

Information Bulletin No. IBE16-001

Reissued January 1, 2020

Subject: Proper Wire Rope Gauges

Issue:

There is confusion as to what wire rope gauges that are to be used when measuring wire ropes as required by the latest adopted code in Alberta

Background:

On March 1, 2016 a new *Elevating Devices Codes Regulation AR 192/2015* came into effect adopting the ASME A17.1-2013/CSA B44-13.

- The ASME A17.1-2013/CSA B44-13 references the ASME A17.6-2017 as the method for determining the safety criteria for inspection and installation of Steel Wire Ropes Aramid and Flat Belt Type suspension means and compensation means, and governor ropes.
- The Elevating Devices Codes Regulation and the ASME A17.1-2013/B44-13 both state that the inspection of suspension means, compensation mean and governor ropes applies to all existing elevating devices.
- The ASME A17.6 sets out more stringent requirements for wire discard criteria rope than in the previous regulation AR 62/2009.
- Therefore, new wire rope gauges reflect those changes. An example of this is the rejection criteria for 5/8 inch wire ropes is;
 - The previous rope diameter rejection criteria called the ropes to be rejected at 37/64th or 0.578 mm
 - The new requirements call for replacement at 0.586 mm and a more stringent 0.605 mm if showing rouge.





Figure 1 MUST have reference to A17.6 spec

Path Forward:

- Effective December 1, 2016 Safety Codes Officers will use the new wire rope gauges to determine the proper rejection criteria as set out the ASME A17.6 2010.
- The Safety Codes Officers will use the same method, as was previously used in the AR 62/2009 when determining the overall condition of the rope except: using the new rope gauge and the requirements of ASME A17.6-2010 as follows;
 - > **INSTRUCTIONS:** (Determine loss of diameter)
 - 1) By fitting the gauge to the rope at two points spaced at least 1 metre apart; at each point the gauge shall be fitted twice at right angles to each other.
 - 2) By sliding the gauge the length of one rope lay. Loss of rope diameter is indicated when the gauge moves freely **at all four measurements**.

Implementation: Effective Immediately

Signed:

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