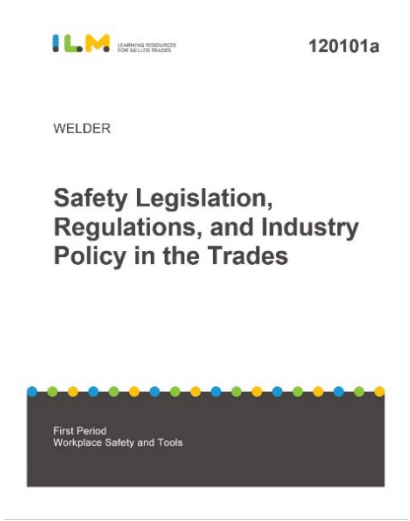
Welder Publishing Release Notes 2022-23

In 2022, ILM and the Alberta Welder programs implemented a pilot project titled ModuleWorks, where a selection of **six priority modules** were chosen for a full revision update. The objective of this development project was to minimize the duplication of content found in the first period modules. Based on feedback received and in collaboration with the instructors, our team successfully **combined and restructured module 120101b and 120101k into a single module, now known as 120101b-kA/B**. Similarly, modules 120103a and 120103b were redeveloped using a comparable approach, with a reordering of objectives into topics to enhance delivery and flow. These modules are now combined into two parts: **120103a-bA/B**. For detailed notes outlining the discontinuation of current modules and the new modules/booklets to replace them, please refer to the two tables below.

Original Module Number and Title to be discontinued:	New Module Numbers and Titles to replace them:
120103a - Wire Feed Welding Equipment Power Sources	120103a-bA - Wire Feed Welding Equipment and Consumables: Part A
120103b - Wire Feed Welding Filler Metals and Feeders	120103a-bB - Wire Feed Welding Equipment and Consumables: Part B
120101b - Climbing, Lifting, Rigging and Hoisting	120101b-kA - Climbing, Lifting, Load Moving and Materials Handling: Part A
120101k - Materials Handling	120101b-kB - Climbing, Lifting, Load Moving and Materials Handling: Part B

Content notes for all six (6) redeveloped modules:

Product Cover	Topics/Objectives	Content Summary
	**Objectives** 1. Demonstrate the ability to apply the *Occupational Health and Safety* (*OHS*) *Act*, *Regulation*, and *Code*. 2. Explain the role of the employer and employee regarding Occupational Health and Safety (OHS) regulations, *Bill C-45*, workplace hazardous materials information systems (WHMIS), fire regulations, Workers Compensation Board (WCB) regulations, and related advisory bodies and agencies. 3. Explain industry practices for hazard assessment and control procedures. 4. Describe the responsibilities of workers and employers to apply emergency procedures. 5. Describe positive tradesperson attitudes with respect to housekeeping and personal protective equipment (PPE) and emergency procedures. 6. Describe the roles and responsibilities of employers and employees with respect to the selection and use of personal protective equipment (PPE). 7. Select, use, and maintain appropriate PPE for work site applications.	This module discusses the responsibilities of employers and employees in the workplace regarding Occupational Health and Safety (OHS) regulations, as well as related legislation and policies. The content emphasizes the need for both employers and employees to be aware of hazards in the workplace, to effectively reduce or eliminate those hazards, and to be familiar with legislation and standards in place to ensure a safe workplace. The content highlights the potential consequences of failing to meet these responsibilities, including fines, prison sentences, and criminal charges under the Criminal Code of Canada. The importance of personal protective equipment (PPE), hazard assessments, and emergency preparedness is also emphasized throughout.

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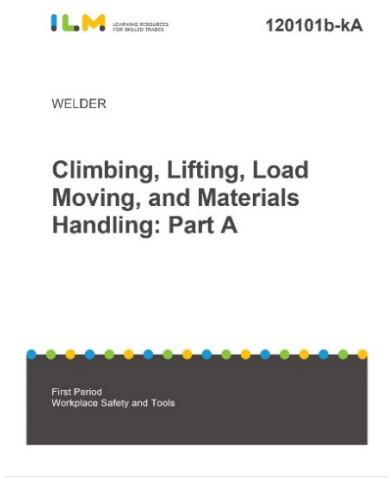
<td> 
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<table>
<tr><th>Booklet Part A Topics</th><th>AIT Objectives</th></tr>
<tr><td>Fall Protection and Equipment for Working at Heights</td><td>1, 2</td></tr>
<tr><td>Manual Lifting and Body Mechanics</td><td>1, 2</td></tr>
<tr><td>Handling and Storing Materials</td><td>6</td></tr>
<tr><td>Weight and Centre of Gravity</td><td>7</td></tr>
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<td>This booklet provides safety guidelines for working at heights including the proper use of personal protective equipment, ladder safety, and fall protection systems. It outlines the importance of using the correct equipment for specific tasks and understanding the characteristics of different materials. The content emphasizes the need for proper training and certification, regular equipment inspections, and the development of a fall protection plan. It also provides information on the proper use of rigging and hoisting equipment and the various types of scaffolding systems.</td>
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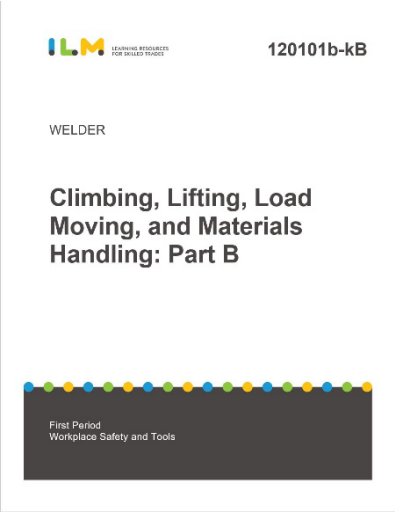
<td> 
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<tr><th>Booklet Part B Topics</th><th>AIT Objectives</th></tr>
<tr><td>Rigging Hardware and Safety</td><td>3</td></tr>
<tr><td>Plate Clamps and Cable Clips</td><td>9</td></tr>
<tr><td>Wire Rope and Synthetic Sling Load Limits</td><td>8</td></tr>
<tr><td>Rigging Equipment Selection</td><td>4</td></tr>
<tr><td>Hoisting and Load Moving</td><td>5</td></tr>
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<td>This booklet covers important information on climbing, lifting, rigging, and hoisting for welders, including the use of personal protective equipment (PPE), determining weight and center of gravity of loads, selecting rigging equipment and tying proper knots and hitches. Safety factors must be applied to minimize danger to personnel and equipment. There are different types of knots, bends, and hitches, which have different applications and limitations, and rigging hardware is used to attach loads to hoisting or lifting devices. Each lifting project requires selecting the correct equipment, understanding safety precautions, and knowing the characteristics of different materials used in slings. The content provides detailed information on rigging equipment selection, wire rope and synthetic sling load limits, hoisting, and load moving procedures.</td>
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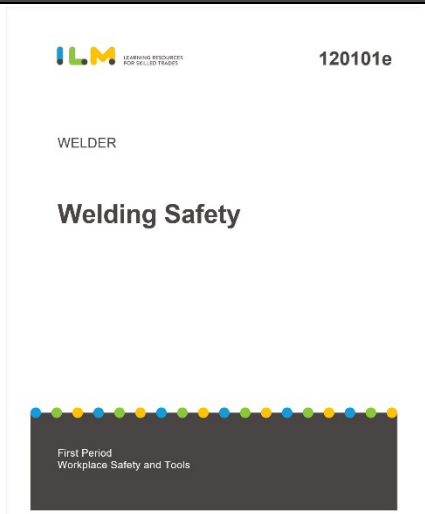
<td> 
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<td>Objectives
1. Identify hazards for welding and cutting operations.
2. Identify the use of personal protective equipment (PPE) for welding and cutting operations.
3. Explain the hazards involved with welding fumes and gases.
4. Identify welding fume ventilation methods.
5. Explain the effects of electricity and precautions used to prevent injury.
6. Describe the procedure for welding or cutting in confined spaces or potentially dangerous enclosures.
7. Interpret sections of the Occupational Health and Safety Act, General Safety Regulations.</td>
<td>This module provides information on treating burns, hypothermia, and frostbite, all of which can be caused by exposure to extreme temperatures during welding. It also discusses the different types of rays (visible light, infrared, and ultraviolet) that can cause burns or damage to the body and emphasizes the importance of following safety regulations to prevent injury. The content stresses the need to seek medical attention for severe burns and frostbite, and to raise the body temperature slowly when treating hypothermia.</td>
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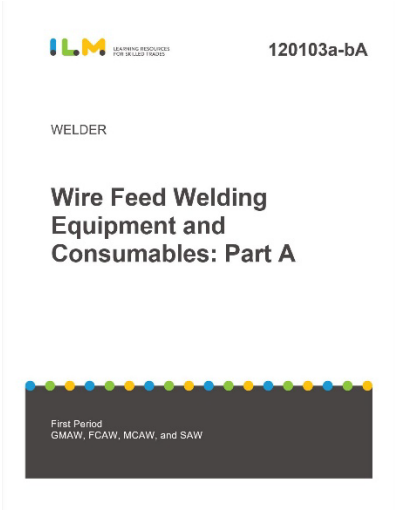
<td> 
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<tr><th>Booklet Part A Topics</th><th>AIT Objectives</th></tr>
<tr><td>Wire Feed Welding Principles and Equipment</td><td>1, 2</td></tr>
<tr><td>Power Sources</td><td>3</td></tr>
<tr><td>Drive Systems and Assemblies</td><td>7</td></tr>
<tr><td>Filler Metal Identification and Packaging</td><td>5</td></tr>
<tr><td>Metal Transfer and Operating Variables</td><td>6, 8</td></tr>
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<td>This booklet covers the principles and equipment involved in wire feed welding, including the types of power sources and necessary equipment such as the wire feeder, welding gun, and consumables like spooled filler wire and shielding gas. The advantages of wire feed welding are discussed, such as faster welding speeds and greater precision, and safety considerations are highlighted, including the potential dangers of toxic gases produced during welding. The document also includes activities and objectives for learners to understand the operation of wire feed welding equipment and processes.</td>
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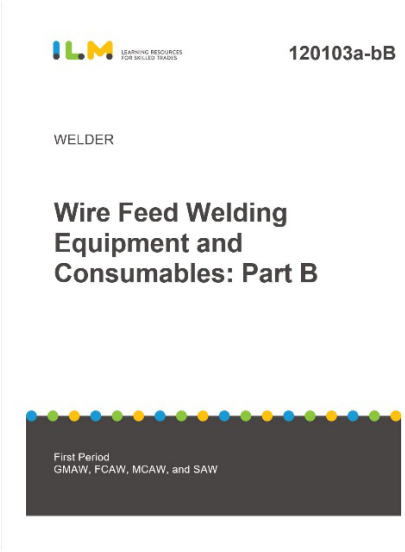	**Booklet Part B Topics** / **AIT Objectives** Gas Metal Arc Welding (GMAW) — 1, 4, 5 Flux-Cored Arc Welding (FCAW) — 1, 4, 5 Metal-Cored Arc Welding (MCAW) — 1, 4, 5	This booklet covers wire feed welding equipment and consumables used in gas metal arc welding (GMAW), flux-cored arc welding (FCAW), and metal-cored arc welding (MCAW). The booklet also covers the principles of operation, advantages, and disadvantages of wire feed welding processes and provides information on filler wire classifications and manufacturing.

QA Maintenance and Other ILM Product Updates

In addition to the changes in ModuleWorks, 13 Maintenance comments were resolved impacting 5 additional modules in 2022.

For more information on the ILM Comments and QA Maintenance process, please visit our website:

- ILM Maintenance : https://www.ilmlearning.ca/ilm-maintenance
- Comments: https://www.ilmlearning.ca/comments

***All-Trades Product Update:** Due to changes resulting from the new Skilled Trades and Apprenticeship Education Act, the content within **Alberta's Industry Network** and **Apprenticeship Training Program** modules are no longer valid. When the provincial apprenticeship system changes are final, these products will be updated accordingly. Until then, they are not available to order.

The table below lists all modules impacted by QA maintenance edits and the above all-trades modules discontinuations.

	1st Period				
	Booklet Number	**Module Title**	**Change Notes**	**Category**	**Version**
1	120103e	GMAW on Mild Steel		QA Maintenance	25
2	120101d	Alberta's Industry Network	Content no longer accurate.	Discontinued	24
	3rd Period				
3	120301c	SMAW and Oxyfuel Cutting on Mild Steel		QA Maintenance	25
4	120302a	SMAW on Mild Steel Pipe		QA Maintenance	25
5	120302b	GTAW on Mild Steel Plate and Pipe		QA Maintenance	25
6	120304c	Metallurgy for Practical Applications		QA Maintenance	25
	AIT (65) All Trades Discontinued Modules				
1	*650101d	Apprenticeship Training Program	Content no longer accurate.	Discontinued	24
2	*650401a	Alberta's Industry Network	Content no longer accurate.	Discontinued	24