

DACUM Research Chart for Machinist 1

DACUM Panel

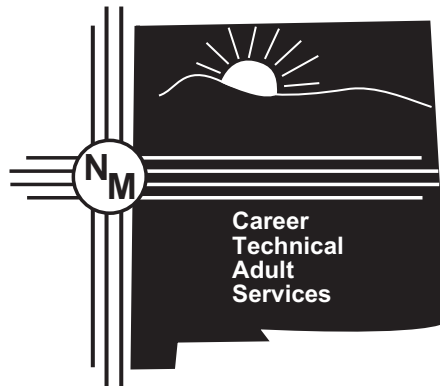
Lewis Hartwick
Albuquerque NM

Tom Souther
Sandia Labs
Albuquerque NM

DACUM Facilitators

Karen Christopherson
Smith Frederick
Skip Saurman
Joan Slick
Mindy Stevens
James Hamilton, Team Leader

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Duties		Tasks				
A	Plan Job Process	A-1 Determine job specifications	A-2 Identify machining processes	A-3 Estimate job time requirements	A-4 Determine job materials	A-5 Determine job machines
B	Obtain Job Resources	B-1 Collect job materials	B-2 Determine machine availability	B-3 Determine tooling availability	B-4 Manufacture specialized job or fixture	B-5 Arrange outsource
C	Perform Saw Operations	C-1 Determine necessity of saw fixture	C-2 Set up saw fixture	C-3 Select saw blade	C-4 Install saw blade	C-5 Set saw blade speed
D	Perform Lathe Operations	D-1 Determine mill holding fixture	D-2 Obtain lathe holding fixture	D-3 Set up lathe holding fixture	D-4 Set up lathe tooling	D-5 Calculate mill speeds and feeds
E	Perform Mill Operations	E-1 Determine mill holding fixture	E-2 Obtain mill holding fixture	E-3 Set up mill holding fixture	E-4 Set up mill tooling	E-5 Calculate mill speeds and feeds
F	Perform Grinder Operations	F-1 Determine grinder holding fixture	F-2 Obtain grinder holding fixture	F-3 Set up grinder holding fixture	F-4 Determine appropriate grinding wheel	F-5 Set up grinding wheel
G	Perform WEDM Operations	G-1 Determine (EDM) holding fixture	G-2 Obtain (EDM) holding fixture	G-3 Set up (EDM) holding fixtures	G-4 Select (EDM) wire	G-5 Install (EDM) wire
H	Perform Sinker EDM Operations	H-1 Determine sinker (EDM) holding fixture	H-2 Obtain sinker (EDM) holding fixture	H-3 Set up sinker (EDM) holding fixture	H-4 Manufacture sinker (EDM) tool	H-5 Install sinker (EDM) tools
I	Perform Benchmark	I-1 Perform layout work	I-2 Perform bench cutting tasks (e.g., reaming)	I-3 Perform part deburring	I-4 Hand finish parts	I-5 Install hardware
J	Perform Administrative Functions	J-1 Fill out/review work order	J-2 Document time worked per job	J-3 Document manufacturing process	J-4 Document environmental compliance (e.g., safety, security, health)	

A-6 Determine job tooling	A-7 Determine sequence of processes	A-8 Identify processes for outsourcing			
C-6 Perform saw cutting operations					
D-6 Perform turning operation	D-7 Perform lathe facing operation	D-8 Perform lathe drilling operation	D-9 Perform grooving/parting operation	D-10 Perform lathe threading operation	D-11 Perform lathe threading operation
E-6 Perform edge milling operations	E-7 Perform face milling operations	E-8 Perform mill drilling operations	E-9 Perform mill boring operations	E-10 Perform mill tapping operations	
F-6 Perform surface grinding operations					
G-6 Create/load wire (EDM) program	G-7 Perform (WEDM) cutting operations				
H-6 Set (EDM) sinker depth	H-7 Perform (EDM) cutting/burning operations				
I-6 Perform minor assembly	I-7 Create tool paths for (CNC) deburring				
J-5 Document raw materials certification					

General Knowledge and Skills

Math (Algebra, Geometry, & Applied Trig.)
Computer literacy
Blue print reading
Oral and written communication skills
Multi-tasking
Interpersonal/teams
Creative problem skills
Hand-eye coordination
Basic use of hand tools
Above average dexterity
Perform mechanical measurement skills
Knowledge of cooling and cutting lubricants
Overall safety knowledge

Worker Behaviors

Punctual
Can deal with people
Honesty
Integrity
Positive attitude
Continuous learner
Presentable appearance
Life-long learner
Versatile
Conscientious
Neat and clean environment
Perfectionist

Tools, Equipment, Supplies and Materials

Lathe	Mill
Saws	Grinders
Drill press	Punches
Shears	Brakes
Rollers	Optical comparers
Surface plates	Electrical discharge machines
Squares	Scribes
Files	Files
Deburr tools	Tumblers
Degreasers	Hacksaw
Riveting	Drills
Taps	Reaners

Future Trends and Concerns

Continuous learning (e.g., technology)
Future staffing
Knowledge management
Increased computer skills