

DACUM Panel

1. Mr. Nani Ram Chaudhari, Butwal
2. Mr. R.P.Sharma, Butwal
3. Mr.Mankaji Kumal, Butwal
4. Mr.Dipak S. Chaudhary, Butwal
5. Mr.Ram Kathariya Tharu, Butwal
6. Mr.Govenda Pd Neupane, Butwal
7. Mr.Bimal Dahal, Butwal
8. Mr.Dil Bahadur Chhetri, Butwal
9. Mr.Lila Bahadur Bhandari, Butwal
10. Mr.Bishnu Hari Devkota, Butwal
11. Mr.Manoj Chaudhary, Butwal
12. Mr.Kamal Rana Magar, Butwal

DACUM Facilitator/Recorder

1. Mr Ramhari Devkota
Dupty Director,NSTB
2. Mr.Bhumaheshwor Ranjit
Sani.Instructor, BSET

Verified panel

1. Mr. Rajendra Aryal
Mech. Instructor, BSET
2. Mr. Iswar Lal Shrestha
Mech. Assist. Instructor BSET
3. Mr. Nabin Jung Sapkota
Welding Instructor
Gorkhes Construction Training center
4. Mr. Babu Raja Maharjan
Proprietor, Babyking Metal
Industry Pvt.Ltd, Kathmandu
5. Mr. Indra Nepali
Welding Technician, Modern Solar and
Sanitation Works, Samakhushi
6. Mr. Hari Bahadur Sen
Welding Technician, Modern Solar
and Sanitation Works, Samakhushi
7. Mr. Saroj Shrestha
Welding Technician,
Private Workshop
8. Mr. Kavi Khagi
Welding Technician, Private Workshop
9. Mr. Bhushan Raj Shrestha
Welding Technician, Private Workshop

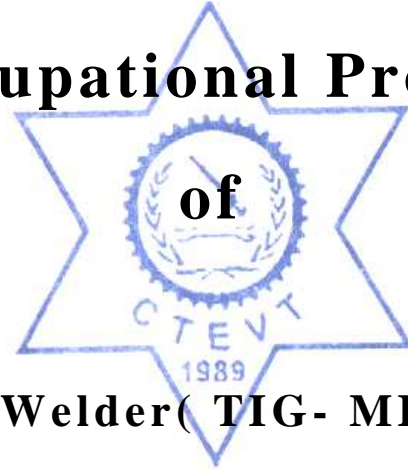
Facilitator/Recorder:

1. Mr Ramhari Devkota
Dupty Director, NSTB
2. Mr.Bhumaheshwor Ranjit
Sani.Instructor, BSET

Technical Sub Committee

- 1.Prof. Rabindra Nath Bhattarai
Coordinator, Mechanical Technical
Sub Committee
2. Mr. Chandra Bhakta Nakarmi, Member
Director, NSTB
3. Mr. Binaya Manandhar, Member
Sr. Instructor, IOE, Thapathali
4. Mr. Raju Bajracharya, Member
Sr. Mech. Instructor, BSET
5. Mr. Iswar Lal Shrestha, Member
Asst. Mech. Instructor, BSET
6. Mr. Ram Hari Devkota, Member
Deputy Director, NSTB
7. Er. Gunananda Jha, Member
Sr. Skill Testing Officer, NSTB
8. Mr. Ishwar Chandra Ghimire, Member
Skill Testing Officer, NSTB
9. Mr. Ganga Bahadur Gurung
Skill Testing Officer, NSTB

Occupational Profile



Junior Welder(TIG- MIG), L-1

(DACUM workshop on January, 2005)

(Customized DACUM on 01 September, 2009)

(Technical Sub Committee Meeting on 29 October, 2009)



Council For Technical Education and Vocational Training

NATIONAL SKILL TESTING BOARD

Madyapur Thimi 17, Sanothimi, Bhaktapur

Nepal

(NSTB approval date)

DUTIES and TASKS

A. Assist to manage work

A1. Assist to manage equipments			A2. Assist to manage welding tools			A3. Assist to manage welding supplies			A4. Assist to manage welding materials		
Task rating			Task rating			Task rating			Task rating		
Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency
2	1	1	3	1	2	3	1	1	1	1	1
A5. Coordinate helpers			A6. Assist to estimate cost			A7. Assist to manage Transportation					
Task rating			Task rating			Task rating					
Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency			
1	1	1	1	1	1	2	1	2			

B. Communicate with others

B1. Communicate with seniors			B2. Communicate with juniors			B3. Deal with costumer			B4. Communicate with other welding shops		
Task rating			Task rating			Task rating			Task rating		
Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency
3	1	2	3	1	1	3	2	3	3	1	2
B5. Request for tool, supplies materials and equipments											
Task rating											
Importance	Difficulty	Frequency									
2	1	2									

C. Perform Bench Work

C1. Perform measuring and marking			C2. Perform sawing			C3. Perform filing			C4. Perform grinding		
Task rating			Task rating			Task rating			Task rating		
Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency
3	1	3	3	3	3	2	2	1	3	2	2
C5. Perform drilling			C6. Perform punching								
Task rating			Task rating								
Importance	Difficulty	Frequency	Importance	Difficulty	Frequency						
2	1	1	1	1	1						

D. Perform Arc Welding

D1. Set the current (ampere)			D2. Select the electrode according to materials			D3. Set flat welding position			D4. Set welding joint		
Task rating			Task rating			Task rating			Task rating		
Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency
3	1	2	3	1	1	3	3	3	3	3	3
D5. Perform welding			D6. Remove slag and spatter			D7. Clean work piece					
Task rating			Task rating			Task rating					
Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency			
3	3	3	3	1	3	2	1	3			

E. Perform Gas Welding and Brazing

E1. Prepare gases			E2. Adjust gas pressure			E3. Select nozzle			E4. Adjust flame		
Task rating			Task rating			Task rating			Task rating		
Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency
3	1	1	3	1	1	3	1	1	3	2	3
E5. Select filler rod			E6. Set flat welding position			E7. Set welding joint			E8. Apply flux as required		
Task rating			Task rating			Task rating			Task rating		
Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency
3	1	1	3	3	2	3	3	3	1	1	1

F. Perform MIG Welding

F1. Set gas flow			F2. Set ampere			F3. Select wire			F4. Set wire speed		
Task rating			Task rating			Task rating			Task rating		
Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency
3	1	1	3	2	2	3	1	1	3	3	3
F5. Set flat welding position			F6. Set weld joint			F7. Perform welding			F8. Clean the work piece		
Task rating			Task rating			Task rating			Task rating		
Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency
3	3	3	3	3	3	3	1	1	3	1	1

DUTIES and TASKS

G. Perform TIG Welding

G1. Set gas			G2. Set ampere			G3. Select filler rod			G4. Select tungsten electrode		
Task rating			Task rating			Task rating			Task rating		
Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency
3	2	1	3	2	1	3	1	1	3	2	1
G5. Prepare electrode tip according to current			G6. Select welding position			G7. Select weld joint			G8. Perform weld		
Task rating			Task rating			Task rating			Task rating		
Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency
3	2	3	3	3	3	3	3	3	3	3	3
G9. Clean the work piece											
Task rating											
Importance	Difficulty	Frequency									
3	1	1									

RECOMMENDATION: Perform Professional Development (Not for test purposes)

1. Read News papers/magazine			2. Visit well equipped w/s			3. Consult library			4. Participate in Training/seminar		
Task rating			Task rating			Task rating			Task rating		
Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency
3	1	2	3	2	3	3	1	2	3	1	3
5. Exchange ideas with seniors & subordinates			6. Participates/organize exhibition								
Task rating			Task rating								
Importance	Difficulty	Frequency	Importance	Difficulty	Frequency						
3	1	3	3	1	2						

Rating options:

0= No 1= Low 2= Medium 3=High

DUTIES and TASKS
Additional Information for Job Title

<u>Worker Traits</u>	<u>Entry Requirement</u>	<u>Career path</u>
<ul style="list-style-type: none"> • Good Expression • Polite • Creative • Punctual • Helpful • Neat and Tidy • Sincere • Tactful • Service Oriented • Healthy • Hard working • Faithful • Confidential • Patience 	<ul style="list-style-type: none"> • Training: 390 hrs • Literate <li style="padding-left: 20px;">or • As per NSTB rules 	<ul style="list-style-type: none"> • Welder Technician (TIG-MIG), L-2

<u>Knowledge</u>	<u>Tools and equipments</u>
<ul style="list-style-type: none"> • Knowledge on Safety. • Knowledge on interpretation of drawing. • Knowledge on preparation of gas. • Knowledge on flux, electrode and filler materials. • Knowledge on Nozzle. • Knowledge on different welding tools and equipments. • Knowledge on welding position. • Knowledge on first aid. • Knowledge on welding joints. • Knowledge on units and measurements. • Knowledge on welding defects and their remedies. • Knowledge on marketing management. • Knowledge on welding metallurgy. • Knowledge of terminology GMAW, GTAW, SMAW and OAW • Knowledge on calculation. 	<ul style="list-style-type: none"> • Welding table • Welding m/c • Gas cylinders • Measuring tape • Steel rule • Files • Hammer • Center punch • Chisel • Tongs • Pliers • Wrench • Hack saw • Divider • Welding gauge • Wire brush • Chipping hammer • Protector • Scraper • Grinding m/c • Leather gloves • Leather apron • Goggles for OAW • Wire cutter • Safety helmet • Nozzle cleaner • Anti spattering spray or nozzle gel • Spark lighter • Earth clamp • Back square • Welding socket and plug • Drill m/c (hand and pedestal) • Drill bits • Gas regulators for TIG, MIG, and OAW • Hand shield • Safety goggles (Plain) • Gas flow meter • Hose pipes