

National Institute for Metalworking Skills, Inc.

Credentialing Achievement Record

Stamping Level III Set Up with Compound Dies

National Institute for Metalworking Skills 3251 Old Lee Highway, Suite 205 Fairfax, VA 22030 http://nims-skills.org



METAL STAMPING CREDENTIALING PROGRAM

LEVEL III CREDENTIALING ACHIEVEMENT RECORD (CAR)

and

Official Performance CHECKLISTs (Skill Checks)

NAME:			Reg. No.	Job Title:
Site Name:				Site No.
STATUS:	Non-Completer □			ompleted all NIMS Performance lowing Credentialing Area:
	Reason:	Duty Cluster	Name:	
		l		

Directions

Please print

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 (or log book) of individual on-the-job performance. The CAR is the *vehicle* that will allow eligible candidates to take the NIMS written 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**.

Date Completed:

Candidates may select as many credentialing Duty Clusters as applicable to the facility or appropriate to the job. There are separate CAR booklets for each credentialing Duty Cluster. The CAR opens with a list Critical Work Activities (or experience statements) that must be acknowledged and documented. However, actual performance is assessed two ways: 1) by fulfilling these general experience and historical statements and 2) by an examiner administering *Skill Checks* (or performance assessments). Skill Checks required for credentialing are clearly marked with the title - CAR SKILL CHECK. With the exception of the Opportunity Observations required for troubleshooting and maintenance, each Skill Check must be successfully completed five times. Candidate performance is documented by a ☑ on each Examiner's CHECKLIST. All successful Skill Check attempts must be co-signed and dated by the trainer/supervisor and candidate. Work Activity (experiential) statements must be co-initialed by the trainer/supervisor or manager and the candidate then dated. If a particular Skill Check step or standard does not apply at your facility, check-off the applicable *NA* box and continue. Skill Checks may require the candidate to perform work a bit differently than your normal procedure or learn how to do something that may not be part of their typical day-to-day responsibilities. However, you may only check-off a *NA* box if the process-standard does not apply because the equipment or tooling is not available or the stamping process itself does not require this activity.

For additional information about administering *CAR* Skill Checks, see the <u>Guide to Administering Credentialing Achievement Records</u> or consult with your facility Credentialing Coordinator.



METAL STAMPING CREDENTIALING PROGRAM

LEVEL III CREDENTIALING ACHIEVEMENT RECORD (CAR)

CAR WORK ACTIVITY SIGN-OFFS AND SKILL CHECKS

Setup Equipment with Compound Dies - Level III

DUTY CLUSTER - 2.4

Duty Cluster and Critical Work Activities	Date Completed	Supervisor Initials	Trainer Initials	Trainee Initials
Setup Equipment with Compound Dies				
Candidate has met the attendance policy of the facility for the last 12 consecutive months.				
Candidate has no company documented safety violations within the last 12 consecutive months.				
Candidate has demonstrated the ability to maintain a safe, clean and orderly work area in compliance with facility housekeeping policies and has no reported violations for a period of three (3) consecutive months.				
Candidate has demonstrated expert knowledge of material/part conformance standards and working knowledge of SPC recording requirements.				
Candidate has demonstrated leadership qualities and communication skills consistent with the position and level of responsibility.				
Candidate has demonstrated competency when directing the work of others and has provided workable advice and modest training to co-workers that has fostered an environment of continuous learning and process improvement.				
Candidate understands basic principles of machining, electricity/electronics, mechanical technology, metallurgy, material handling, and/or power systems.				
Candidate has demonstrated the ability to use prints, charts, technical drawings, and/or schematics to troubleshoot running processes, for in-process inspections, and perform basic corrective or preventive maintenance.				



Candidate: Registration No.:	Date:	199
Examiner: Examiner No.:	(For official use only) Results (check one): Pass	Yes No

Work Activity

2.4 - Setup, Operate and Maintain Auxiliaries and Machines with Compound Dies

Performance Conditions

Setting: OJT Observations. Given a set-up plan or work order, candidate will setup, activate, adjust, test/verify, and monitor all safety systems, lubrication devices, auxiliaries, and compound die equipment. Candidate will produce (operate equipment) and inspect parts (verify product quality) in the manner prescribed by the Process/Quality Plan. Given an appropriate process monitoring plan and opportunity, candidate will troubleshoot problems during production runs and perform appropriate corrective or preventive maintenance.

(First of five Skill Checks)

Safety Equipment:

- PPE/PPC
- Protective Devices (hoods, guards, dust mask, signs, locks/tags, etc.)

Tools, Equipment and Materials:

- Assorted/Common Hand Tools
- Part Placement Equipment (tongs, suction cups, magnets, etc.)
- Mirror and Flashlight
- Pen/Pencils
- Calculator (optional)
- Process/Quality Plan
- Operating Instructions (if needed)
- Lubricants/Coolants (as needed)
- Lubricant Delivery Devices
- Stock/Coil and Package Containers
- Scrap Removal Tools and Containers

Measuring Instruments:

- Rules/Tape Measure
- **Calipers**
- Micrometers
- Verniers
- Squares
- **Specialty Gages**
- Protractor
- Sight Gages
- **Dipsticks**
- Attribute and Fixture Gages

Attainment Standards

- 1. 100% of all procedural steps and standards, without assistance, within company-specific time limit, following all safety and plant procedures.
- 2. 100% conformance with all product standards and Process Plan criteria.



Trainee Directions

Examiner Instructions

The above referenced tools, equipment, materials and supplies will be used to Setup, Operate, Troubleshoot, and Maintain Compound Die Equipment and Tooling. All safety and plant procedures must be followed. Both the process and final result of the process will be evaluated. Steps should be performed in the sequence, and all steps must meet the standards for successful completion.

For successful completion of this Skill Check, the candidate must demonstrate the ability to complete the work activity under controlled assessment conditions. All work must be completed to standard.

Before administering the Skill Check:

- ♦ Read/review the *Guide to Administering Credentialing Achievement Records* developed for the program.
- Ensure that you have a copy of this Skill Check for the candidate to use while he/she is working. Be sure all applicable equipment and supplies are available

Do <u>not</u> provide assistance during the Skill Check. Monitor work in-progress and evaluate for *process*. Assess the completed work for conformance with **product** criteria. Mark *NA* if a process/product is not appropriate.

Stop the Skill Check immediately if the candidate violates a safety regulation or procedure or if there is any possibility of personal injury or damage to equipment.

Before testing, the examiner may discuss appropriate safety requirements and loss potential issues (i.e., Lockout/Tagout and HAZCOM/HAZMAT, personal protection equipment, confined space entry, compressed air, high/residual voltage).

EXAMINER: Read aloud the Skill Check Script from the Guide to Administering Credentialing Achievement Records (verbatim).

When the candidate indicates that he/she has completed the Skill Check or when maximum time allowed has run out, assess final product and follow the closing procedures outlined in the *Guide to Administering Credentialing Achievement Records*.

Checklist

Guide to Administering Credentialing Achievement Records

Scoring Procedures: Observe the candidate's performance for each Process Element and mark the *CHECKLIST* whether or not the standards were attained (*Do not rely on your memory*). Steps on the process side are to be marked as they are initiated. Standards are to be marked after each step has been competed.

(C) *Critical*. Failure to meet the standard will result in Skill Check termination.

Note: The evaluator will terminate the assessment and schedule the individual for further training.



Examiner's CHECKLIST — CAR SKILL CHECK #1

Setup, Operate, and Maintain Equipment with Compound Dies

SETUP PROCESS			PROCESS-PRODUCT STANDARDS			
⇒ PRESS AND TOOLING	Yes	No		Yes	No	NA
1. Stage Work Site and Prepare Press			 PPE/PPC appropriate for the job. (c) Work area clean and orderly (no debris, slippery floor 			
for Setup			areas, unmanaged scrap, unguarded obstructions, etc.)Obtained and set up applicable tools, calibrated			
			 gages, safety equipment, supplies, and documents. Read and understood Setup Plan, Standard Operating Procedures, and/or equipment 			
			manufacturer instructions.			
			 Setup package/part and scrap containers. Verified availability of raw material/stock as 			
			specified in Process/Quality Plan.			
2. Prepare Die for Installation			• Correct die was obtained as per Process/Quality Plan or as cross referenced to work order. (c)			
			Die and die cavity is clean based on visual inspection (no dirt, rust, burrs, etc.).			
			• Die/die assembly is not damaged based on visual inspection (no cracks, dents, holes, etc no loose bolts,			
			wires/cables, or parallels, etc no missing features)(c). • Unique tooling successfully installed.			
			Die staged for installation.			
3. Setup Press and Install Die			Ram/slide, bolster, and die/die assembly clean, deburred, clear of scrap, and showing no damage			
mstan Die			(include knockouts, if applicable). (c)			
			Accessories removed as needed.			
			 Followed safety procedures/used safety devices. (c) Die/die assembly properly installed, 			
			centered/squared, and clamped @ BDC (includes			
			 installation of any knockouts, bolts, etc.). (c) Performed necessary lubrication and/or counter 			
			balancing activities while inspecting die.			
			Ram/slide manipulation was performed safely and correctly to shut height requirements (no damage to press, shoe, die/assembly, casting, ram, clamps, no loose)			
			bolts, etc.). (c)			
Process steps continued on			• Demonstrated proficiency estimating, adjusting and then setting final shut height.			
next page			Verified clearances (stroke + minimum height			



allowance) to ensure smoothness of operation.		
 Press will maintain a smooth operation and meet clearance requirements even after any knockout, feeder, or sensor adjustments. Counters reset and functional (if applicable). Press inspected for service items/maintenance (lubrication, repair, adjustment, calibration, etc.). Identified and responded to/corrected problems (see troubleshooting and maintenance sections). Blanks/coil lubricated and/or advanced to starting position (see: setup coil-fed auxiliaries section). Setup inspection gages and quality control equipment for production or hand-off. Work cell organized, press/press area clean, and all safety devices, alarms, sensors, and guards set (or 		0 0 0 0 0
installed) and verified for function. (c)		

Skill Check Continued on Next Page

SETUP and OPERATION PROCESS	Yes	No	PROCESS-PRODUCT STANDARDS	Yes	No	NA
⇒ AUXILIARIES AND PRESS			For Coil-Feed applications.			
Request and Verify Raw Material/Stock			 Followed Process/Quality Plan and/or Standard Operating Procedures. (c) Material matched process specification criteria (ID 	٠	٦	
(Hand-and Coil fed)			 code, type, SO number, width, thickness, etc.) Material visually inspected for adverse conditions (rust, surface lamination, coil break, etc.). 			
			Sufficient coil/blanks staged for production.			
2. Prepare and Adjust Uncoiler (Coil-fed only)			 Coil/stock correctly aligned and mandrels/keepers or cradle accepts ID/OD or width of coil. (c) Material/stock secured and containing bands safely 		٠	
			 removed. Verified safety systems for function. (c) Material advanced to next operation. 		0 0	
			 Obtained correct feed speed and set brake tension. Adjusted loop control (if applicable). Demonstrated ability and safety during loading 	0	0	
			 (rigging, crane operations, load capacity, etc.). (C) Demonstrated ability when using threading tables. Demonstrated proficiency using controls (Modes of 	0	0	
			 Operation). (c) Setup performed according to Standard Operating Procedure(s) and/or Process/Quality Plan. (c) 			
			 Equipment checked for service items/maintenance. Identified and responded to problems (see: troubleshooting and maintenance sections). 		0	
3. Prepare and Adjust Straightener			 Straightener accepts coil. Material properly aligned and secured (adjusted pinchroll(s), entrance guide(s), loop controls, etc.). (c) 			
(Coil-fed only)			Set parameters of straightener.Obtained correct speed ratio for smooth, efficient,			
			 and continuous production. (c) Equipment checked for service items/maintenance. Identified and responded to problems (see: 			
			 troubleshooting and maintenance sections). Demonstrated proficiency using controls (Modes of Operation). (c) 			
			 Straightener set up according to Standard Operating procedure(s) and/or Process/Quality Plan. (c) 			

Skill Check continued

PROCESS	Yes	No	PROCESS-PRODUCT STANDARDS	Yes	No	NA
4. Prepare, Load and Adjust Feeder (Coil-fed only)			 Feed parameters set (material thickness/width, length, timing, pass-line, pilot release, etc.). Speed of feed matches press speed. (c) Coil/strip loaded and aligned with die(s). (c) Feeder set up, activated, and verified for safety. Equipment checked for service items/maintenance. Material advanced smoothly into die/die assembly (material did not bind, buckle, wrinkle, slip, stretch, etc.). Identified and responded to problems (see troubleshooting and maintenance sections). Demonstrated proficiency using controls. (c) 	00000 0 0	00000 0 0	0 0 00000
			 Feeder set up performed according to Standard Operating Procedure(s) and/or Setup Plan. (c) 			
5. Make a Quality			Press energized and re-adjusted for inch/jog mode.			
Piece Part (Inch/Jog Mode)			 First-run piece-part stamped according to Process/Quality Plan (validated shut height). Material/stock passed smoothly through die 			
(Hand and Coil-fed)			 assembly to payoff (material or part no longer in die). Part safely removed from guarded area. (c) Part attributes conform to quality characteristic 		0 0	
			standards based visual inspections (includes no missing or incomplete features). (c) • Part variables conform to specified dimensional +/-			
			 tolerances, SPC control limits and measurement standards (gage or instrument inspections required). (C) Scrap exited smoothly and properly segregated, stored or contained (no scrap/slugs present in die, shoe 			
			or part containers). No excessive scrap present. • Identified and responded to problems (see: troubleshooting and maintenance sections).			
			 Demonstrated proficiency using/setting controls.(c) Demonstrated accuracy when using hand-held measuring gages or QC instrumentation devices. 			
			 Equipment production ready and verified for safety. 			
6. Produce Parts (Operate Equipment for at least 15 minutes)		٦	Attentively monitored process (pressures, lubricants/coolants, inputs tooling, outputs, etc.) and identified and responded to problems (see troubleshooting and maintenance sections). In the first of the first troubleshooting and maintenance sections.	0	0	
(Hand and Coil-fed)			 Identified defective or non-compliance parts without contaminating quality parts discharged(c). Equipment functioning properly and parts 			
			 Equipment functioning property and parts manufactured within % productivity expectations. Quality parts produced on an on-going, successive, 			
			and continuous basis.			



		Equipment shut-off or prepared for hand-off.	П		
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FINAL PRODUCT STANDARDS

		FINAL PRODUCT STANDARDS
"Work	is Do	ne As Expected When:"
a.		Jobs were performed proficiently according to Process/Quality Plan, Setup Plan, SOP and/or Work Order instructions.
b.		All systems and components functioning properly and press continuously making good parts within (%) productivity standards.
C.		Accurate and legible information/data has been recorded on forms, information sheets, reports, work orders, labels, and /or in log books.
d.		Candidate demonstrated ability to deal with problems pro-actively and decisively.
e.		Candidate demonstrated ability to link cause and effect to isolate and correct problems or make process improvements.
f.		All safety and plant procedures have been followed and work area was left clean.
		COMMENTS
Candid	late/F	yaminer:

| Signatures: ______ Date: _____

(Monitor)

(Candidate)

Date:

Date:



Examiner's CHECKLIST — CAR SKILL CHECK #2

Setup, Operate, and Maintain Equipment with Compound Dies

SETUP PROCESS			PROCESS-PRODUCT STANDARDS			
⇒ PRESS AND TOOLING	Yes	No		Yes	No	NA
1. Stage Work Site and Prepare Press			 PPE/PPC appropriate for the job. (c) Work area clean and orderly (no debris, slippery floor 			
for Setup			areas, unmanaged scrap, unguarded obstructions, etc.)Obtained and set up applicable tools, calibrated			
			 gages, safety equipment, supplies, and documents. Read and understood Setup Plan, Standard Operating Procedures, and/or equipment 			
			manufacturer instructions.			
			 Setup package/part and scrap containers. Verified availability of raw material/stock as 			
			specified in Process/Quality Plan.			
2. Prepare Die for Installation			• Correct die was obtained as per Process/Quality Plan or as cross referenced to work order. (c)			
			Die and die cavity is clean based on visual inspection (no dirt, rust, burrs, etc.).			
			• Die/die assembly is not damaged based on visual inspection (no cracks, dents, holes, etc no loose bolts,			
			wires/cables, or parallels, etc no missing features)(c). • Unique tooling successfully installed.			
			Die staged for installation.			
3. Setup Press and Install Die			Ram/slide, bolster, and die/die assembly clean, deburred, clear of scrap, and showing no damage			
mstan Die			(include knockouts, if applicable). (c)			
			Accessories removed as needed.			
			 Followed safety procedures/used safety devices. (c) Die/die assembly properly installed, 			
			centered/squared, and clamped @ BDC (includes			
			 installation of any knockouts, bolts, etc.). (c) Performed necessary lubrication and/or counter 			
			balancing activities while inspecting die.			
			Ram/slide manipulation was performed safely and correctly to shut height requirements (no damage to press, shoe, die/assembly, casting, ram, clamps, no loose)			
			bolts, etc.). (c)			
Process steps continued on			• Demonstrated proficiency estimating, adjusting and then setting final shut height.			
next page			Verified clearances (stroke + minimum height			



allowance) to ensure smoothness of operation.		
 Press will maintain a smooth operation and meet clearance requirements even after any knockout, feeder, or sensor adjustments. Counters reset and functional (if applicable). Press inspected for service items/maintenance (lubrication, repair, adjustment, calibration, etc.). Identified and responded to/corrected problems (see troubleshooting and maintenance sections). Blanks/coil lubricated and/or advanced to starting position (see: setup coil-fed auxiliaries section). Setup inspection gages and quality control equipment for production or hand-off. Work cell organized, press/press area clean, and all safety devices, alarms, sensors, and guards set (or installed) and verified for function. (c) 		0 0 0 0 0
(3)		

Skill Check Continued on Next Page

SETUP and OPERATION PROCESS	Yes	No	PROCESS-PRODUCT STANDARDS	Yes	No	NA
⇒ AUXILIARIES AND PRESS			For Coil-Feed applications.			
Request and Verify Raw Material/Stock			 Followed Process/Quality Plan and/or Standard Operating Procedures. (c) Material matched process specification criteria (ID 	ū	٠	0
(Hand-and Coil fed)			 code, type, SO number, width, thickness, etc.) Material visually inspected for adverse conditions (rust, surface lamination, coil break, etc.). 			0 0
			Sufficient coil/blanks staged for production.			
2. Prepare and Adjust Uncoiler (Coil-fed only)			 Coil/stock correctly aligned and mandrels/keepers or cradle accepts ID/OD or width of coil. (c) Material/stock secured and containing bands safely 	0	٠	
(Coll-led only)			 removed. Verified safety systems for function. (c) Material advanced to next operation. 	000	0	
			 Obtained correct feed speed and set brake tension. Adjusted loop control (if applicable). Demonstrated ability and safety during loading 	0	0	
			 (rigging, crane operations, load capacity, etc.). (C) Demonstrated ability when using threading tables. Demonstrated proficiency using controls (Modes of 	<u> </u>	0	00
			 Operation). (c) Setup performed according to Standard Operating Procedure(s) and/or Process/Quality Plan. (c) 	٠		
			 Equipment checked for service items/maintenance. Identified and responded to problems (see: troubleshooting and maintenance sections). 	0	0	0 0
3. Prepare and Adjust			 Straightener accepts coil. Material properly aligned and secured (adjusted pinchroll(s), entrance guide(s), loop controls, etc.). (c) 			
Straightener (Coil-fed only)			Set parameters of straightener.Obtained correct speed ratio for smooth, efficient,	0		
			 and continuous production. (c) Equipment checked for service items/maintenance. Identified and responded to problems (see: 	0		
			 troubleshooting and maintenance sections). Demonstrated proficiency using controls (Modes of Operation). (c) 			
			Straightener set up according to Standard Operating procedure(s) and/or Process/Quality Plan. (c)	٠		

Skill Check continued

PROCESS	Yes	No	PROCESS-PRODUCT STANDARDS	Yes	No	NA
4. Prepare, Load and Adjust Feeder (Coil-fed only)			 Feed parameters set (material thickness/width, length, timing, pass-line, pilot release, etc.). Speed of feed matches press speed. (c) Coil/strip loaded and aligned with die(s). (c) Feeder set up, activated, and verified for safety. Equipment checked for service items/maintenance. Material advanced smoothly into die/die assembly (material did not bind, buckle, wrinkle, slip, stretch, etc.). Identified and responded to problems (see troubleshooting and maintenance sections). Demonstrated proficiency using controls. (c) Feeder set up performed according to Standard Operating Procedure(s) and/or Setup Plan. (c) 	0000000000000	00000 0 0 0 0	0 0 0 0 00000
5. Make a Quality			Press energized and re-adjusted for inch/jog mode.			
Piece Part (Inch/jog Mode)			 First-run piece-part stamped according to Process/Quality Plan (validated shut height). Material/stock passed smoothly through die 		٠	
(Hand and Coil-fed)			 assembly to payoff (material or part no longer in die). Part safely removed from guarded area. (c) Part attributes conform to quality characteristic 		0	
			 standards based visual inspections (includes no missing or incomplete features). (c) Part variables conform to specified dimensional +/-tolerances, SPC control limits and measurement 		٠	0
			 standards (gage or instrument inspections required). (c) Scrap exited smoothly and properly segregated, stored or contained (no scrap/slugs present in die, shoe 		٠	٥
			 or part containers). No excessive scrap present. Identified and responded to problems (see: troubleshooting and maintenance sections). 		٦	
			 Demonstrated proficiency using/setting controls.(c) Demonstrated accuracy when using hand-held measuring gages or QC instrumentation devices. 			
			Equipment production ready and verified for safety.			
6. Produce Parts (Operate Equipment for at least 15 minutes) (Hand and Coil-fed)		٦	 Attentively monitored process (pressures, lubricants/coolants, inputs tooling, outputs, etc.) and identified and responded to problems (see troubleshooting and maintenance sections). Identified defective or non-compliance parts without 		٠	0
			contaminating quality parts discharged(c).Equipment functioning properly and parts			0
			manufactured within % productivity expectations.Quality parts produced on an on-going, successive,			
			and continuous basis.			



		Equipment shut-off or prepared for hand-off.	П		
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		FINAL PRODUCT STANDARDS
"Work	is Do	ne As Expected When:"
a.		Jobs were performed proficiently according to Process/Quality Plan, Setup Plan, SOP and/or
		Work Order instructions.
b.		All systems and components functioning properly and press continuously making good parts
		within (%) productivity standards.
C.		Accurate and legible information/data has been recorded on forms, information sheets, reports,
		work orders, labels, and /or in log books.
d.		Candidate demonstrated ability to deal with problems pro-actively and decisively.
e.		Candidate demonstrated ability to link cause and effect to isolate and correct problems or make
		process improvements.
f.		All safety and plant procedures have been followed and work area was left clean.
		COMMENTS
		COMMENTS
Candid	late/E	xaminer:

Candidate/Exa	miner:	
		
		Data
Signatures: _	(Examiner)	Date:
		Date:
_	(Monitor)	
_		Date:
	(Candidate)	



Examiner's CHECKLIST — CAR SKILL CHECK #3

Setup, Operate, and Maintain Equipment with Compound Dies

SETUP PROCESS			PROCESS-PRODUCT STANDARDS			
⇒ PRESS AND TOOLING	Yes	No		Yes	No	NA
1. Stage Work Site and Prepare Press			 PPE/PPC appropriate for the job. (c) Work area clean and orderly (no debris, slippery floor 			
for Setup			areas, unmanaged scrap, unguarded obstructions, etc.)Obtained and set up applicable tools, calibrated			
			 gages, safety equipment, supplies, and documents. Read and understood Setup Plan, Standard Operating Procedures, and/or equipment 			
			manufacturer instructions.			
			 Setup package/part and scrap containers. Verified availability of raw material/stock as 			
			specified in Process/Quality Plan.			
2. Prepare Die for Installation			• Correct die was obtained as per Process/Quality Plan or as cross referenced to work order. (c)			
			Die and die cavity is clean based on visual inspection (no dirt, rust, burrs, etc.).			
			• Die/die assembly is not damaged based on visual inspection (no cracks, dents, holes, etc no loose bolts,			
			wires/cables, or parallels, etc no missing features)(c). • Unique tooling successfully installed.			
			Die staged for installation.			
3. Setup Press and Install Die			Ram/slide, bolster, and die/die assembly clean, deburred, clear of scrap, and showing no damage			
mstan Die			(include knockouts, if applicable). (c)			
			Accessories removed as needed.			
			 Followed safety procedures/used safety devices. (c) Die/die assembly properly installed, 			
			centered/squared, and clamped @ BDC (includes			
			 installation of any knockouts, bolts, etc.). (c) Performed necessary lubrication and/or counter 			
			balancing activities while inspecting die.			
			Ram/slide manipulation was performed safely and correctly to shut height requirements (no damage to press, shoe, die/assembly, casting, ram, clamps, no loose)			
			bolts, etc.). (c)			
Process steps continued on			• Demonstrated proficiency estimating, adjusting and then setting final shut height.			
next page			Verified clearances (stroke + minimum height			



allowance) to ensure smoothness of operation.			
			1
 Press will maintain a smooth operation and meet clearance requirements even after any knockout, 			
feeder, or sensor adjustments.			
 Counters reset and functional (if applicable). Press inspected for service items/maintenance (hybridation repairs disappears askington). 	۵	٦	٥
 (lubrication, repair, adjustment, calibration, etc.). Identified and responded to/corrected problems (see troubleshooting and maintenance sections). 	۵		
Blanks/coil lubricated and/or advanced to starting			
 position (see: setup coil-fed auxiliaries section). Setup inspection gages and quality control equipment for production or hand-off. 	٦		٠
Work cell organized, press/press area clean, and all			
safety devices, alarms, sensors, and guards set (or installed) and verified for function. (c)			
instance, and vermed for function.			

Skill Check Continued on Next Page

SETUP and OPERATION PROCESS	Yes	No	PROCESS-PRODUCT STANDARDS	Yes	No	NA
⇒ AUXILIARIES AND PRESS			For Coil-Feed applications.			
Request and Verify Raw Material/Stock			 Followed Process/Quality Plan and/or Standard Operating Procedures. (c) Material matched process specification criteria (ID 	ū	٠	0
(Hand-and Coil fed)			 code, type, SO number, width, thickness, etc.) Material visually inspected for adverse conditions (rust, surface lamination, coil break, etc.). 			0 0
			Sufficient coil/blanks staged for production.			
2. Prepare and Adjust Uncoiler (Coil-fed only)			 Coil/stock correctly aligned and mandrels/keepers or cradle accepts ID/OD or width of coil. (c) Material/stock secured and containing bands safely 	0	٠	
			 removed. Verified safety systems for function. (c) Material advanced to next operation. 	000	0	
			 Obtained correct feed speed and set brake tension. Adjusted loop control (if applicable). Demonstrated ability and safety during loading 	0	0	
			 (rigging, crane operations, load capacity, etc.). (C) Demonstrated ability when using threading tables. Demonstrated proficiency using controls (Modes of 	<u> </u>	0	00
			 Operation). (c) Setup performed according to Standard Operating Procedure(s) and/or Process/Quality Plan. (c) 	٠		
			 Equipment checked for service items/maintenance. Identified and responded to problems (see: troubleshooting and maintenance sections). 	0	0	0 0
3. Prepare and Adjust Straightener			 Straightener accepts coil. Material properly aligned and secured (adjusted pinchroll(s), entrance guide(s), loop controls, etc.). (c) 			
(Coil-fed only)			Set parameters of straightener.Obtained correct speed ratio for smooth, efficient,	0		
			 and continuous production. (c) Equipment checked for service items/maintenance. Identified and responded to problems (see: 	0		
			 troubleshooting and maintenance sections). Demonstrated proficiency using controls (Modes of Operation). (c) 			
			Straightener set up according to Standard Operating procedure(s) and/or Process/Quality Plan. (c)	٠		

Skill Check continued

PROCESS	Yes	No	PROCESS-PRODUCT STANDARDS	Yes	No	NA
4. Prepare, Load and Adjust Feeder (Coil-fed only)		0	 Feed parameters set (material thickness/width, length, timing, pass-line, pilot release, etc.). Speed of feed matches press speed. (c) Coil/strip loaded and aligned with die(s). (c) Feeder set up, activated, and verified for safety. Equipment checked for service items/maintenance. Material advanced smoothly into die/die assembly (material did not bind, buckle, wrinkle, slip, stretch, etc.). Identified and responded to problems (see troubleshooting and maintenance sections). Demonstrated proficiency using controls. (c) 	00000 0 0	00000 0 0 0	0 0 0 00000
			• Feeder set up performed according to Standard Operating Procedure(s) and/or Setup Plan. (c)			
5. Make a Quality			Press energized and re-adjusted for inch/jog mode.			
Piece Part (Inch/jog Mode)			 First-run piece-part stamped according to Process/Quality Plan (validated shut height). Material/stock passed smoothly through die 		٠	
(Hand and Coil-fed)			 assembly to payoff (material or part no longer in die). Part safely removed from guarded area. (c) Part attributes conform to quality characteristic 		0	
			standards based visual inspections (includes no missing or incomplete features). (c) • Part variables conform to specified dimensional +/-		٥	٥
			tolerances, SPC control limits and measurement standards (gage or instrument inspections required). (c) • Scrap exited smoothly and properly segregated,		۵	
			 stored or contained (no scrap/slugs present in die, shoe or part containers). No excessive scrap present. Identified and responded to problems (see: troubleshooting and maintenance sections). 		٦	٥
			 Demonstrated proficiency using/setting controls.(c) Demonstrated accuracy when using hand-held measuring gages or QC instrumentation devices. 		0	
			Equipment production ready and verified for safety.			
6. Produce Parts (Operate Equipment for at least 15 minutes)	0	0	Attentively monitored process (pressures, lubricants/coolants, inputs tooling, outputs, etc.) and identified and responded to problems (see troubleshooting and maintenance sections). Identified defective or non-compliance parts without			
(Hand and Coil-fed)			• Identified defective or non-compliance parts without contaminating quality parts discharged(c).			
			 Equipment functioning properly and parts manufactured within % productivity expectations. Quality parts produced on an on-going, successive, and continuous basis. 		<u> </u>	
			and Continuous vasis.			



		Equipment shut-off or prepared for hand-off.	П		
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		FINAL PRODUCT STANDARDS
"Work	is Do	one As Expected When:"
a.		Jobs were performed proficiently according to Process/Quality Plan, Setup Plan, SOP and/or Work Order instructions.
b.		All systems and components functioning properly and press continuously making good parts within (%) productivity standards.
C.		Accurate and legible information/data has been recorded on forms, information sheets, reports, work orders, labels, and /or in log books.
d.		Candidate demonstrated ability to deal with problems pro-actively and decisively.
e.		Candidate demonstrated ability to link cause and effect to isolate and correct problems or make process improvements.
f.		All safety and plant procedures have been followed and work area was left clean.
		COMMENTS
Candio	late/E	xaminer:

(Examiner)

(Monitor)

(Candidate)

Signatures:

Date:

Date:

Date:



Examiner's CHECKLIST — CAR SKILL CHECK #4

Setup, Operate, and Maintain Equipment with Compound Dies

SETUP PROCESS			PROCESS-PRODUCT STANDARDS			
⇒ PRESS AND TOOLING	Yes	No		Yes	No	NA
1. Stage Work Site and Prepare Press			 PPE/PPC appropriate for the job. (c) Work area clean and orderly (no debris, slippery floor 			
for Setup			areas, unmanaged scrap, unguarded obstructions, etc.)Obtained and set up applicable tools, calibrated			
			 gages, safety equipment, supplies, and documents. Read and understood Setup Plan, Standard Operating Procedures, and/or equipment 			
			manufacturer instructions.			
			 Setup package/part and scrap containers. Verified availability of raw material/stock as 			
			specified in Process/Quality Plan.			
2. Prepare Die for Installation			• Correct die was obtained as per Process/Quality Plan or as cross referenced to work order. (c)			
			Die and die cavity is clean based on visual inspection (no dirt, rust, burrs, etc.).			
			• Die/die assembly is not damaged based on visual inspection (no cracks, dents, holes, etc no loose bolts,			
			wires/cables, or parallels, etc no missing features)(c). • Unique tooling successfully installed.			
			Die staged for installation.			
3. Setup Press and Install Die			Ram/slide, bolster, and die/die assembly clean, deburred, clear of scrap, and showing no damage			
mstan Die			(include knockouts, if applicable). (c)			
			Accessories removed as needed.			
			 Followed safety procedures/used safety devices. (c) Die/die assembly properly installed, 			
			centered/squared, and clamped @ BDC (includes			
			 installation of any knockouts, bolts, etc.). (c) Performed necessary lubrication and/or counter 			
			balancing activities while inspecting die.			
			Ram/slide manipulation was performed safely and correctly to shut height requirements (no damage to press, shoe, die/assembly, casting, ram, clamps, no loose)			
			bolts, etc.). (c)			
Process steps continued on			• Demonstrated proficiency estimating, adjusting and then setting final shut height.			
next page			Verified clearances (stroke + minimum height			



allowance) to ensure smoothness of operation.		
 Press will maintain a smooth operation and meet clearance requirements even after any knockout, feeder, or sensor adjustments. Counters reset and functional (if applicable). Press inspected for service items/maintenance (lubrication, repair, adjustment, calibration, etc.). Identified and responded to/corrected problems (see troubleshooting and maintenance sections). Blanks/coil lubricated and/or advanced to starting position (see: setup coil-fed auxiliaries section). Setup inspection gages and quality control equipment for production or hand-off. Work cell organized, press/press area clean, and all safety devices, alarms, sensors, and guards set (or 		0 0 0 0 0
installed) and verified for function. (c)		

Skill Check Continued on Next Page

SETUP and	Yes	No	PROCESS-PRODUCT STANDARDS	Yes	No	NA
OPERATION PROCESS						
⇒ AUXILIARIES AND PRESS			For Coil-Feed applications.			
Request and Verify Raw Material/Stock			 Followed Process/Quality Plan and/or Standard Operating Procedures. (c) Material matched process specification criteria (ID) 			
(Hand-and Coil fed)			 code, type, SO number, width, thickness, etc.) Material visually inspected for adverse conditions (rust, surface lamination, coil break, etc.). 			
			 Sufficient coil/blanks staged for production. 			
2. Prepare and Adjust Uncoiler (Coil-fed only)			 Coil/stock correctly aligned and mandrels/keepers or cradle accepts ID/OD or width of coil. (c) Material/stock secured and containing bands safely 	۵		٥
			removed.			
			• Verified safety systems for function. (c)			
			Material advanced to next operation.Obtained correct feed speed and set brake tension.			
			Adjusted loop control (if applicable).			
			• Demonstrated ability and safety during loading (rigging, crane operations, load capacity, etc.). (C)			
			Demonstrated ability when using threading tables.			
			• Demonstrated proficiency using controls (Modes of Operation). (c)			
			• Setup performed according to Standard Operating Procedure(s) and/or Process/Quality Plan. (c)			
			• Equipment checked for service items/maintenance.			
			Identified and responded to problems (see: troubleshooting and maintenance sections).			
3. Prepare and Adjust Straightener			 Straightener accepts coil. Material properly aligned and secured (adjusted pinchroll(s), entrance guide(s), loop controls, etc.). (c) 			
(Coil-fed only)			Set parameters of straightener.Obtained correct speed ratio for smooth, efficient,			
			 and continuous production. (c) Equipment checked for service items/maintenance. Identified and responded to problems (see: 			0
			troubleshooting and maintenance sections).Demonstrated proficiency using controls (Modes of			
			 Operation). (c) Straightener set up according to Standard Operating procedure(s) and/or Process/Quality Plan. (c) 			
			procedure(o) and of 1100000 Quartey 1 tun. (b)			

Skill Check continued

PROCESS	Yes	No	PROCESS-PRODUCT STANDARDS	Yes	No	NA
4. Prepare, Load and Adjust Feeder (Coil-fed only)			 Feed parameters set (material thickness/width, length, timing, pass-line, pilot release, etc.). Speed of feed matches press speed. (c) Coil/strip loaded and aligned with die(s). (c) Feeder set up, activated, and verified for safety. Equipment checked for service items/maintenance. Material advanced smoothly into die/die assembly (material did not bind, buckle, wrinkle, slip, stretch, etc.). Identified and responded to problems (see troubleshooting and maintenance sections). Demonstrated proficiency using controls. (c) 	00000 0 0 0	00000 0 0 0	0 0 0 0 0 0 0
			 Feeder set up performed according to Standard Operating Procedure(s) and/or Setup Plan. (c) 			
5. Make a Quality			Press energized and re-adjusted for inch/jog mode.			
Piece Part (Inch/jog Mode)			 First-run piece-part stamped according to Process/Quality Plan (validated shut height). Material/stock passed smoothly through die 			
(Hand and Coil-fed)			 assembly to payoff (material or part no longer in die). Part safely removed from guarded area. (c) Part attributes conform to quality characteristic 			
			 standards based visual inspections (includes no missing or incomplete features). (c) Part variables conform to specified dimensional +/-tolerances, SPC control limits and measurement 			
			 standards (gage or instrument inspections required). (c) Scrap exited smoothly and properly segregated, stored or contained (no scrap/slugs present in die, shoe 		۵	
			or part containers). No excessive scrap present. Identified and responded to problems (see: troubleshooting and maintenance sections).			
			 Demonstrated proficiency using/setting controls.(c) Demonstrated accuracy when using hand-held measuring gages or QC instrumentation devices. 			
			 Equipment production ready and verified for safety. 			
6. Produce Parts (Operate Equipment for at least 15 minutes)			Attentively monitored process (pressures, lubricants/coolants, inputs tooling, outputs, etc.) and identified and responded to problems (see troubleshooting and maintenance sections). The different left of the form			0
(Hand and Coil-fed)			 Identified defective or non-compliance parts without contaminating quality parts discharged(c). 			
			 Equipment functioning properly and parts manufactured within % productivity expectations. Quality parts produced on an on-going, successive, 			
			and continuous basis.			



	•	Equipment shut-off or prepared for hand-off.		



FINAL PRODUCT STANDARDS

		FINAL PRODUCT STANDARDS
"Work	is Do	one As Expected When:"
a.		Jobs were performed proficiently according to Process/Quality Plan, Setup Plan, SOP and/or Work Order instructions.
b.		All systems and components functioning properly and press continuously making good parts within (%) productivity standards.
C.		Accurate and legible information/data has been recorded on forms, information sheets, reports, work orders, labels, and /or in log books.
d.		Candidate demonstrated ability to deal with problems pro-actively and decisively.
e.		Candidate demonstrated ability to link cause and effect to isolate and correct problems or make process improvements.
f.		All safety and plant procedures have been followed and work area was left clean.
		COMMENTS
Candid	late/E	xaminer:

Candidate/Exa	miner:	
Signaturos		Date:
Signatures: _	(Examiner)	Date:
	,	
_	(Monitor)	Date:
	(Monitor)	
_		Date:
	(Candidate)	



Examiner's CHECKLIST — CAR SKILL CHECK #5

Setup, Operate, and Maintain Equipment with Compound Dies

SETUP PROCESS			PROCESS-PRODUCT STANDARDS				
⇒ PRESS AND TOOLING	Yes	No		Yes	No	NA	
1. Stage Work Site and Prepare Press			 PPE/PPC appropriate for the job. (c) Work area clean and orderly (no debris, slippery floor 				
for Setup			areas, unmanaged scrap, unguarded obstructions, etc.)Obtained and set up applicable tools, calibrated				
			 gages, safety equipment, supplies, and documents. Read and understood Setup Plan, Standard Operating Procedures, and/or equipment 				
			manufacturer instructions.				
			 Setup package/part and scrap containers. Verified availability of raw material/stock as 				
			specified in Process/Quality Plan.				
2. Prepare Die for Installation			• Correct die was obtained as per Process/Quality Plan or as cross referenced to work order. (c)				
			Die and die cavity is clean based on visual inspection (no dirt, rust, burrs, etc.).				
			• Die/die assembly is not damaged based on visual inspection (no cracks, dents, holes, etc no loose bolts,				
			wires/cables, or parallels, etc no missing features)(c). • Unique tooling successfully installed.				
			Die staged for installation.				
3. Setup Press and Install Die			Ram/slide, bolster, and die/die assembly clean, deburred, clear of scrap, and showing no damage				
mstan Die			(include knockouts, if applicable). (c)				
			Accessories removed as needed.				
			 Followed safety procedures/used safety devices. (c) Die/die assembly properly installed, 				
			centered/squared, and clamped @ BDC (includes				
			 installation of any knockouts, bolts, etc.). (c) Performed necessary lubrication and/or counter 				
			balancing activities while inspecting die.				
			Ram/slide manipulation was performed safely and correctly to shut height requirements (no damage to press, shoe, die/assembly, casting, ram, clamps, no loose)				
			bolts, etc.). (c)				
Process steps continued on			• Demonstrated proficiency estimating, adjusting and then setting final shut height.				
next page			Verified clearances (stroke + minimum height				



allowance) to ensure smoothness of operation.			
Press will maintain a smooth operation and meet			
clearance requirements even after any knockout,			
feeder, or sensor adjustments.			
 Counters reset and functional (if applicable). Press inspected for service items/maintenance (lubrication, repair, adjustment, calibration, etc.). 	٠		٠
Identified and responded to/corrected problems (see troubleshooting and maintenance sections).		٦	
Blanks/coil lubricated and/or advanced to starting position (see: setup coil-fed auxiliaries section).			
 Setup inspection gages and quality control equipment for production or hand-off. 			
Work cell organized, press/press area clean, and all safety devices, alarms, sensors, and guards set (or			
installed) and verified for function. (c)			

Skill Check Continued on Next Page

SETUP and	Yes	No	PROCESS-PRODUCT STANDARDS	Yes	No	NA
OPERATION PROCESS						
⇒ AUXILIARIES AND PRESS			For Coil-Feed applications.			
Request and Verify Raw Material/Stock			 Followed Process/Quality Plan and/or Standard Operating Procedures. (c) Material matched process specification criteria (ID 	0	0	C
(Hand-and Coil fed)			 code, type, SO number, width, thickness, etc.) Material visually inspected for adverse conditions (rust, surface lamination, coil break, etc.). 	<u> </u>		0
			Sufficient coil/blanks staged for production.			
2. Prepare and Adjust Uncoiler (Coil-fed only)			 Coil/stock correctly aligned and mandrels/keepers or cradle accepts ID/OD or width of coil. (c) Material/stock secured and containing bands safely 			D
(2011 2011 2111)			removed.			
			 Verified safety systems for function. (c) Material advanced to next operation. 			
			Material advanced to next operation.Obtained correct feed speed and set brake tension.			
			Adjusted loop control (if applicable).			
			Demonstrated ability and safety during loading (rigging, crane operations, load capacity, etc.). (C)			
			Demonstrated ability when using threading tables.Demonstrated proficiency using controls (Modes of			
			Operation). (c) • Setup performed according to Standard Operating Proceeding (c) and/or Process/Operating (c)	٥		
			 Procedure(s) and/or Process/Quality Plan. (c) Equipment checked for service items/maintenance. Identified and responded to problems (see: troubleshooting and maintenance sections). 	0	00	
			troubleshooting and maintenance sections).			
3. Prepare and			Straightener accepts coil.			
Adjust Straightener (Coil-fed only)			 Material properly aligned and secured (adjusted pinchroll(s), entrance guide(s), loop controls, etc.). (c) Set parameters of straightener. Obtained correct speed ratio for smooth, efficient, 	0		00
			 and continuous production. (c) Equipment checked for service items/maintenance. Identified and responded to problems (see: 	0		
			troubleshooting and maintenance sections).Demonstrated proficiency using controls (Modes of	٠		0
			Operation). (c) • Straightener set up according to Standard Operating			
			procedure(s) and/or Process/Quality Plan. (c)			

Skill Check continued

PROCESS	Yes	No	PROCESS-PRODUCT STANDARDS	Yes	No	NA
4. Prepare, Load and Adjust Feeder (Coil-fed only)			 Feed parameters set (material thickness/width, length, timing, pass-line, pilot release, etc.). Speed of feed matches press speed. (c) Coil/strip loaded and aligned with die(s). (c) Feeder set up, activated, and verified for safety. Equipment checked for service items/maintenance. Material advanced smoothly into die/die assembly (material did not bind, buckle, wrinkle, slip, stretch, etc.). Identified and responded to problems (see troubleshooting and maintenance sections). Demonstrated proficiency using controls. (c) 	00000 0 0 0	00000 0 0 0	0 0 0 0 0 0 0
			 Feeder set up performed according to Standard Operating Procedure(s) and/or Setup Plan. (c) 			
5. Make a Quality			Press energized and re-adjusted for inch/jog mode.			
Piece Part (Inch/jog Mode)			 First-run piece-part stamped according to Process/Quality Plan (validated shut height). Material/stock passed smoothly through die 			
(Hand and Coil-fed)			 assembly to payoff (material or part no longer in die). Part safely removed from guarded area. (c) Part attributes conform to quality characteristic 			
			 standards based visual inspections (includes no missing or incomplete features). (c) Part variables conform to specified dimensional +/-tolerances, SPC control limits and measurement 			
			 standards (gage or instrument inspections required). (c) Scrap exited smoothly and properly segregated, stored or contained (no scrap/slugs present in die, shoe 		۵	
			or part containers). No excessive scrap present. Identified and responded to problems (see: troubleshooting and maintenance sections).			
			 Demonstrated proficiency using/setting controls.(c) Demonstrated accuracy when using hand-held measuring gages or QC instrumentation devices. 			
			 Equipment production ready and verified for safety. 			
6. Produce Parts (Operate Equipment for at least 15 minutes)			Attentively monitored process (pressures, lubricants/coolants, inputs tooling, outputs, etc.) and identified and responded to problems (see troubleshooting and maintenance sections). The different left of the form			0
(Hand and Coil-fed)			 Identified defective or non-compliance parts without contaminating quality parts discharged(c). 			
			 Equipment functioning properly and parts manufactured within % productivity expectations. Quality parts produced on an on-going, successive, 			
			and continuous basis.			



		Equipment shut-off or prepared for hand-off.	П		
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FINAL PRODUCT STANDARDS						
"Work	is Do	one As Expected When:"				
a.		Jobs were performed proficiently according to Process/Quality Plan, Setup Plan, SOP and/or Work Order instructions.				
b.		All systems and components functioning properly and press continuously making good parts within (%) productivity standards.				
C.		Accurate and legible information/data has been recorded on forms, information sheets, reports, work orders, labels, and /or in log books.				
d.		Candidate demonstrated ability to deal with problems pro-actively and decisively.				
e.		Candidate demonstrated ability to link cause and effect to isolate and correct problems or make process improvements.				
f.		All safety and plant procedures have been followed and work area was left clean.				
		COMMENTS				
Candidate/Examiner:						

Date:

Date:

Date:

2.4 - CAR SKILL CHECK SUMMARY

(Examiner)

(Monitor)

(Candidate)

Signatures:

Critical Work Activities and Skill Checks Completed	Date Completed
Setup Equipment with Compound Dies	
Successful Skill Check Attempt #1	
Successful Skill Check Attempt #2	
Successful Skill Check Attempt #3	
Successful Skill Check Attempt #4	
Successful Skill Check Attempt #5	

Opportunity Observations			
		Successful	Not Successful
⇒ TROUBLESHOOT PRESS, TOOLING AND AUXILIARIES	Candidate must successfully react to/demonstrate at least <u>five</u> (5) of the following troubleshooting situations to be credentialed in the Duty Cluster	Yes §	9
Troubleshoot	 Responded to a double-hit or mis-hit situation and successfully isolated the cause of the problem. Responded to broken tooling and correctly determined the 	1. 📮	1.
Running Process	cause of breakage. 3. Identified defects in raw material/stock, located defective	2. 🗖	2. 🗖
	area(s), and implemented corrective actions.4. Responded to non-conforming part dimensions during a production run and successfully isolated the cause of the	3. 🗖	3. 🗖
	problem. 5. Responded to damaged parts or quality non-conformance conditions during a production run and successfully isolated	4. 🗖	4. 🗖
	the potential cause(s) of the problem. 6. Detected variations in material thickness, isolated areas of non-conformance, and correctly diagnosed the cause of the problem.	5. 🗖	5. 🗖
	7. Responded to double thickness conditions, identified problem area(s), and successfully isolated the cause of the	6. 🗖	6. 🗖
	problem.Responded to a press overload situation or E-Stop, analyzed potential problem areas, and successfully determined cause	7. 🗖	7. 🗖
	of the overload or stoppage. 9. Detected a material alignment problem, isolated the cause of	8. 🗖	8. 🗖
	the mis-alignment, and performed corrective actions. 10. Identified mis-alignment of straighteners, evaluated problem areas, and successfully isolated the cause of the problem.	9. 🗖	9. 🗖
	11. Detected speed variations on feeders, uncoilers, or straighteners; determined problem area; and successfully isolated the cause of the problem.	10. 🗖	10. 🗖
	12. Responded to loop sensor faults and successfully isolated the problem.	11. 🗖	11. 🗖
	13. Responded to a conveyor, part handler, or transfer device failure and correctly determined cause of the problem.	12. 🗖	12. 🗖
	14. Identified irregular (<i>high/low</i>) pressure/temperature/flow variations, isolated the cause of the problem, and performed	13. 🗖	13. 🗖
	corrective actions.	14. 🗖	14. 🗖



Opportunity observations continued	Opportunity Observations	Successful	Not Successful
⇒ MAINTAIN PRESS, TOOLING, OR AUXILIARIES	Candidate must successfully demonstrate at least <u>10</u> of the following maintenance activities to be credentialed in the Duty Cluster	Yes &	7
	1. Removed taps and installed new or replacement taps.	1.	1.
	2. Bleed lines and valves.	2. \Box	2. 🗖
Perform Corrective	3. Changed and adjusted shut height (in-process adjustment).	3. 🗖	3. 🗖
or Preventive	4. Dressed or replaced electrodes on a welder.	4.	4.
Maintenance on	5. Cleaned scrap from tee slots, holes, etc.	5. □	5. □
Equipment	6. Cleaned a bolster or ram/slide.	6. □	6. □
	7. Pulled, cleaned and re-installed/mounted a die/assembly.	7. □	7. 🗖
	8. Replaced damaged/defective pins or key.	8.	8.
	 Locked and tagged-out equipment (Zero energy on mechanical and electrical). 	9.	9.
	10. Removed, cleaned, and re-installed a filter.	10. 🗖	10. 🗖
	11. Replaced a hose or tubing.	11. 🗖	11. 🗖
	12. Removed, cleaned or unplugged, and re-installed a valve.	12. 🗖	12. 🗖
	13. Removed a damaged or non-functioning valve and replaced it with a new or rebuilt valve.	13. 🗖	13. 🗖
	14. Corrected and adjusted/re-set timing (in-process adjustment).	14. 🗖	14. 🗖
	15. Corrected, adjusted/re-set, and controlled feeds, speeds and/or flow rates (in-process adjustments).	15. 🗖	15. 🗖
	16. Polished or cleaned rollers.	16. 🗖	16. 🗖
	17. Repositioned stock/raw material (in-process adjustment).	17. 🗖	17. 🗖
	18. Changed/replaced a low-voltage fuse or breaker.	18. 🗖	18. 🗖
	19. Tightened strippers.	19. 🗖	19. 🗖
	20. Tightened parallels.	20. 🗖	20. 🗖
	21. Replaced a defective workholding device and it verified for safety.	21. 🗖	21. 🗖
	22. Verified calibration of sensors, monitors or switches.	22. 🗖	22. 🗖
	23. Changed/replaced a limit or proximity switch.	23. 🗖	23. 🗖
	24. Replaced and set a conveyor or material handling belt.	24. 🗖	24. 🗖
	25. Changed and adjusted a drive belt or chain.	25. 🗖	25. 🗖
	26. Adjusted pressure/temperature regulator (in-process adjustment).	26. 🗖	26. 🗖
	27. Filled/refilled lubrication or cooling devices/reservoirs.	27. 🗖	27. 🗖
	28. Lubricated/greased equipment manually (PM).	28. 🗖	28. 🗖
	29. Replaced a control panel light or LED.	29. 🗖	29. 🗖
	30. Successfully conducted a titration test.	30. 🗖	30. 🗖
	31. Successfully performed a refractometer (viscosity) analysis.	31. 🗖	31. 🗖
	32. Successfully tested material for hardness (e.g., Rockwell test)	32. 🗖	32. 🗖



33.	Successfully tested tensile of raw material or a part (e.g., "pull test")	33. 🗖	33. 🗖
34.	Successfully conducted continuity tests on sensors/probes.	34. 🗖	34. 🗖
35.	Successfully performed a magnaflux or container pressure test (deep drawing process only).	35. 🗖	35. 🗖
36	. Verified press diagnostics.	36. 🗖	36. 🗖



PERFORMANCE AFFIDAVIT

NIMS Credentialing Program

Affidavit of Successful Completion

NIMS Level III Metal Stamping Credentialing Program

♦ Credentialing Achievement Record **♦**

➢ Please print		
Candidate Name	Reg. No.	Date Completed
The credentialing candidate named above has completed all necessary CAR requ	 uirements for NIMS <u>Level II</u>	LOJT recognition.
Site Name and Address:	Site No.	
Indicate in the number of Skill Checks completed and dates of succes	sful performance for each Ski	ill Check
Duty Cluster Name	Required Skill Checks	Number of Skill Checks
SETUP EQUIPMENT WITH COMPOUND DIE SETS		Completed
	5	
Successful Skill Check Attempt #1	Date:	
Successful Skill Check Attempt #2	Date:	
Successful Skill Check Attempt #3	Date:	
Successful Skill Check Attempt #4	Date:	
Successful Skill Check Attempt #5	Date:	
Experience-eligibility statements have been completed, dated, and co-initialed.	Yes 🗖	No 🗖
	Manual Feed	I OYES O NO
	Coil Fed	O YES O NO
	Other:	g
Opportunity Observations	1	Specif
Opportunity Observations Troubleshooting		
&		
Corrective/Preventive Maintenance		
Successfully demonstrated at least five troubleshooting situations.	OYES	O NO
Successfully demonstrated at least 10 maintenance activities.	OYES	O NO
	~	
		19
Site Coordinator Signature-		Date
		<u>19</u>
Supervisor Signature		Date
Candidate Signature		Date 19



COMMENTS:	

Make a copy of the completed Affidavit of Successful Completion for your records and send the original to:







The National Institute for Metalworking Skills 3251 Old Lee Highway, Suite 205
Fairfax, Virginia, 22030
http://nims-skills.org