High-speed bridge column bolts



Overview

The bridge bearing bolts are generally high-strength bolts, with surface treatments such as multi-element alloy diffusion, zinc chromium coating, and sealed treatment. The bridge bearing bolts are usually purchased as a set, which includes hex head bolts . Victory Fasteners offers a comprehensive portfolio of high-strength, durable fasteners engineered to meet and exceed the rigorous demands of civil engineering projects, particularly bridge construction. Designed for durability, reliability, and exceptional performance, our fasteners are built to. Steel structure bolts are essential fasteners that connect and stabilize every part of a steel building — from columns and beams to foundations and joints. This comprehensive guide explains the different types of bolts used in steel structures (ordinary bolts, high-strength bolts, anchor bolts, and. In ladder deck and multi-girder bridges, the structural connections are the splices in the longitudinal girders and the connections of the bracing or cross girders to the main girders. Bridge. The purpose of this memorandum is to provide updated guidance on the specification and use of high-strength fasteners in highway bridges.

© 2026 OptiLink · All rights reserved

Article Content

Jun 16, 2026

High-speed Railway Bridges

High-speed Railway Bridges Conceptual Design Guide the book provides first-hand experience with worked calculation examples numerous practical examples ge-scale bridges is constantly growing

Jan 19, 2026

7.4 Column Reinforcement

Figure 7.4.3-1 shows standard the column reinforcement standard practice for staggered splice locationsdetails. No splice is allowed when the required length of longitudinal reinforcement is less

Jul 17, 2025

Bridge Bearing Fastener

The sleeves for bridge bolt can be divided into metric and imperial sizes. Although the internal concave shape of the sleeves is the same, the outer diameter, length,

Mar 10, 2026

Bridge & Highway Fasteners | Guardrail Bolts & Structural Bolts Supplier

Our products include guardrail bolts, flange bolts, anchor bolts, and heavy hex nuts for bridge decks and steel connections. We use carbon steel and alloy steel with hot-dip galvanizing or zinc-nickel

Jul 30, 2025

Design and Performance Verification of a Bridge Column/Footing/Pile ...

Motaref et al. (2011) and Kavianipour and Saiidi (2013) tested a precast bridge pier, in which the columns were embedded into the reserved socket in a precast footing with high-strength grout infill.

May 06, 2026

Cyclic loading test of self-centering precast segmental concrete high ...

The bridge columns can control residual drift in an allowable range before failure. Precast concrete high-speed railway (HSR) bridge columns are attractive for standardized HSR bridges, but

Jun 03, 2026

High Strength Bolts and Fasteners for Bridges

© 2026 OptiLink - All rights reserved

Maintain safe and secure bridge structures using our selection of large diameter fasteners, high-strength bolts, and other critical parts. We manufacture durable

Jun 29, 2025

Seismic Performance of Concrete Bridge Columns Reinforced with High ...

A comprehensive experimental study was conducted on the seismic performance of bridge columns reinforced with Grade 80 (550) steel. The column tests were designed to observe the impact of the

Feb 05, 2026

High-Strength Fastener Solutions for Bridge Construction

Designed for durability, reliability, and exceptional performance, our fasteners are built to withstand the harshest environments, toughest conditions, and highest loads.

Jun 03, 2026

Cyclic performance of precast GFRP-RC columns with innovative ...

This study aims to address the knowledge gap in the application of GFRP reinforcement in precast structures. Experimental tests were conducted to evaluate the lateral behaviour of precast

Aug 18, 2025

Use of High Strength Fasteners in Highway Bridges

As a result, a memorandum titled High Strength Bolts (July 18, 1988) was published providing supplemental performance requirements for owners to consider on projects that used high-strength

Jun 13, 2026

Rail & Bridge C-Parts, Bolts & Fasteners Solutions

Partner with CSG, your trusted expert for extreme-duty C-parts, high-strength structural bolts, and advanced OEM fastening solutions that guarantee

Mar 25, 2026

Comparison study of time-varying seismic fragility of precast

In recent years, precast segmental bridge columns (PSBCs) have been widely used in high-speed railway bridges, but the lack of long-term seismic performance limits PSBCs application

Jun 18, 2026

Research on the application of super high tension bolts to highway bridges

© 2026 OptiLink - All rights reserved

But in recent years, super high tension bolts (S14T) created by improving delayed failure resistance performance were developed, and they have been adopted in the building construction field. Now the

Oct 12, 2025

Steel Structure Bolts: Types, Applications, Installation

Explore essential types, uses, and installation of steel structure bolts for buildings and bridges. Learn how to choose, apply, and maintain bolts for

Aug 09, 2025

Seismic fragility and post-earthquake reparability of circular ...

The bridge archetypes extensively constructed for Chinese high-speed rails were briefly introduced, the bridge columns were reinforced by LBHSRs. The OpenSees element model

Jul 13, 2025

The Complete Guide to Structural Bolts: From Types to

What are the Types of Bolts in Steel Structures? Among the various types, the most commonly used structural bolts include: A325 Bolts: Often used in structural steel

May 26, 2026

High-Strength Bolts for Bridges

Since the introduction of high-strength bolts the requirement has been that high-strength fasteners in slip critical joints and connections subject to direct tension or reversible loads need to be preloaded to a

Jul 08, 2025

Bolted Column Connections

Bolted column connections for ease of design, speed of erection, and safety – System Components Overview System Components Design Tools References

Jan 16, 2026

Connections in bridges

Eurocode TerminologyBolted Or Welded Connections?Bolted ConnectionsWelded ConnectionsHybrid ConnectionsAccess For Site OperationsReferencesFurther ReadingResourcesSee AlsoDesigners should note the limit on ultimate capacity of hybrid connections of both slip resistant bolts acting in friction and welded connections. This is described in clause NA2.26 of the National Annex to BS EN 1993-2:2006as to be taken as no greater than 90% of their combined capacities.See more on steelconstruction pankajinternational

© 2026 OptiLink - All rights reserved

Bridges & Structures - Pankaj International

Pankaj International supplies advanced fastening solutions like Huck Bolts and High Strength Friction Grip (HSFG) bolts, essential for the construction and safety of bridges and structures.

Nov 17, 2025

Design and Performance Verification of a Bridge Column/Footing/Pile ...

Therefore, this study was conducted to investigate a prefabricated bridge pier system suitable for accelerated bridge construction (ABC). The proposed system consists of a precast

Mar 12, 2026

Connections in bridges

In ladder deck and multi-girder bridges, the structural connections are the splices in the longitudinal girders and the connections of the bracing or cross girders to the

Oct 02, 2025

Guidelines

Guidelines for fabrication and erection of steel bridGes introduction A need was felt during the deliberation on IRC:24 to have some Guidelines for Fabrication and Erection of Steel Bridges, since

Dec 20, 2025

Bridge Projects | Tension Control Bolts

Tension Control Bolts are widely used in the bridge market globally. Typical applications include new road, rail and foot bridges, and our standard TCBs are

Mar 31, 2026

Specification for Structural Joints Using High-Strength Bolts

This edition of the Council''s Specification for Structural Joints Using High-Strength Bolts continues the tradition of earlier editions. The most significant changes are listed below.

Oct 15, 2025

Steel Structure Bolts: Types, Applications, Installation

Steel structure bolts are essential fasteners that connect and stabilize every part of a steel building — from columns and beams to foundations and

Jul 25, 2025

© 2026 OptiLink - All rights reserved

Steel Bridge Design Handbook Vol

This handbook covers a full range of topics and design examples intended to provide bridge engineers with the information needed to make knowledgeable decisions regarding the selection, design,

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: https://www.moletenare-ew.co.za
Email: info@moletenare-ew.co.za
Phone: +86 138 1658 3346
Address: Ningbo, China

This document is for informational purposes only. Specifications subject to change without notice.

© 2026 OptiLink - All rights reserved