

**CASE STUDY:**

# **Customized Bolting Solution for Confined Structural Steel Connection**



**GWY**  
ABSOLUTE ACCURACY®

# Project Overview

Structural steel projects often involve complex connections where limited space can prevent the use of standard installation tools. When these challenges arise, contractors must find a solution that maintains compliance with industry specifications without modifying structural steel or delaying project timelines.

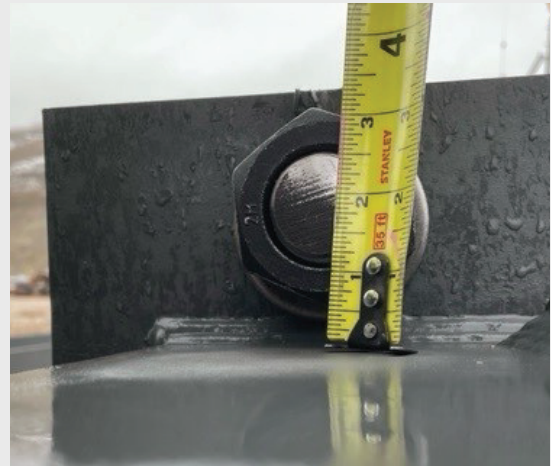
GWY was brought in to assist a customer facing severe spatial constraints that made conventional bar sockets unusable for Turn-of-Nut installation. The project required a compliant and constructible solution that maintained efficiency despite the confined access.

# The Challenge

The customer encountered a restricted access connection where the clearance between the nut and surrounding steel was too tight for a standard bar socket. Other limitations included:

- No modification to surrounding structural steel was allowed.
- The installation had to follow RCSC Turn-of-Nut specifications.
- The project required maintaining productivity without introducing delays.

Traditional minimal clearance tools were evaluated, but the bar socket thickness exceeded the available space, making conventional approaches ineffective.



## Our Evaluation Process

GWY performed an assessment based on bolt diameter and strength, installation method, jobsite conditions, and spatial parameters. Rather than applying a one-size-fits-all approach, we developed a tailored bolting strategy to maintain both RCSC compliance and onsite constructability.

## The Solution

We selected a Missing Link to bridge the clearance gap between the nut and the structure. This tool provided the necessary reach while remaining fully compatible with the Turn-of-Nut installation method. As a result, ironworkers completed the installations without altering the steel, maintaining both structural integrity and compliance.