

Credentialing Achievement Record

Industrial Technology Maintenance Maintenance Welding Level I

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ITM CREDENTIALING PROGRAM

Level I Credentialing Achievement Record (CAR)

Name:	Job Title / Student ID:
Duty Cluster Name: Maintenance Welding 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 Welding Level I

Critical Work Activities & Experiences All of the following statements must be completed prior to submission of the CAR	Date Completed	Supervisor's or Trainer's Initials	Candidate's 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 Use an acetylene torch to cut steel parts			
 Conduct safety check: Select correct tips for thickness of metal Clean tip with cleaning tool Inspect tips for wear 			
 Perform pre-start procedures, including: Check ventilation Verify that work space is set up properly Verify that all connections are correct Verify that tanks have sufficient gas Verify pressure for each tank Inspect tanks and connections to verify no leaks 			
 Start torch and perform straight cut on several metal samples of varying thickness up to ¹/₂" thick Make adjustments as needed for each plant 			
Turn off torch			
 Perform storage procedures, including: Close valves Verify zero energy state Clean up 			
1.2 Explain welding concepts			
Identify basic weld symbols (such as lap and butt joint) on a welding print			
Select a welding process for a given application			
1.3 Parts to be welded			
Verify proper ventilation			
Select metal to be welded given a print or work order			
Degrease and clean metal parts to be welded			
Fixture part to be ground			
Condition parts to be welded			

Skill Check #1	Date Completed	Supervisor's or Trainer's Initials	Candidate's Initials
1.4 Use SMAW welder to make basic welds on flat stock			
Set up part to be welded; clamp, vise, fixture			
Choose correct electrode for metal being used and thickness			
 Perform pre-start procedures, including: Check ventilation Verify that work space is set up properly Set up and adjust SMAW for welding operations Use proper grounding techniques 			
Perform tack weld			
Perform butt joint weld			
Perform lap joint weld			
Perform T joint weld			
Perform corner joint weld			
Perform a groove joint weld			
Clean welds			
Remove slag from and visually inspect welds for defects			
Perform dye check or similar check			
Turn off and store equipment			

Skill Check #1		Supervisor's or Trainer's Initials	Candidate's Initials
1.5 Use GMAW welder to make basic welds on flat stock			
Set up part to be welded; clamp, vise, fixture			
Choose correct wire for metal being used and thickness			
 Perform pre-start procedures, including: Check ventilation Verify that work space is set up properly Set up and adjust GMAW for welding operations Use proper grounding techniques 			
Perform tack weld			
Perform butt joint weld			
Perform lap joint weld			
Perform T joint weld			
Perform corner joint weld			
Perform a groove joint weld			
Clean welds			
Visually inspect welds for defects			
Perform dye check or similar check			
Turn off and store equipment			
1.6 Use plasma cutter to cut flat stock			
Set up part to be welded; clamp, vise, fixture			
Choose proper tip/cup and electrode for the process and thickness			
 Perform pre-start procedures, including: Check ventilation Verify that work space is set up properly Set up and adjust plasma cutter for metal to be cut Set proper air pressure for cutting metal 			
 Start cutter and perform straight cut on several metal samples of varying thickness up to ¹/₂" thick Make adjustments as needed for each part 			
Turn off and store equipment			
Skill Check #2	Date Completed	Supervisor's or Trainer's	Candidate's Initials

	Initials	
1.1 Use an acetylene torch to cut steel parts		
Conduct safety check"		
• Select correct tips for thickness of metal		
Clean tip with cleaning tool		
• Inspect tips for wear		
Perform pre-start procedures, including:		
Check ventilation		
• Verify that work space is set up properly		
• Verify that all connections are correct		
• Verify that tanks have sufficient gas		
• Verify pressure for each tank		
 Inspect tanks and connections to verify no leaks 		
Start torch and perform straight cut on several metal samples of varying		
thickness up to ¹ /2" thick		
Make adjustments as needed for each plant		
Turn off torch		
Perform storage procedures, including:		
Close valves		
• Verify zero energy state		
• Clean up		
1.2 Explain welding concepts		
Identify basic weld symbols (such as lap and butt joint) on a welding print		
Select a welding process for a given application		
1.3 Parts to be welded		
Verify proper ventilation		
Select metal to be welded given a print or work order		
Degrease and clean metal parts to be welded		
Fixture part to be ground		
Condition parts to be welded		

Skill Check #2	Date Completed	Supervisor's or Trainer's Initials	Candidate's Initials
1.4 Use SMAW welder to make basic welds on flat stock			
Set up part to be welded; clamp, vise, fixture			
Choose correct electrode for metal being used and thickness			
 Perform pre-start procedures, including: Check ventilation Verify that work space is set up properly Set up and adjust SMAW for welding operations Use proper grounding techniques 			
Perform tack weld			
Perform butt joint weld			
Perform lap joint weld			
Perform T joint weld			
Perform corner joint weld			
Perform a groove joint weld			
Clean welds			
Remove slag from and visually inspect welds for defects			
Perform dye check or similar check			
Turn off and store equipment			

Skill Check #2		Supervisor's or Trainer's Initials	Candidate's Initials
1.5 Use GMAW welder to make basic welds on flat stock			
Set up part to be welded; clamp, vise, fixture			
Choose correct wire for metal being used and thickness			
 Perform pre-start procedures, including: Check ventilation Verify that work space is set up properly Set up and adjust GMAW for welding operations Use proper grounding techniques 			
Perform tack weld			
Perform butt joint weld			
Perform lap joint weld			
Perform T joint weld			
Perform corner joint weld			
Perform a groove joint weld			
Clean welds			
Visually inspect welds for defects			
Perform dye check or similar check			
Turn off and store equipment			
1.6 Use plasma cutter to cut flat stock			
Set up part to be welded; clamp, vise, fixture			
Choose proper tip/cup and electrode for the process and thickness			
 Perform pre-start procedures, including: Check ventilation Verify that work space is set up properly Set up and adjust plasma cutter for metal to be cut Set proper air pressure for cutting metal 			
 thickness up to ½" thick Make adjustments as needed for each part 			
Turn off and store equipment			
Skill Check #3	Date Completed	Supervisor's or Trainer's	Candidate's Initials

	Initials	
1.1 Use an acetylene torch to cut steel parts		
Conduct safety check:		
• Select correct tips for thickness of metal		
Clean tip with cleaning tool		
• Inspect tips for wear		
Perform pre-start procedures, including:		
Check ventilation		
• Verify that work space is set up properly		
• Verify that all connections are correct		
• Verify that tanks have sufficient gas		
• Verify pressure for each tank		
 Inspect tanks and connections to verify no leaks 		
Start torch and perform straight cut on several metal samples of varying		
thickness up to ¹ /2" thick		
Make adjustments as needed for each plant		
Turn off torch		
Perform storage procedures, including:		
Close valves		
• Verify zero energy state		
Clean up		
1.2 Explain welding concepts		
Identify basic weld symbols (such as lap and butt joint) on a welding print		
Select a welding process for a given application		
1.3 Parts to be welded		
Verify proper ventilation		
Select metal to be welded given a print or work order		
Degrease and clean metal parts to be welded		
Fixture part to be ground		
Condition parts to be welded		

Skill Check #3	Date Completed	Supervisor's or Trainer's Initials	Candidate's Initials
1.4 Use SMAW welder to make basic welds on flat stock			
Set up part to be welded; clamp, vise, fixture			
Choose correct electrode for metal being used and thickness			
 Perform pre-start procedures, including: Check ventilation Verify that work space is set up properly Set up and adjust SMAW for welding operations Use proper grounding techniques 			
Perform tack weld			
Perform butt joint weld			
Perform lap joint weld			
Perform T joint weld			
Perform corner joint weld			
Perform a groove joint weld			
Clean welds			
Remove slag from and visually inspect welds for defects			
Perform dye check or similar check			
Turn off and store equipment			

Skill Check #3	Date Completed	Supervisor's or Trainer's Initials	Candidate's Initials
1.5 Use GMAW welder to make basic welds on flat stock			
Set up part to be welded; clamp, vise, fixture			
Choose correct wire for metal being used and thickness			
 Perform pre-start procedures, including: Check ventilation Verify that work space is set up properly Set up and adjust GMAW for welding operations Use proper grounding techniques 			
Perform tack weld			
Perform butt joint weld			
Perform lap joint weld			
Perform T joint weld			
Perform corner joint weld			
Perform a groove joint weld			
Clean welds			
Visually inspect welds for defects			
Perform dye check or similar check			
Turn off and store equipment			
1.6 Use plasma cutter to cut flat stock			
Set up part to be welded; clamp, vise, fixture			
Choose proper tip/cup and electrode for the process and thickness			
 Perform pre-start procedures, including: Check ventilation Verify that work space is set up properly Set up and adjust plasma cutter for metal to be cut Set proper air pressure for cutting metal Start cutter and perform straight cut on several metal samples of varying			
 thickness up to ½" thick Make adjustments as needed for each part 			
Turn off and store equipment			

Comments:

Affidavit of Successful Completion

NIMS ITM Maintenance Welding Level I Credentialing Program

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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 Welding 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 Welding 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	Date

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

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