

Resource Training Organization

REQUEST FOR PROPOSAL

WELDING INDUSTRY STANDARDS REVIEW

PHASE 3

CLOSING DATE: October 31 / 07

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SECTION - A - INSTRUCTIONS FOR VENDORS

- The purpose of this proposal is to provide information that will help the Resource Training Organization (RTO) in selecting a Vendor to provide technical services to develop Program Outlines and Test Banks for the Welding Level "B" Apprenticeship Program and the Welding Level "A" Apprenticeship Program from October 29th, 2007 to March 31st, 2008. The response format allows for a primary evaluation of proposals in an efficient and effective manner. It is therefore important that each vendor provide a clear and concise presentation.
- 2. The enclosed proposal format and questionnaire is designed to support a **dmaclaren@rtobc.com** systematic review of the submissions. Proposals that do not conform to the specified format may be excluded from the competition.
- 3. Vendors may attach further written elaboration of their proposal, providing a cross-reference to a question number on the proposal questionnaire.
- 4. There will be no pre-proposal conference for this RFP. Direct inquiries for clarification of information to **Doug MacLaren**, **CEO RTO** by e-mail at. During the proposal period any addendum and any responses to questions from proponents will be issued to all persons/organizations who have indicated their intent to submit a proposal.
- 5. The RTO has attached the existing Occupational Analysis Chart for Welders Level "C", "B" and "A" that may be subject to change with this initiative.
- 6. The Vendor is requested to notify Doug MacLaren on or before October 24th, 2007 to indicate their intent to submit a proposal by e-mail at dmaclaren@rtobc.com.
- 7. There is no set price for this project and the Subject Matter Experts (SME's) will be designated by RTO and the Project Review Committee. No stipends will be paid by the ITA or the RTO to the SME's.
- 8. The **Resource Training Organization** (RTO) will give consideration to **all proposals received via e-mail by 4:00 p.m. (local time)**, *October 31th*.2007.
- 9. It shall be the sole responsibility of the Vendor to ensure that the proposal is received at the aforementioned e-mail address prior to the specified time of 4:00 p.m. (local time), October 31th.2007.
- 10. Freedom of Information and Protection of Privacy (FOIP) Act: Welding Program Standards Review Project records may be subject to access under this Act. If documents submitted contain protected, proprietary or confidential information, please identify the specific issue and provide supporting reasons why the **Resource Training Organization** (RTO) should not release this information if requested by a FOIP inquiry.

- 11. Upon receipt of proposals, the **Resource Training Organization** (RTO) will examine each submission for compliance with bidding requirements, prior to carrying out the primary evaluation.
- 12. The **RTO** will use the following evaluation criteria to short-list the potential vendor.
 - i. Experience......30%
 - ii. Quality/Suitability......15%
 - iii. Service......10%
 - iv. Price.....10% v. Delivery......15%
 - vi. Total Offering......20%
- 13. The following evaluation factors will be used in determining the best-qualified offers:
 - a. The plan for performing the required services
 - b. The ability of the Vendor to perform the requested services and fulfill any reporting requirements as reflected by:
 - General experience
 - Technical training and education
 - Specific experience in providing the requested services
 - Qualifications and abilities of personnel proposed to be assigned to perform the services
 - The proposed equipment and facilities are currently available to perform the requested services
 - Favorable recommendations from referenced clients where similar or like services are being or have been performed
 - Compliance with the RFP specifications
 - Overall quality and completeness of response
 - Pricing
- 14. The **RTO** will determine the most suitable proposal(s) upon completion of the primary review. The RTO may choose to enter discussions with several vendors to further evaluate their proposals.
- 15. Not necessarily the lowest total price, but a combination of all weighted factors showing the greatest benefit to the **RTO** will be considered when assessing the proposals.
- 16. From the proposals received, the **RTO** will negotiate the final contractual arrangement(s).
- 17. If the Vendor intends to use subcontractors to perform any portion of the work described in this RFP, the Vendor must clearly state so. The Vendor's response must include a description of which portion(s) of the work will be subcontracted out, the names and addresses of potential subcontractors and the expected amount of money each will receive under the contract.

SECTION - B - BACKGROUND

Welding is designated as an Inter-Provincial "Red Seal" trade by the Canadian Council of Directors of Apprenticeship (CCDA) and is detailed in the National Occupational Analysis (NOA) in order to maintain current scope of practice, standards, and competencies. The last NOA on the welding trade was conducted in 2004.

Given the importance of the welding trade to British Columbia, the ITA has agreed to fund a comprehensive review led by industry to bring the welding programs current with industry priorities and requirements and to reflect economic and technology changes in the province.

The Provincial Welders Training Program is a competency based, directed learning program designed to provide learners with the skills required to function as safe entry-level tradespersons. The training is divided into Three Levels: "C", "B", and "A".

Level "C" welders are restricted to structural and non-pressure applications as per Authorities having Jurisdiction. Level "B" welders are eligible to obtain pressure-welding certification as per Authorities having Jurisdiction. Certified "A" level welders are able to work throughout the welding industry as per Authorities having Jurisdiction.

Welding Industry Projects Completed to Date:

Phase 1:

In June 2006, the Industry Training Authority of BC (ITA) in association with the Mechanical Contractors Association of BC (MCABC) conducted an industry review of welding training and certification in this province. Here are the steps that were taken by this group to achieve the goals for Phase 1:

- ✓ Prepared a Letter of Introduction for Industry Stakeholders.
- ✓ Contacted Industry Stakeholders for Expression of Interest.
- ✓ Prepared a Directory of Stakeholders (contact list).
- ✓ Surveyed Stakeholders to determine Industry Satisfaction.
- ✓ Conducted a Needs Assessment Meeting with Stakeholders.
- ✓ Facilitated the establishment of an Industry Steering Committee.

Phase 2:

In response to an RFP, a Vendor was retained by the Industry Training Authority (ITA) in co-operation with the Mechanical Contractors Association of BC (MCABC) and other Industry Stakeholders to provide technical services to develop a Program Outline for a Welding Level "C" Apprenticeship Program from December 4th, 2006 to March 31st, 2007 and to prepare a report with other recommendations regarding the development of training for all Welder Qualifications

WELDER LEVEL "C" PROGRAM OUTLINE - TABLE OF CONTENTS

Foreword Acknowledgements Job Description Welder Level "C"

Section 1 – Occupational Analysis

Occupational Analysis Chart Welders "C", "B", "A" Occupational Analysis Chart Welders "C"

Section 2 – Program Outline

Schedule of Time Allotment Program Outline Recommended Reference Textbooks Training Provider Standards for Instructors Training Provider Standards for Facilities Tools and Equipment (as Recommended in the NOA)

Guidelines for Practical Examinations

Appendix One – Final Practical Examination #1 Appendix Two – Final Practical Examination #2 Appendix Three – Final Practical Examination #3 Appendix Four – Final Weld Test Project #1 Appendix Five – Final Weld Test Project #2 Appendix Six – Final Weld Test Project #3 Appendix Seven – Achievement Criteria for Weld Test Projects

WELDER LEVEL 'C" TEST BANK

This project initiated by the Industry Training Authority (ITA) in co-operation with Industry Stakeholders called for the development of a Table of Specifications and 300 test items for the assessment of competency for the Welder Level "C" Certificate of Qualification.

SECTION - C - PROJECT REQUIREMENTS

Under overall direction of the **Resource Training Organization** (RTO) and in close consultation with the Project Review Committee (PRC) and Subject Matter Experts Committee (SMEs), the contractor will conduct an extensive standards review and update the training standards for the Welder training programs for Levels "B" and "A" whereupon completion the learner will have achieved trades qualification as a Level "B" or Level "A" Welder. The contractor will also be required to develop the two test banks as outlined under Section - C - Deliverables in this RFP.

In addition, the review will look at broader industry satisfaction with the welding programs and the requirements to align our welding certifications with other jurisdictions. The review will engage Industry Stakeholders, including employers, associations, trade unions, public and private training providers, and trade practitioners, to include:

- National Occupational Analysis The existing 2004 NOA will be reviewed to ensure that it reflects provincial requirements in the finalization of the new Level "B" and "A" standards where applicable.
- Provincial Program Review The current Welder Level "B" and "A" programs being delivered by Training Providers will be reviewed against the 2004 NOA and the new proposed Program Outline with both the NOA and provincial specifications. This will include training provider standards such as learning resources, tools and facilities and instructor qualifications.
- **Program Profile Chart** An updated program profile chart will be developed in accordance with ITA specifications for Occupational Analysis Charts, reflecting the updated program standards for the 3 classifications for Welders in British Columbia.
- Supporting Tools and Educational Resources Support resources such as training guides, log books, and other educational resources will be reviewed and reflected in the new proposed Program Outline(s) as appropriate.
- Learning Resources The B.C. Welding Modules published by the Queens Printers to identify gaps and/or deficiencies. The other curriculum used by the Training Providers will be reviewed along with other learning materials, such as the welding programs in other provinces, to identify the

best learning resources to address changes in technology and industry requirements and support trainees in achieving national and provincial standards.

- Industry Satisfaction The Welding Industry Standards Review Steering Committee will be consulted to determine satisfaction with the existing Welder Program delivery and, if broader program changes than those outlined during Phase One are required, to improve Welder Apprenticeship to better serve B.C. industry and its apprentices.
- TILMA is the Trade, Investment, and Labour Mobility Agreement between <u>British Columbia</u> and <u>Alberta</u>. The agreement was signed on <u>28</u> <u>April</u>, <u>2006</u> and provides a virtual economic union between the two provinces. Other provinces such as Ontario are negotiating entry into this agreement as well. As a result of this agreement, the Alberta welding program must be considered to address mobility in qualifications.
- Cross Trade Credits Other trades people that frequently require welding to perform their tasks may be interested in developing their welding skills to become more marketable as a trades-person. Common skills between related trades should be identified for the purpose of receiving credits to become certified in welding. These trades will include Boilermakers, Ironworkers, Machinists, Metal Fabricators, Millwrights, Pipefitters, Sheet Metal Workers, Shipfitters, Steamfitters, Tool and Die Makers and any others identified by the RTO and the PRC.
- Recognition of Prior Learning, Prior Learning Assessment, or Prior Learning Assessment and Recognition - Describes the set of standards and procedures put in place by educational institutions to assign advanced standing to prospective students. These factors must be considered in the design and development of the training standards for all three Levels of Welder Certification.
- Implementation Plan Prepare a "go-forward" plan for RTO regarding implementing approved program changes.

SECTION - D - DELIVERABLES

The Vendor will be expected to deliver two electronic copies (CD's) and two hard copies of these documents that will meet or exceed current Industry Training Authority standards.

1. DELIVERABLE ONE

PROGRAM OUTLINE WELDER LEVEL "B" (FORMAT)

Foreword Acknowledgements Job Description Welder Level "B"

Section 1 – Occupational Analysis

Occupational Analysis Chart Welders "C", "B", "A" (updated version) Occupational Analysis Chart Welders "B"

Section 2 – Program Outline

Schedule of Time Allotment Program Outline Recommended Reference Textbooks Training Provider Standards for Instructors Training Provider Standards for Facilities Tools and Equipment (as Recommended in the NOA)

Guidelines for Practical Examinations

To be determined by Industry Subject Matter Experts and approved by Resource Training Organization in consultation with Project Review Committee and Stakeholders. (See examples for Welder Level "C" on page 6).

2. DELIVERABLE TWO

Upon completion of the new Welder Level "B", the vendor will develop a Table of Specifications and an examination test bank with a minimum of 300 items. All test items must be weighted in accordance with the Table of Specifications and in compliance with ITA guidelines (e.g. to Red Seal standards).

3. DELIVERABLE THREE

PROGRAM OUTLINE WELDER LEVEL "A" (FORMAT)

Foreword Acknowledgements Job Description Welder Level "A"

Section 1 – Occupational Analysis

Occupational Analysis Chart Welders "C", "B", "A" (updated version) Occupational Analysis Chart Welders "A"

Section 2 – Program Outline

Schedule of Time Allotment Program Outline Recommended Reference Textbooks Training Provider Standards for Instructors Training Provider Standards for Facilities Tools and Equipment (as Recommended in the NOA)

Guidelines for Practical Examinations

To be determined by Industry Subject Matter Experts and approved by the Resource Training Organization in consultation with Project Review Committee and Stakeholders. (See examples for Welder Level "C" on page 6).

4. DELIVERABLE FOUR

Upon completion of the new Welder Level "A", the vendor will develop a Table of Specifications and an examination test bank with a minimum of 300 items. All test items must be weighted in accordance with the Table of Specifications and in compliance with ITA guidelines (e.g. to Red Seal standards).

The Final Report

- Considerations and recommendations for delivery of the new Welding Level "B" and Welding Level "A" Apprenticeship Programs.
- Supporting Tools and Educational Resources that were identified during the development process.
- Learning Resources review and gap analysis for future program development (e.g. changes to Queen's Printers curriculum currently being upgraded).
- Industry Satisfaction (e.g. any changes made to the new training program as a result of industry recommendations).
- How do the new B.C. Program Outlines for Welder Level "B" and Welder Level "A" consider the TILMA agreement when compared to the Alberta welding program to address mobility in qualifications?
- How will the new B.C. Program Outlines for Levels "B" and "A" welding affect Cross Trade Credits for other trades and which of those trades identified in this RFP include a portion (or all) of Level "B" and Level "A" welding as part of their apprenticeship training programs?
- How has Recognition of Prior Learning, Prior Learning Assessment, or Prior Learning Assessment and Recognition been taken into consideration during this phase of the program development process?
- Prepared implementation plan.

SECTION - E - PROPOSAL QUESTIONNAIRE

1.	Organization Legal Name:
	Street Address:
	City, Province, Postal Code:
	Telephone Number:Fax Number:
	Proposal Prepared by:
	Title:E-mail:
2.	How long has your organization been in business?
3.	What are your regular hours of operation?
4.	Please provide a brief history and experience your organization has pertaining to the requirements of this proposal.
5.	Key personnel that would be involved in the Welding Level "A" and "B" Program Standards Review Project.
	What are the average years of service for your team?
6.	Other projects of this nature that you have implemented.

7. Provide three references. They should be clients for which your organization provided similar services.

a) Name of organization:	
Contact name:	
Phone number:	
Length of time and type of services provided:	
b) Name of organization:	
Contact name:	
Phone number:	Fax number:
Length of time and type of services provided:	
c) Name of organization:	
Contact name:	
Phone number:	Fax number:
Length of time and type of services provided:	

8. Describe the features of your submission that meet or exceed the requirements of this proposal.

 Provide a detailed schedule outlining the financial considerations you would propose to undertake the Welding Program Standards Review Project. All assumptions should be clearly stated.

 Estimate the start-up time required and describe the implementation process you would put in place if selected to undertake the Welding Program Standards Review Project.

11. Explain your invoicing procedures:

12. What other information would you like RTO to consider when evaluating this proposal?

GUARANTEE OF TENDER PRICE

I guarantee my quoted prices for a period of ______ following the closing date for proposal submissions (minimum of 60 days).

ACCEPTANCE OF THE PROPOSAL

I understand that the RTO and the ITA is in no way obliged to accept the lowest, or any Proposal. I also understand that the RTO and the ITA is in no way financially liable for any costs incurred by the Vendor in the application process for this project.

I have read the above conditions and terms and am in agreement with the complete context and hereby accept all conditions as outlined. Exceptions are to be listed and signed.

Organization Name

Date

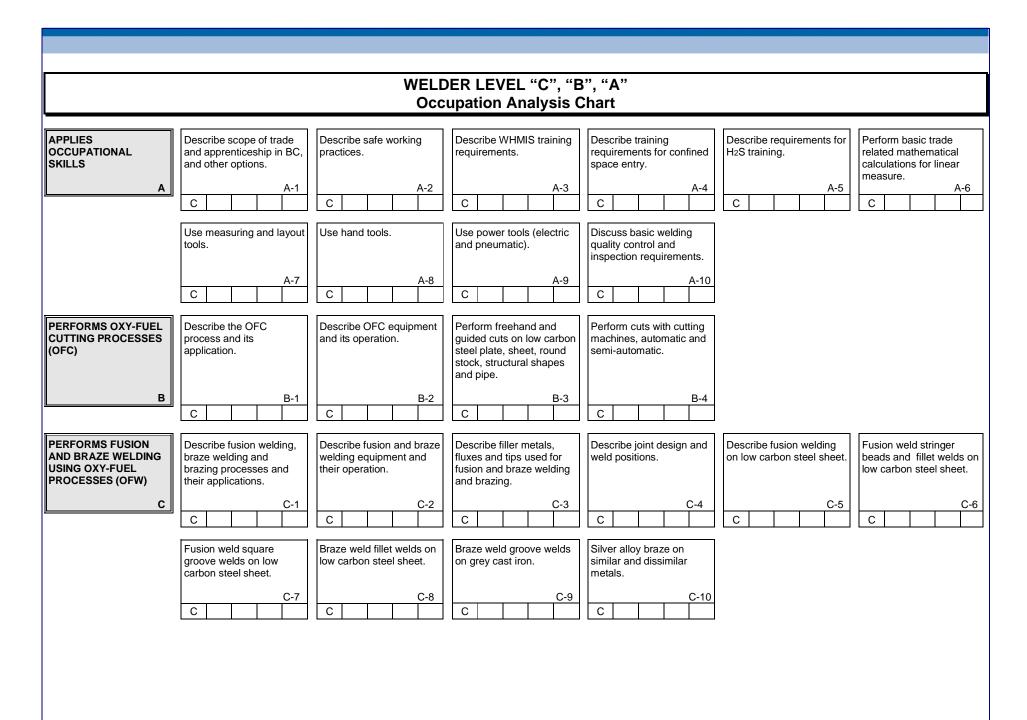
Authorized Signature and Position

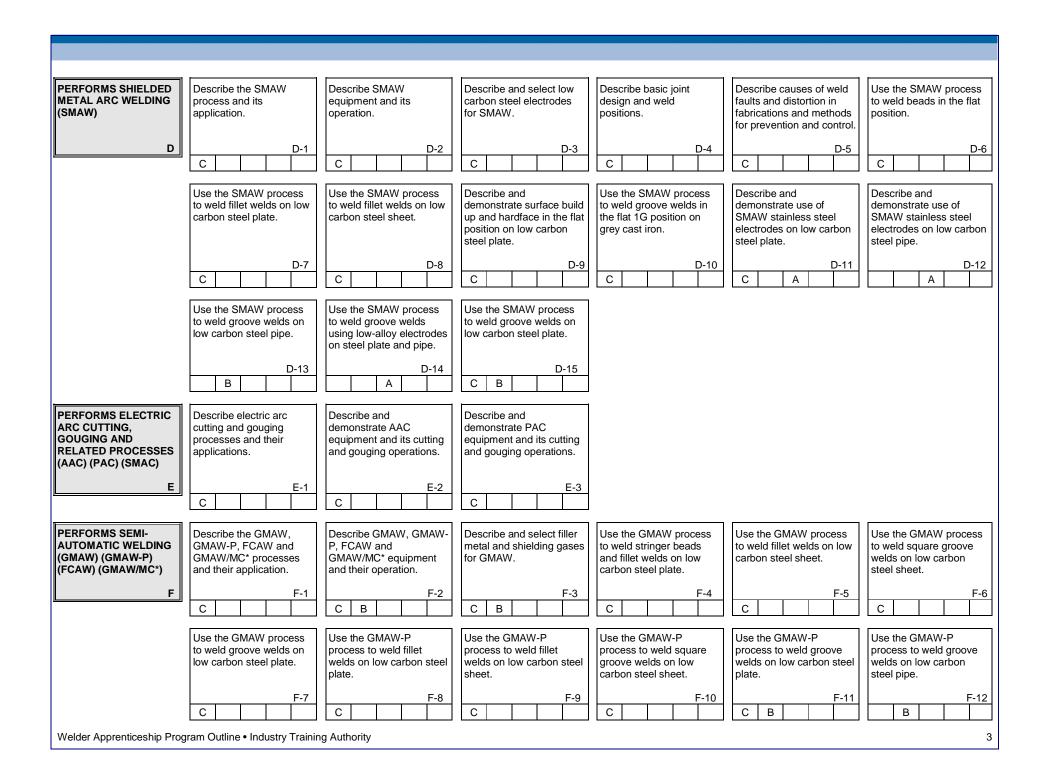
Type or Print Name

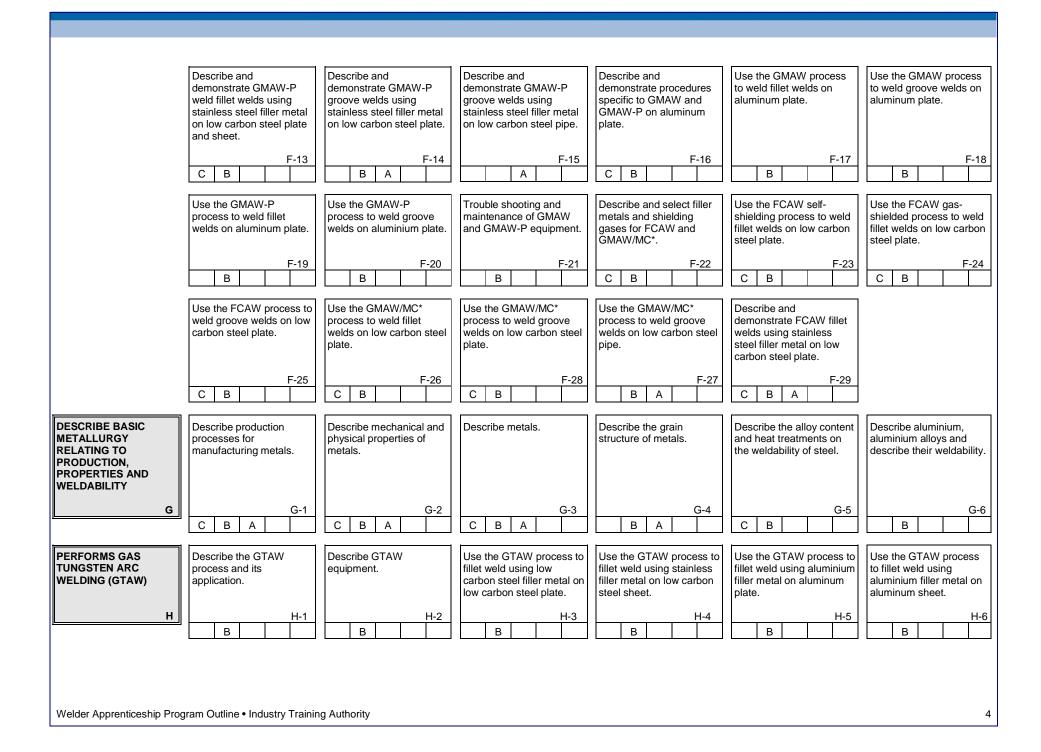
SECTION - F- APPENDIX 1

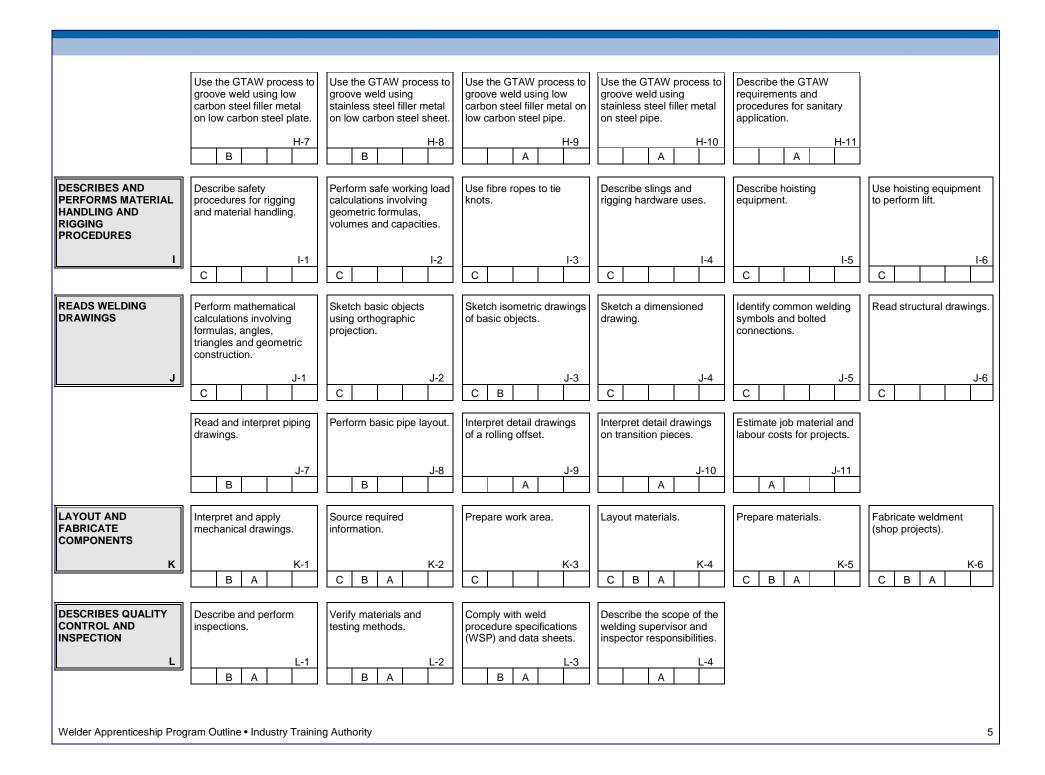
OCCUPATION ANALYSIS CHART

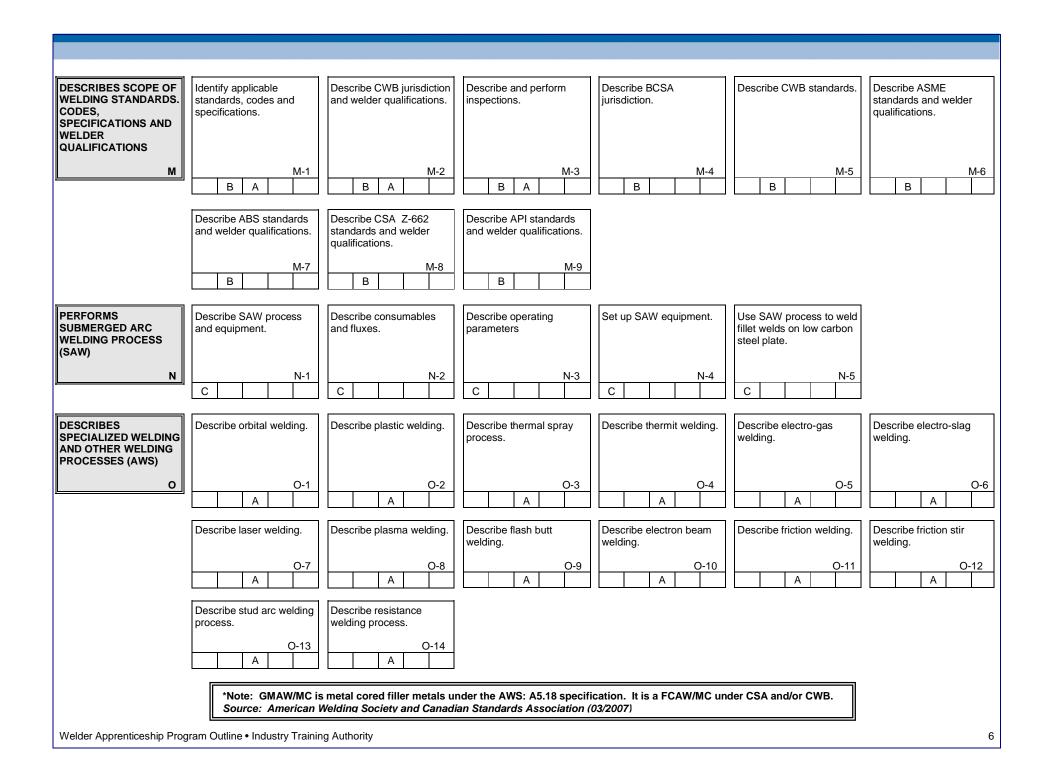
In alignment with the Welder 2004 National Occupational Analysis



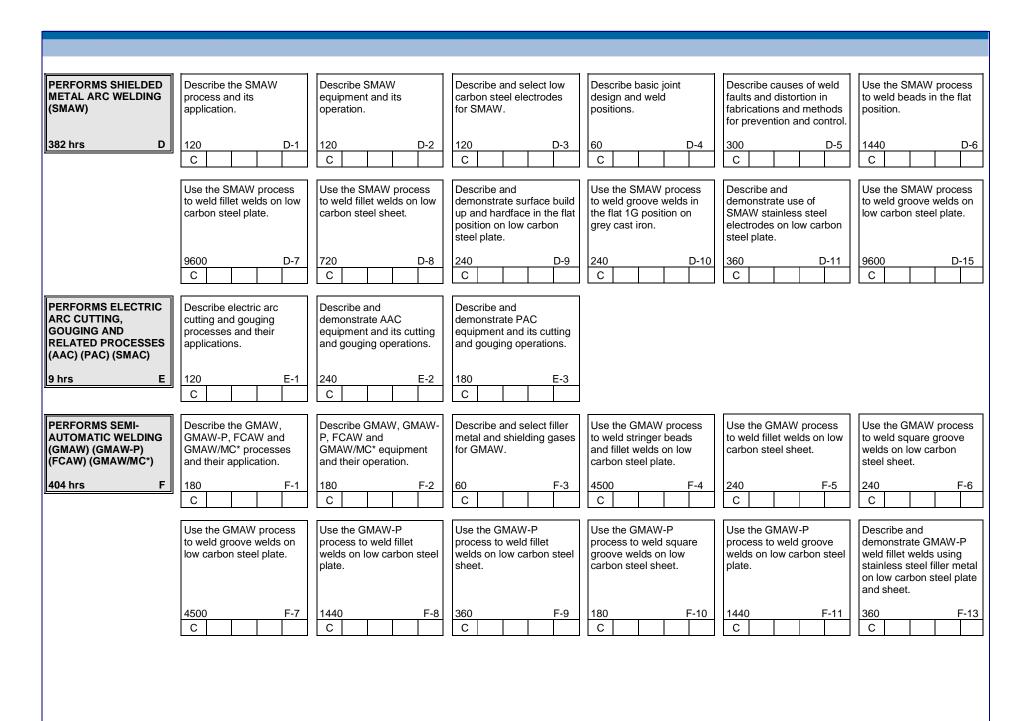




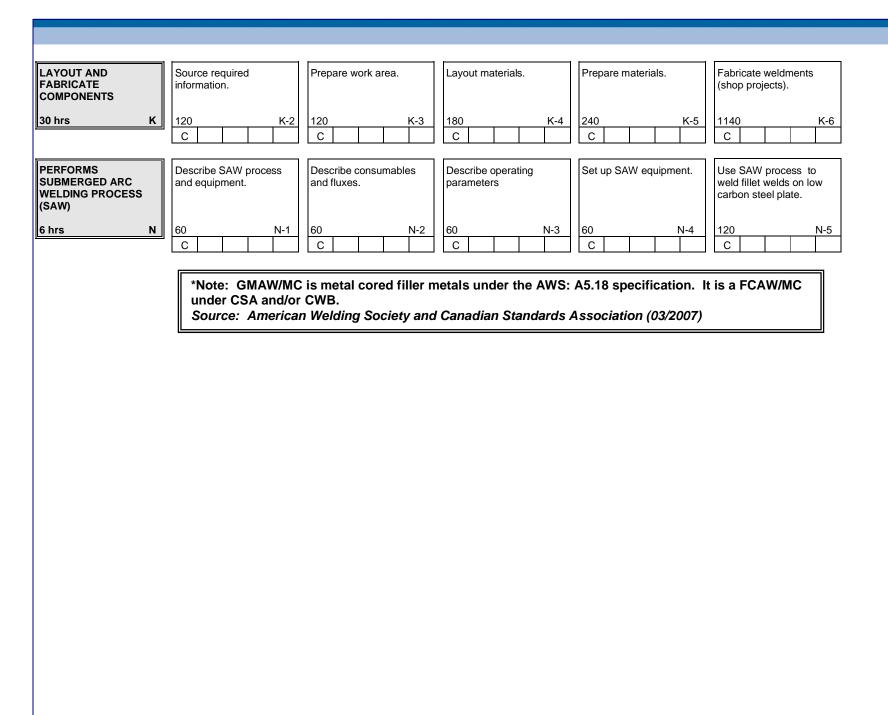




WELDER LEVEL "C" Occupation Analysis Chart 980 ESTIMATED TOTAL HOURS							
APPLIES OCCUPATIONAL SKILLS	Describe scope of trade and apprenticeship in BC, and other options.	Describe safe working practices.	Describe WHMIS training requirements.	Describe training requirements for confined space entry.	Describe requirements for H2S training.	Perform basic trade related mathematical calculations for linear measure.	
40 hrs A	60 A-1 C	360 A-2 C	30 A-3 C	30 A-4 C	30 A-5 C	720 A-6 C	
	Use measuring and layout tools.	Use hand tools.	Use power tools (electric and pneumatic).	Discuss basic welding quality control and inspection requirements.			
	210 A-7 C	420 A-8 C	420 A-9 C	60 A-10 C			
PERFORMS OXY-FUEL CUTTING PROCESSES (OFC)	Describe the OFC process and its application.	Describe OFC equipment and its operation.	Perform freehand and guided cuts on low carbon steel plate, sheet, round stock, structural shapes and pipe.	Perform cuts with cutting machines, automatic and semi-automatic.			
30 hrs B	240 B-1 C	120 B-2 C	1200 B-3 C	240 B-4 C			
PERFORMS FUSION AND BRAZE WELDING USING OXY-FUEL PROCESSES (OFW)	Describe fusion welding, braze welding and brazing processes and their applications.	Describe fusion and braze welding equipment and their operation.	Describe filler metals, fluxes and tips used for fusion and braze welding and brazing.	Describe joint design and weld positions.	Describe fusion welding on low carbon steel sheet.	Fusion weld stringer beads and fillet welds on low carbon steel sheet.	
27 hrs C	60 C-1 C	60 C-2 C	90 C-3 C	60 C-4 C	60 C-5 C	750 C-6 C	
	Fusion weld square groove welds on low carbon steel sheet.	Braze weld fillet welds on low carbon steel sheet.	Braze weld groove welds on grey cast iron.	Silver alloy braze on similar and dissimilar metals.			
	240 C-7 C	120 C-8 C	120 C-9 C	60 C-10 C			
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	Describe and demonstrate procedures specific to GMAW and GMAW-P on aluminum plate.	Describe and select filler metals and shielding gases for FCAW and GMAW/MC*.	Use the FCAW self- shielding process to weld fillet welds on low carbon steel plate.	Use the FCAW gas- shielded process to weld fillet welds on low carbon steel plate.	Use the FCAW process to welds groove welds on low carbon steel plate.	Use the GMAW/MC* process to weld fillet welds on low carbon steel plate.
	720 F-16 C	120 F-22 C	1440 F-23 C	1800 F-24 C	5400 F-25 C	360 F-26 C
	Use the GMAW/MC* process to weld groove welds on low carbon steel plate. 360 F-27 C	Describe and demonstrate FCAW fillet welds using stainless steel metal wire on low carbon steel plate. 360 F-29 C				
DESCRIBE BASIC METALLURGY RELATING TO PRODUCTION, PROPERTIES AND WELDABILITY	Describe production processes for manufacturing metals.	Describe mechanical and physical properties of metals.	Describe metals.	Describe the alloy content and heat treatments on the weldability of steel.		
8 hrs G	90 G-1 C	120 G-2 C	180 G-3 C	90 G-5 C		
DESCRIBES AND PERFORMS MATERIAL HANDLING AND RIGGING PROCEDURES	Describe safety procedures for rigging and material handling.	Perform safe working load calculations involving geometric formulas, volumes and capacities.	Use fibre ropes to tie knots.	Describe slings and rigging hardware uses.	Describe hoisting equipment.	Use hoisting equipment to perform lift.
16 hrs I	120 I-1 C I	300 I-2 C I	120 I-3 C	120 I-4 C I	120 I-5 C	180 I-6
READS WELDING DRAWINGS	Perform mathematical calculations involving formulas, angles, triangles and geometric construction.	Sketch basic objects using orthographic projection.	Sketch isometric drawings of basic objects.	Sketch a dimensioned drawing.	Identify common welding symbols and bolted connections.	Read structural drawings.
28 hrs J	360 J-1 C	240 J-2 C	180 J-3	180 J-4	360 J-5 C	360 J-6
			<u> </u>			



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