAR should be considered **CONFIDENTIAL**. The CAR is the property of the candidate and must be returned to the candidate when employment ends or at the completion of the training / school program.

Candidates may select as many credentialing areas as applicable to the facility or appropriate to the job. There are separate CAR booklets for each credentialing area. This CAR opens with a list of Critical Work Activities & Experiences (or experience statements) that must be acknowledged and documented. However, actual performance is assessed in two ways: 1) by fulfilling these general experience and historical statements and 2) by an examiner administering the *Skill Checks (or performance assessments)*. Three successful Skill Check attempts are required. Skill Checks are clearly marked with the title **"Skill Check."**

Candidate performance is documented by a checkmark on the *Examiner's Checklist*. All Skill Checks must be <u>co-initialed</u> and dated by the trainer/supervisor and candidate. Work activity sign-offs must be <u>co-initiated</u> by the trainer/supervisor and candidate then dated.

When the candidate has successfully demonstrated abilities in each of the critical work activities and experiences and skills checks to the satisfaction of the supervisor or trainer, he/she is eligible to take the online theory credentialing exam. The Affidavit of Successful Completion is completed and signed by the sponsor. It is co-signed by the trainer/ supervisor and the candidate, and then e-mailed to **support@nims-skills.org** to request access to the online theory exam. The candidate's sponsor will be notified when the online theory exam is made available on the NIMS testing system.

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Examiner's Checklist: Maintenance Operations Level I

Critical Work Activities & Experiences	Date Completed	Supervisor's or Trainer's	Candidate's Initials
All of the following statements must be completed prior to submission of the CAR.	completeu	Initials	Initials
1.1 Adhere to safety, health and environmental rules and regulations			
Describe use and selection of fire extinguishers			
Demonstrate use of fall protection safety in use of ladders and platforms			
Demonstrate use of common PPE for maintenance work to be performed			
Perform a job safety analysis of work to be performed			
Perform spill or release reporting procedure			
Perform spill or release clean-up procedure			
Perform injury reporting procedure			
1.2 Describe, locate and interpret safety data sheets			
 Describe, locate and interpret the following for safety data sheets: Locate current safety material data sheets for given machines or processes Interpret information on SDS and apply Determine appropriate PPE required Describe uses of SDS 			
1.3 Technical documentations			
Locate and interpret function and operation using technical documents			
Identify symbols for duty area			
Demonstrate knowledge of how to locate and maintain maintenance documents			

Skill Check #1	Date Completed	Supervisor's or Trainer's Initials	Candidate's Initials
1.1 Perform a lockout/tagout procedure on a machine			
Determine points on a machine to lockout up and down stream			
Describe when to lockout a machine			
Describe the lockout/tagout procedure			
 Lockout machine per documentation Test for zero state/zero energy Remove lockout from machine per documentation 			
1.2 Monitor and record machine operation in operation log			
 Read and record the following performance data from one or more machines: Obtain PPE required Locate machine operation log(s) Pressure as indicated on a gauge, both in kPa and psig units Flow rate as indicated on a flow meter, both in lpm and gpm units Fluid levels as indicated by level gauges, noting if normal, high or low Temperature as indicated on a gauge, both in degrees C and F Vacuum as indicated on a gauge, in inches of water, mm of water, and in Hg Current as indicated on a meter, in mA or Amps Voltage as indicated on a meter, in mV or Volts Record other pertinent performance data, as required by machine operation log 			

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Skill Check #1	Date Completed	Supervisor's or Trainer's Initials	Candidate's Initials
1.3 Operate a machine (with operator present)			
 Perform a pre-start checklist: Check machine for zero state/energy and lockout/tag-out installed Inspect machine for leaks, cleanliness, loose items Check guards and other interlocks to make sure they are working and installed Check fluid levels Check other features of machine needed for operation Make sure other personnel are clear of machine Review operation of machine controls, describing functions Perform machine startup, shutdown, and operation procedures Restore power to machine Air, Water, Power and Control Check machine indicators to verify machine is safe and ready to start Start machine Monitor machine, checking to make sure that all indicators show normal operation Verify that machine meets its performance specifications Perform normal shutdown of machine using cycle stop function 			
1.4 Perform machine maintenance procedures			
Describe when a work order is needed			
 Read and interpret work order: Machine to be serviced Purpose of service Other pertinent information Close work order procedure Perform or observe maintenance performed: Obtain PPE and tools required Inform operations personnel of maintenance work order Use lockout/tagout Perform maintenance 			
 Inform appropriate personnel Remove lockout Test machine Record information in maintenance logs			

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Skill Check #1	Date Completed	Supervisor's or Trainer's Initials	Candidate's Initials
1.5 Perform preventative maintenance procedures			
 Perform the following preventive maintenance procedures: Locate preventive maintenance schedule and log for a given machine Obtain materials, PPE, and tools required Inform operations personnel of preventive maintenance procedure Use lockout/tagout procedures Check hydraulic oil levels and add as per specifications Identify correct lubrication points for a machine from manufacturer's manual Select and identify correct oil and grease for bearings from specs Handle and store lubricants in accordance with company and OSHA requirements Check lubrication oil levels and add as per specifications Check grease levels and add as per specifications Replace oil filter Replace pneumatic air filter Drain air filter and other traps of condensate Check fasteners using a torque wrench and tighten as per specifications Clean machine surfaces Inform appropriate personnel Remove lockout 			
Record information in maintenance logs			

Skill Check #1	Date Completed	Supervisor's or Trainer's Initials	Candidate's Initials
1.6 Use hand tools to perform maintenance and installation tasks			
Given one or more assembly drawings, assemble/disassemble components by selecting correct tools and using correct methods.			
Assemblies should demonstrate use of each of the following tools: Screw drivers, straight, Phillips Nut drivers Fixed wrenches: box and open end Allen wrenches Ratchet wrenches Torque wrench Pullers Pliers Clamps Mallets Protect parts as needed during the assembly/disassembly process Obtain parts using each of these fasteners types: Threaded fasteners (bolts and machine screws), washers, and nuts Pins (clevis, taper, dowel, spring, roll, shear) Keys Clips Snap rings			
• Tie wraps			
1.7 Move, handle and store materials and equipment			
Describe and demonstrate rigging safety including load capacity			
Inspect a hoist and determine if it is safe to use			
Use manual and powered hoist with either cantilevered or gantry hoist configuration			
Determine and calculate center of gravity for load balance			
Determine proper use eyebolts for lifting parts			
Inspect and select correct sling size for load capacity			
Use a manual pry truck to move a load			

Skill Check #2	Date Completed	Supervisor's or Trainer's Initials	Candidate's Initials
1.1 Perform a lockout/tagout procedure on a machine			
Determine points on a machine to lockout up and down stream			
Describe when to lockout a machine			
Describe the lockout/tagout procedure			
 Lockout machine per documentation Test for zero state/zero energy Remove lockout from machine per documentation 			
1.2 Monitor and record machine operation in operation log			
 Nead and record the following performance data from one of more machines: Obtain PPE required Locate machine operation log(s) Pressure as indicated on a gauge, both in kPa and psig units Flow rate as indicated on a flow meter, both in lpm and gpm units Fluid levels as indicated by level gauges, noting if normal, high or low Temperature as indicated on a gauge, both in degrees C and F Vacuum as indicated on a gauge, in inches of water, mm of water, and in Hg Current as indicated on a meter, in mA or Amps Voltage as indicated on a meter, in mV or Volts Record other pertinent performance data, as required by machine operation log 			

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Skill Check #2	Date Completed	Supervisor's or Trainer's Initials	Candidate's Initials
1.3 Operate a machine (with operator present)			
 Perform a pre-start checklist: Check machine for zero state/energy and lockout/tagout installed Inspect machine for leaks, cleanliness, loose items Check guards and other interlocks to make sure they are working and installed Check fluid levels Check other features of machine needed for operation Make sure other personnel are clear of machine Review operation of machine controls, describing functions Perform machine startup, shutdown, and operation procedures Restore power to machine Air, Water, Power and Control Check machine indicators to verify machine is safe and ready to start Start machine Monitor machine, checking to make sure that all indicators show normal operation Wonitor machine with five senses to determine if the machine is in normal operation Verify that machine meets its performance specifications Perform normal shutdown of machine using cycle stop function 			
1.4 Perform machine maintenance procedures			
Describe when a work order is needed			
 Read and interpret work order: Machine to be serviced Purpose of service Other pertinent information Close work order procedure Perform or observe maintenance performed: Obtain PPE and tools required 			
 Inform operations personnel of maintenance work order Use lockout/tagout Perform maintenance Inform appropriate personnel Remove lockout Test machine 			
Record information in maintenance logs			

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Skill Check #2	Date Completed	Supervisor's or Trainer's Initials	Candidate's Initials
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 Perform the following preventive maintenance procedures: Locate preventive maintenance schedule and log for a given machine Obtain materials, PPE, and tools required Inform operations personnel of preventive maintenance procedure Use lockout/tagout procedures Check hydraulic oil levels and add as per specifications Identify correct lubrication points for a machine from manufacturer's manual Select and identify correct oil and grease for bearings from specs Handle and store lubricants in accordance with company and OSHA requirements Check grease levels and add as per specifications Check grease levels and add as per specifications Replace oil filter Drain air filter and other traps of condensate Check fasteners using a torque wrench and tighten as per specifications Clean machine surfaces Inform appropriate personnel Remove lockout 			
Record information in maintenance logs			

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Skill Check #2	Date Completed	Supervisor's or Trainer's Initials	Candidate's Initials
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Assemblies should demonstrate use of each of the following tools: Screw drivers, straight, Phillips Nut drivers Fixed wrenches: box and open end Allen wrenches Ratchet wrenches Torque wrench Pullers Pliers Clamps Mallets Protect parts as needed during the assembly/disassembly process Obtain parts using each of these fasteners types: Threaded fasteners (bolts and machine screws), washers, and nuts Pins (clevis, taper, dowel, spring, roll, shear) Keys Clips Snap rings			
• Tie wraps			
1.7 Move, handle and store materials and equipment			
Describe and demonstrate rigging safety including load capacity			
Inspect a hoist and determine if it is safe to use			
Use manual and powered hoist with either cantilevered or gantry hoist configuration			
Determine and calculate center of gravity for load balance			
Determine proper use eyebolts for lifting parts			
Inspect and select correct sling size for load capacity			
Use a manual pry truck to move a load			

Skill Check #3	Date Completed	Supervisor's or Trainer's Initials	Candidate's Initials
1.1 Perform a lockout/tagout procedure on a machine			
Determine points on a machine to lockout up and down stream			
Describe when to lockout a machine			
Describe the lockout/tagout procedure			
 Lockout machine per documentation: Test for zero state/zero energy Remove lockout from machine per documentation 			
1.2 Monitor and record machine operation in operation log			
 Read and record the following performance data from one or more machines: Obtain PPE required Locate machine operation log(s) Pressure as indicated on a gauge, both in kPa and psig units Flow rate as indicated on a flow meter, both in lpm and gpm units Fluid levels as indicated by level gauges, noting if normal, high or low Temperature as indicated on a gauge, both in degrees C and F Vacuum as indicated on a gauge, in inches of water, mm of water, and in Hg Current as indicated on a meter, in mA or Amps Voltage as indicated on a meter, in mV or Volts Record other pertinent performance data, as required by machine operation log 			

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	Initials	Initials
1.3 Operate a machine (with operator present)		
 Perform a pre-start checklist: Check machine for zero state/energy and lockout/tagout installed Inspect machine for leaks, cleanliness, loose items Check guards and other interlocks to make sure they are working and installed Check fluid levels Check other features of machine needed for operation Make sure other personnel are clear of machine Review operation of machine controls, describing functions Perform machine startup, shutdown, and operation procedures Restore power to machine Air, Water, Power and Control Check machine indicators to verify machine is safe and ready to start Start machine Monitor machine, checking to make sure that all indicators show normal operation Verify that machine meets its performance specifications Perform normal shutdown of machine using cycle stop function 		
1.4 Perform machine maintenance procedures		
Describe when a work order is needed		
 Read and interpret work order: Machine to be serviced Purpose of service Other pertinent information Close work order procedure Perform or observe maintenance performed: Obtain PPE and tools required Inform operations personnel of maintenance work order 		
 Use lockout/tagout Perform maintenance Inform appropriate personnel Remove lockout Test machine Record information in maintenance logs		

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Skill Check #3	Date Completed	Supervisor's or Trainer's Initials	Candidate's Initials
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 Perform the following preventive maintenance procedures: Locate preventive maintenance schedule and log for a given machine Obtain materials, PPE, and tools required Inform operations personnel of preventive maintenance procedure Use lockout/tagout procedures Check hydraulic oil levels and add as per specifications Identify correct lubrication points for a machine from manufacturer's manual Select and identify correct oil and grease for bearings from specs Handle and store lubricants in accordance with company and OSHA requirements Check grease levels and add as per specifications Replace oil filter Replace pneumatic air filter Drain air filter and other traps of condensate Check fasteners using a torque wrench and tighten as per specifications Clean machine surfaces Inform appropriate personnel Remove lockout 			
Record information in maintenance logs			

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Skill Check #3	Date Completed	Supervisor's or Trainer's Initials	Candidate's Initials
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Given one or more assembly drawings, assemble/disassemble components by selecting correct tools and using correct methods.			
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Tie wraps			
1.7 Move, handle and store materials and equipment			
Describe and demonstrate rigging safety including load capacity			
Inspect a hoist and determine if it is safe to use			
Use manual and powered hoist with either cantilevered or gantry hoist configuration			
Determine and calculate center of gravity for load balance			
Determine proper use eyebolts for lifting parts			
Inspect and select correct sling size for load capacity			
Use a manual pry truck to move a load			

Comments:

Affidavit of Successful Completion

NIMS ITM Maintenance Operations Level I Credentialing Program Credentialing Achievement Record (CAR)

The affidavit must be filled-out in its entirety in order to ensure timely processing.

Candidate Name:	Date Completed:

The credentialing candidate named above has completed all necessary CAR requirements for NIMS ITM Maintenance Operations Level I Recognition. Site Name and Address:

Indicate successful completion of Critical Work Activities & Experiences and Skills Checks, by checking either Yes or No.

Maintenance Operations Level I			
	Yes	No	
Successful completion of Critical Work Activities & Experiences statements have been completed, dated, and co-initialed.			
Successful completion of Skill Check #1, all components have been completed, dated, and co-initialed.			
Successful completion of Skill Check #2, all components have been completed, dated, and co-initialed.			
Successful completion of Skill Check #3, all components have been completed, dated, and co-initialed.			

Sponsor Signature	Date
Trainer/Supervisor Signature	Date

Candidate Signature

Make a copy of the completed Affidavit of Successful Completion for your records and email the CAR to:

Date

NIMS 10565 Fairfax Boulevard, Suite 10 Fairfax, VA 22030 http://nims-skills.org support@nims-skills.org