# Lindapter Connections for **STEEL BRIDGES**

#### **BENEFITS**

- ✓ No drilling or welding
- ✔ For permanent & temporary connections
- ✓ No damage to existing steel
- ✔ For parallel & tapered flanges
- ✓ Tensile safe working load of up to 56,000lbs\*
- ✓ Frictional safe working load of up to 15,700 lbs\*
- ✔ Various corrosion resistance options

#### **TYPICAL APPLICATIONS**

- > Bridge Strengthening
- > Support Connections for Refurbishments
- > Securing Maintenance Access
- > Piping & Electrical Support
- Securing Panels, Cladding & Signage

See inside for Lindapter project experience...





#### **BRIDGE STRENGTHENING**

Project: Morton's Leam BridgeLocation: Peterborough, Cambridgeshire, UKProduct: Type AFApplication: Connection of bridgestrengthening steel girders



### SUPPORT CONNECTIONS FOR REFURBISHMENTS

Project: Alexander Hamilton Bridge Refurbishment Location: Route 95, New York, USA Product: Type AF Application: Temporary support connections



#### **SECURING MAINTENANCE ACCESS**

Project: Queen Elizabeth II Bridge Location: Dartford River Crossing, UK Product: Type B Application: Connection of GRP panels to facilitate future maintenance access



#### SECURING PANELS, CLADDING & SIGNAGE

Project: Kennedy Bridge (Kennedybrücke) Location: Bonn, Germany Product: Type A Application: Securing solar panels to the bridge structure



#### **PIPING & ELECTRICAL SUPPORT**

Project: Millau ViaductLocation: Millau, Aveyron, FranceProduct: Type AApplication: Securing electrical services to inclined steel sections of the bridge deck







Lindapter Type AF connections, specified in a Girder Clamp configuration, secured strengthening steel girders to the existing steel beams of the bridge. Installation was completed without the need to weld or drill, allowing the bridge to remain open to rail traffic during the development.





Lindapter Type AF connections were used on the major refurbishment and widening of the Alexander Hamilton Bridge to connect temporary support systems for cantilevered roadways. Type AF clamps were ideal for the varying connection angles of the application due to their high performance in friction and tensile.



Lindapter designed a special assembly using Type B clamps to connect GRP panels to the QE2 Bridge. The GRP panels were used to create an enclosed maintenance access walkway beneath the bridge deck to allow for essential maintenance without the need to close crucial London transport links.





The entire length of the bridge's south side was fitted with enough solar panels to provide energy to 20 households, making it the world's first solar bridge. Lindapter Type A connections secured the solar panels to the steel sections on the underside of the bridge without the need to weld or drill.





With a deck standing at 885 feet above the River Tarn, this iconic structure is at the forefront of Bridge Engineering. Lindapter Type A connections were used to precisely align and secure electrical services to inclined steel sections within the interior of the aerodynamically designed steel deck.



lindapter®

## THE **Lindapter** RANGE



#### **STEEL CONNECTIONS**

Lindapter has pioneered a unique & proven concept: innovative clamping systems that eliminate the need to weld or drill, reducing installation time & labor costs. Lindapter's steel connections lend themselves perfectly to the securing of both maintenance access & bridge strengthening systems.



#### **HOLLOW STEEL (HSS) CONNECTIONS**

Featuring the legendary Hollo-Bolt<sup>®</sup> and Lindibolt<sup>®</sup>, Lindapter's HSS connections provide simple, cost-effective connections for all types of hollow section or where access is only available from one side. The Hollo-Bolt is the ideal solution for the connection of signage and cladding panels.



#### **CONCRETE DECKING CONNECTIONS**

Lindapter offers the Toggle Clamp as the ideal service suspension connection for pre-cast hollow core concrete slabs. This versatile connector is also compatible with HSS, steel sheeting & purlins and can be used in the construction of bridges wherever these materials are used.



#### **PIPE / CONDUIT SUPPORTS**

Lindapter provides a wide range of connection solutions for suspending services, such as pipe work, electrics and instrumentation from structural or supporting steel. Using Lindapter support connections, utilities can be run along the length of a steel bridge deck without welding or drilling.



#### **STEEL FLOOR CONNECTIONS**

Lindapter's unique no-weld no-drill concept extends to the connection of steel flooring. Open bar grating & checker plate flooring can be installed for bridge maintenance walkways by one person without the need to access the underside of the flooring.

For more information visit www.lindapterusa.com or email inquiries@lindapterusa.com to request a catalogue.

