

## INTRODUCTION TO CSA B52 MECHANICAL REFRIGERATION CODE

**LECTURER:** Mr. Richard W. Barnes, P. Eng.  
**LOCATION:** ANRIC Enterprises Inc., 701 Evans Ave., Suite 202, Toronto  
**FEE:** Register four weeks before and pay at time of registration:  
\$550.00 (pp/plus HST)  
Registrations received within four weeks: \$700.00 (pp/plus HST)

### OBJECTIVE:

The Objective of the CSA B52 course is to introduce the requirements and Application of CSA B52 Mechanical Refrigeration Code. It covers the relationship of CSA B52 and CSA B51, ASME Boiler and Pressure Vessel Code, ASME B16.5 Refrigeration Piping and Heat Transfer Components.

**CONTENTS:** A one day course consisting of the following:

- Scope of CSA B52
- Identification of Systems Requirements
- Classification by occupancy
- Classification of Refrigeration Systems
- Classification by Refrigerant
- Equipment Design & Construction
- Installation
- Overpressure Protection
- Maintenance of System
- Precautions
- Additional Application Notes on CO<sub>2</sub> and Hydrocarbon Systems

### WHO SHOULD ATTEND?

The CSA B52 Course is directed toward Designers, manufacturers, owners, users and persons charged with the responsibility for the safe operating practices, installation and maintenance of mechanical refrigeration systems in public, commercial, industrial, institutional and residential settings. The course material will concentrate primarily on the requirements in the Standard and not the requirements in the referenced documents.

### EXPECTATIONS:

Understand the classification and applicability of mechanical refrigeration systems and their limitations based upon occupancy type, refrigerant type and other factors.

Gain an understanding of the design, operation and maintenance safety framework in the CSA B52 Code.

Understand the role of the referenced Codes and Standards within the CSA B52 framework and the adoption of the CSA B52 framework in Canadian jurisdictions.

### LECTURER:

Mr. Richard W. Barnes is the Principle Engineer at ANRIC Enterprises Inc. and has been actively involved for over 30 years in the development of the ASME and CSA Codes and Standards associated with Pressure Boundary for both nuclear and non-nuclear power plants. Mr. Barnes leads the team at ANRIC Enterprises Inc that offers technical assistance for companies registering Pressure Boundary products, and provides expert consultation on the application of the various pressure boundary codes. The ANRIC team also develops and delivers training on both the CSA and ASME Codes and Standards for delivery on-site at the ANRIC Learning Centre and off-site at the clients' premises. Mr. Barnes sits on various code committees responsible for the development of Codes and Standards. He is the past-chair and member of the ASME Standard Committee of the BPV III, which is responsible for the development of Section III of the ASME BPV Code; past Vice-Chair and member of N285A Technical Committee on CANDU Nuclear Power Plant Systems and Components, member of the B51 Technical Committee on Boilers and Pressure Vessels, and member of N286 Technical Committee on Overall Quality Assurance for Nuclear Power Plants of the CSA Standards Committee; and member of ASME B16 Standards Committee of Standardization of Valves, Flanges, Fittings and Gaskets and member of the Subcommittee responsible for development of the B16:34 Standard. Mr. Barnes has received the ASME Dedicated Service Award and the highest ASME Nuclear award, the Bernard F. Langer Nuclear Codes and Standards Award in recognition for his contributions to the nuclear industry. In 2007, was elected to the ASME Grade of Fellow. In 2009, Mr. Barnes received the CNA Outstanding Contribution Award and in 2011 the CSA Award of Merit.



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## IMPORTANT INFORMATION:

**PAYMENT:** Full payment is due at time of registration. Payment can be made via credit card (VISA, MasterCard or American Express), cheque or purchase order. PLEASE NOTE: Payment is non-refundable.

**CANCELLATION POLICY:** Cancellation must be received in writing 7 days prior to course start date. If cancellations are made after that date, the cancellation fee will be 50% of the course cost. You may send a substitute. Notification of a substitute must be received at least 48 hours prior to the commencement of the course or a cancellation fee will be charged. PLEASE NOTE: The cancellation fee can be discounted towards any future course taken at the ANRIC Learning Centre.

**ACCOMMODATION:** The Stay Inn, 560 Evans Ave (2 minute drive to 701 Evans Ave), has provided a quote of \$99.00 per night for 1 bed and \$109.00 for 2 beds, including a continental breakfast. The Stay Inn can be contacted at [info@stayinn.ca](mailto:info@stayinn.ca) or 416-259-7899/1-888-445-4473 for more information. Please refer to ANRIC Enterprises Inc. when speaking with reservations. This is a small hotel, so it is advisable to book early.

**FOOD AND BEVERAGE:** At the start of the day juice, fruit, pastries, coffee and tea will be provided before the course. Coffee and Tea will be provided at mid-morning break, including pop in the afternoon and lunch will be provided. Please indicate when you are enrolling for the course if you have any specific food requirements. Every effort will be made to accommodate your needs in this area.

**COURSE TIMES:** Registration begins at 8:00 a.m. The course will begin at 8:30 a.m. and conclude at 4:30 p.m.

**DRESS:** Please dress so that you will be comfortable. It is prudent to dress light and bring a light jacket in case you need it during the course. The tolerance to temperature varies for people and sometimes room temperature acceptable to the majority may not be right for an individual.

**PARKING:** There is parking available for a fee of \$5.00 per day. There is parking at 701 and 703 Evans Ave.

ANRIC Enterprises Inc. specializes in courses of calibre to industry by providing lecturers who have recognized expertise and who are involved with the development and application of Codes and Standards.

ANRIC Enterprises Inc. reserves the right to cancel any course and/or change lecturers.