CAN/CSA-Z256-M87 – Safety Code for Material Hoists Welding Requirements

This document provides an overview of the requirements of *CAN/CSA- Z256-M87 – Safety Code for Material Hoists* with respect to welding. It is designed to provide guidance for individuals and organizations involved in the design, construction, installation, erection, inspection, maintenance, repair or modification of structures and hoists that are not a permanent part of buildings, structures, or other works, and that are used during construction, alteration, or demolition to raise and lower persons and/or materials connected with or related to a building project.

This document is only for general guidance purposes; reference to the full text of CSA Z256 should be made. For further information, please contact the CWB at 1-800-844-6790 or info@cwbgroup.org.

Introduction

Welding is a key joining method used in the fabrication of hoists. To ensure welds of the highest quality and the safety of both the users of hoists and the general public, CSA Standard Z256 provides specific requirements around the welded fabrication and welding inspection of such equipment.

Welded Fabrication

CSA Z256 provides the following requirements:

4.1.1 Material and Design
Material and design of structural members, bolts, rivets and connections shall be as specified in the following CSA Standards:
CSA Standard S16 - Design of Steels Structures
CSA Standard S136 - North American specification for the design of cold-formed steel structural members

4.2.1 Design
Welding shall conform to the design and procedure requirements of CSA Standard W59.

4.2.2 Qualification
Welding shall be undertaken by a fabricator or a contractor qualified according to the requirements of CSA Standard W47.1.

CSA Standard W47.1 provides requirements for the qualification of welders and welding operators, welding procedures and welding supervisory and engineering personnel.

CSA Standards W59 provides guidance on weld design, fabrication techniques, inspection and other key considerations around welding for steel and aluminum respectively. CSA Standard W59 requires that contractors performing work under this standard be certified under the requirements of CSA Standard W47.1 unless the Engineer of record approves the contractor for the work to be undertaken.

An organization meeting the requirements of CSA Standard W47.1 will have qualified welders, accepted welding procedures and accepted supervisory/engineering personnel. All elements of the welding operation will be independently verified by the Canadian Welding Bureau on an on-going basis.

Please note that there are no domestic or international equivalents to CSA Standard W47.1. Other national systems, such as that of the American Welding Society (AWS) do not include key concepts such as independent and ongoing verification and welding supervisors/engineers. The CWB strongly cautions the reader around accepting substitutions; doing so may contravene the intent of CSA Z256 and place public safety at risk.

For a listing of all organizations that currently meet the requirements of CSA Standard W47.1 please see *www.cwbgroup.org*.

Welding Inspection

CSA Standard W59 requires that all welds be visually inspected. In addition, when required by contract weld inspection must be completed by certified welding inspectors or a welding inspection organization following the requirements of CSA Standard W178.2 or CSA Standard W178.1 respectively. It also requires that CSA Standard W59 be followed for the acceptance criteria for all welds. It should be noted that CSA Standard W178.2 has individual "product categories" that inspectors may qualify to, including one for CSA Standard W59.

For a listing of all organizations and individuals who currently meet the requirements of CSA Standard W178.1 and CSA Standard W178.2, please see *www.cwbgroup.org* .