



Gauge Board Mounting

1.0 Introduction

Hawkeye offers two modes to mount our gauge boards, either steel clips welded directly to the tank, or a magnetic clip assembly that does not require modification to the tank. This document outlines the manner in which the number of each clip can be determined based on application.

2.0 Weld On Clips

Weld on clips are required at the top and bottom of the gauge board, and spaced intermittently along the length of the gauge board.

What you need to know before starting:

- H** Total Length of Gauge Board (in inches)
- G** Maximum Gap between clips (60 in. recommended)

What we will determine:

- N** # of gauge board clips required
- S** Actual spacing between them (in inches)

For the following procedure, we will use a 30 ft gauge with 60 inch maximum clip spaces as an example. **Example calculations are in red.**

- 1.) Determine the distance between the top and bottom clip.

$$L = H - 1.5 \text{ in.}$$

$$L = (30\text{ft.} \times 12 \text{ in.}) - 1.5 \text{ in.} = 358.5 \text{ in.}$$

- 2.) Determine the number of intermediate clips.

$$N' = L / G$$

$$N' = 358.5 \text{ in.} / 60 \text{ in.} = 5.975$$

Before going forward, delete all the numbers following the decimal point.

$$N' = 5.975 = 5$$

- 3.) Determine total number of clips.

$$N = N' + 2$$

$$N = 5 + 2 = 7$$

- 4.) Determine actual spacing between clips.

$$S = L / (N-1)$$

$$S = 358.5 / (7-1) = 59.75 \text{ in.}$$

In the case of the example gauge board, it would require **7** weld-on gauge clips, including top and bottom clips spaced **59.75 in.** apart.

For applications where the gauge board will experience significant loading from winds or other

factors, decrease the maximum gap (G) used in part 2.

3.0 Magnetic Clips

Using magnetic gauge board clips requires clips at the top and bottom of the gauge board, at each splice location, and at the midpoint of each board section.

What you need to know before starting:

- B** Total number of gauge board sections

What we will determine:

- N** # of gauge board clips required

Hawkeye supplies all gauge boards in 8 or 10 ft sections. In most instances, the number of gauge boards sections used for a particular height will be:

Height (ft)	Board Quantity	
	8 ft	10 ft
8	1	
10		1
16	2	
20		2
24	3	
32	4	

For sizes not listed, consult engineering for a gauge board section count.

For the following procedure, we will use a 32 ft gauge made from four 8 ft sections. **Example calculations are in red.**

- 1.) Determine the number of magnetic clips required.

$$N = 2B + 1$$

$$N = 2(4) + 1 = 9$$

In the case of the example gauge board, it would require **9** magnetic gauge clips, installed at the top, bottom, splice locations and board section mid-points.