## **Industrial Mechanic (Millwright)**

### **Interprovincial Journeyperson Examination Information**

Apprentice Requirements:	4 years and 7200 hours
Tradesperson Requirements:	6 years and 10800 hours
Practical Examination:	No

The interprovincial (IP) journeyperson examination for this trade is developed by a national committee of worker and employer representatives. The content for IP Examinations is drawn from the Red Seal Occupational Standard (RSOS) for that trade and is based on industry's standards and expectations. You can download and print a free copy of the RSOS from the Red Seal website by visiting <a href="https://www.red-seal.ca">www.red-seal.ca</a>

To write the interprovincial journeyperson examination, you must either successfully complete an apprenticeship training program or meet tradesperson eligibility requirements. The pass mark is 70%.

#### **Red Seal Examination preparation resources:**

To assist in the understanding of the development of all Interprovincial Red Seal examinations, Employment and Social Development Canada (ESDC) has developed the following information.

- A short explanation of the role of an occupational standard in the development of a Red Seal examination can be accessed on the Red Seal website at the following link: http://www.red-seal.ca/resources/wh.1t.3sn.4.1-eng.html
- The Getting Ready for the Examination document can be accessed through the Red Seal website at the following link: <a href="http://www.red-seal.ca/docms/getready-eng.pdf">http://www.red-seal.ca/docms/getready-eng.pdf</a>
- Red Seal examination sample questions can be accessed on the Red Seal website at the following link: <a href="http://www.red-seal.ca/resources/s.1mpl.2">http://www.red-seal.ca/resources/s.1mpl.2</a> q.5.2st.3.4ns-eng.html
- A trade specific skills assessment tool is available on the Red Seal website at the following link: <a href="https://www.red-seal.ca/eng/resources/selfexamlist.shtml#i">https://www.red-seal.ca/eng/resources/selfexamlist.shtml#i</a>

Use of cell phones, electronic imaging/recording or communication equipment is **not** permitted. You will be required to leave immediately if any of these items are found on your person.

Please note that examinations and study information change frequently. The most recent information is available on our website at <a href="https://www.saskapprenticeship.ca">www.saskapprenticeship.ca</a>.



# Industrial Mechanic (Millwright) – Red Seal Examination Breakdown

An Interprovincial Red Seal examination is based on the Red Seal Occupational Standard (RSOS) for the trade. The RSOS describes the skills and knowledge required to perform the duties of the trade. Each standard is divided into Major Work Activities (MWA), which are divided into Tasks, which are divided into Sub-tasks.

The Red Seal examination has a certain number of questions assigned to these sections. The number of questions are provided below. For more information, see the full Red Seal Occupational Standard for this <u>trade</u>.

Total number of questions on the Interprovincial Red Seal examination – 135 questions\*

Subject	Percent	Number of Questions
MWA A: Performs Common Occupational Skills	19%	
Task A-1: Performs safety related functions		4
Task A-2: Uses tools and equipment		5
Task A-3: Performs routine trade tasks		7
Task A-4: Uses communication and mentoring techniques		3
Task A-5: Performs measuring and layout		4
Task A-6: Performs cutting and welding operations		2
MWA B: Performs Rigging, Hoisting/Lifting and Moving		
Task B-7: Plans rigging, hoisting/lifting and moving		8
Task B-8: Rigs, hoists/lifts and moves load		9
MWA C: Services Mechanical Power Transmission Components and Systems	23%	
Task C-9: Services prime movers		5
Task C-10: Services shafts, bearings and seals		6
Task C-11: Services couplings, clutches and brakes		5
Task C-12: Services chain and belt drive systems		5
Task C-13: Services gear systems		5
Task C-14: Performs shaft alignment procedures		6

MWA D: Services Material Handling/Process Systems	18%	
Task D-15: Services robotics and automated equipment		1
Task D-16: Services fans and blowers		4
Task D-17: Services pumps		5
Task D-18: Services compressors		5
Task D-19: Services process piping, tanks and containers		4
Task D-20: Services conveying systems		5
MWA E: Services Fluid Power Systems	15%	
Task E-21: Services hydraulic systems		12
Task E-22: Services pneumatic and vacuum systems		9
MWA F: Performs Preventative and Predictive Maintenance, Commissioning and Decommissioning	12%	
Task F-23: Performs preventative and predictive maintenance		11
Task F-24: Commissions and decommissions equipment		5
Total	100%	135

<sup>\*</sup>The number of questions on an interprovincial examination, assigned to assess each major work activity of the RSOS, as derived from the collective input from workers within the trade across Canada.

### Suggested trade resources when preparing for the examination.

To assist you, a list of reference textbooks is provided below. <u>Note that ISBN numbers are subject to change.</u> Please consult with your supplier to access their most current version of the textbook you are acquiring. It is not necessary to use these specific textbooks; you may find others which will be equally beneficial. You are encouraged to seek additional reference materials in all test areas.

- Industrial Fasteners Training Manual IPT ISBN 9780920855126
- Industrial Hydraulics Training Manual IPT ISBN 9780920855409
- Industrial Trades Power Transmission Training Manual IPT ISBN 9780920855706
- Interpreting Engineering Drawings Jensen ISBN 9780176531515
- Millwright Manual/study guide BC Ministry of Labour MN1237 ORDER 7960002299 ISBN 9780771894732
- Modern Metalworking Student workbook Walker ISBN 9781631263422
- Modern Metalworking Walker ISBN 9781631263415
- Rigging Handbook Klinke ISBN 9781888724189
- Rotating Equipment Training Manual IPT ISBN 9780920855287



### Saskatchewan Polytechnic Modules:

- Fluid Power Data Book Code 20019471
- Gas Metal Arc Welding WELD/GMAW Code 20170219
- Math all levels
  - Math 108 Code 20012960
  - Math 201 Code 20030544
  - Math 300 Code 20031008
  - Math 400 Code 20009588
- Oxyfuel Welding and Oxyfuel Cutting Weld OFW and OFC Code 20170196

Individual Learning Modules (ILM's) for the Industrial Mechanic (Millwright) (IMM) trade may be ordered through the Saskatchewan Polytechnic Bookstore Call Centre: 1-866-569-8398 or through <a href="https://ilm.nait.ca/home">https://ilm.nait.ca/home</a> under Millwright.

Modules for the Industrial Mechanic (Millwright) (IMM) trade developed by the Industry Training Authority of British Columbia (*New name:* SkilledTradesBC) are also available at: <a href="https://www.crownpub.bc.ca/Product/Listing/13503">https://www.crownpub.bc.ca/Product/Listing/13503</a> BC-Trades?WT.ac=hpsl BCtrades under Millwright.

Those studying for their Interprovincial examination may wish to refer to other Level booklists for additional study materials.

\*Unless otherwise noted, books listed here are available through the Saskatchewan Polytechnic Bookstore Call Centre: 1-866-569-8398

NOTE: Textbooks **are not** usually available from libraries. When textbooks are being purchased, candidates should allow several weeks for delivery and several weeks for studying.

