

Pragsattel, LED Media Board

Lindapter Girder Clamps provided a solution for connecting a huge LED media board to an iconic 100 foot high Second World War bunker.

Project Background

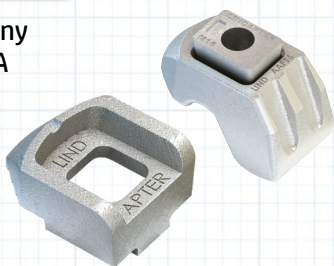
Location: Stuttgart, Germany

Product: Type AAF & Type A
Girder Clamps

Client: Lotus Media

Contractor: LEDCON
Systems GmbH

Engineer: Ingenieurbüro
Brandt GmbH



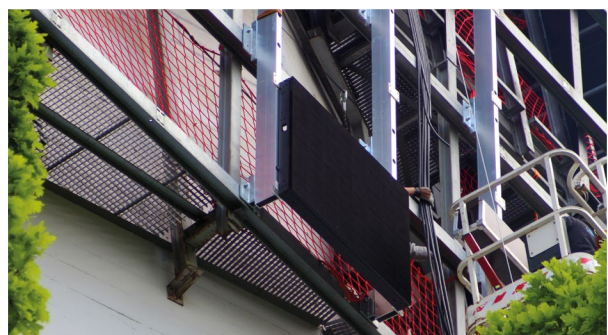
This iconic 100 foot high Second World War bunker is located on a major traffic junction enroute to Stuttgart, known as Pragsattel. Due to its prominent position the bunker has been used as an advertising medium since shortly after the Second World War. In the 1990's a video wall was installed and in 2008 upgraded with a then state-of-the-art screen.

Client Requirement

In 2023 Lotus Media, the company operating the screen, decided the time was right to replace the entire advertising system with the very latest LED screen technology. They wanted to increase the size and resolution of the screen, reduce energy costs by using LED technology while protecting and retaining as much of the original structure as possible. To meet these requirements Lotus commissioned LED specialists LEDCON as the full service contractor for the project.



The new substructure was adapted to the existing steel beams



Installers tightened the Lindapter clamps on the plate brackets to the existing frame on the bunker

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Design Solution

The LEDCON solution involved attaching a secondary steel frame to the existing frame on the outside of the bunker, as part of this secondary frame special plate brackets were designed.

The plate brackets were pre-drilled during fabrication so that once in the field the installers could firstly bolt them to the secondary frame and then pre-assemble the girder clamps to the plate brackets prior to each section of the secondary frame being hoisted up the bunker.

The secondary frame would then be connected to the existing frame via the plate brackets using a combination of Lindapter Type AAF and Type A girder clamps in a 2-bolt configuration. The LED screens would then be attached to the secondary frame using the method specified by the screen manufacturer.

Lindapter
Type AAF
Girder
Clamp



Lindapter
Type A
Girder
Clamp



Installation

To begin with the old system weighing 4.5 tons had to be dismantled piece by piece this included the old display screens and sections of the support frame. At ground level the plate brackets were bolted to the new sections of the secondary frame and then the girder clamps pre-installed.

Each section of the secondary frame was then carefully hoisted up the bunker until they were close to where they were needed, installers then tightened the Lindapter clamps on the plate brackets to the existing frame on the bunker.

Once final adjustments were made and the sections of frame were in the correct positions, installers fully tightened the clamps with a calibrated torque wrench. To complete the installation the new LED screens were attached to the secondary frame.

Result

The Lindapter solution provided a fast, safe installation and avoided costly field drilling or welding that would have been difficult to carry out at this height. The Lindapter girder clamps were able to provide the necessary loads given by the new screen which weighed a total of 2.6 tons.

The adjustability of the clamps also allowed the frame to be accurately installed which would have been very difficult with permanent welds. The new LED screen is now 22% larger than the previous screen and is 70% more energy efficient.



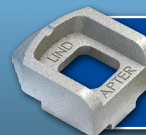
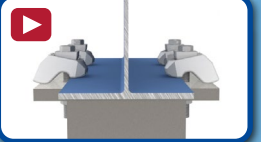
The dismantling and re-erection was implemented in 13 working days, which was well ahead of the planned handover date

Benefits

- ✓ No field welding or drilling
- ✓ Quick and easy installation
- ✓ Adjustable for precise alignment
- ✓ Safer solution



[Click here to watch the Type AAF installation video](#)



[Click here to watch the Type A installation video](#)

