

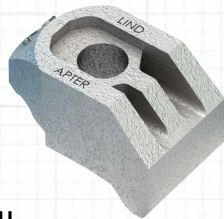
Runway Cleaning Vehicle

Lindapter Girder Clamps provided a solution for securing diesel engines onto vehicle trailers.



Project Background

Location: Staudt, Germany
Product: Type AF Girder Clamp
Market: Automotive
Client: Maschinenbau Cernota GmbH & Co. KG



For almost 20 years Maschinenbau Cernota has been repairing and maintaining machines and equipment in a wide range of manufacturing industries such as food, automotive, ceramics, glass and wood. In order to diversify and concentrate on specialist cleaning vehicles and road marking removal technology they set up a new company called Traffic-Lines.

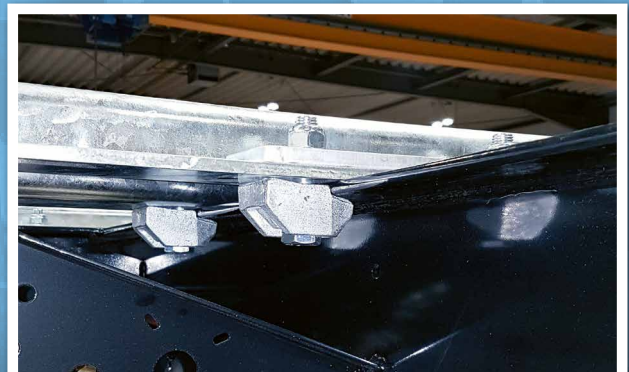
Client Requirement

Traffic-Lines were designing a custom high-pressure water blasting system to remove rubber abrasion from airport runways. The machine was going to be fitted to the front of a vehicle but needed its own diesel engine to drive the water circulation and provide the necessary pressure.

A safe and secure method of connecting the heavy diesel engine to an existing trailer frame was required.



Existing trailer frame to be modified



Sub frame secured using Type AF clamps

Runway Cleaning Vehicle

Design Solution

Lindapter Type AF high slip resistance girder clamps in a two-bolt connection were specified to connect special top hat steel profiles to the existing trailer frame. This would provide a sub frame suitable for mounting the diesel engine and associated pipework and equipment onto. A hot dip galvanized (HDG) finish was also specified to provide a high level of corrosion protection.



Installation

The top hat steel profiles were fixed at right angles across the width of the existing trailer frame with four connections each one made up of two, size 5/8" Type AF girder clamps and a location plate. Installation was quick and easy as each bolt is simply inserted through the clamp and into the pre-drilled holes of the top hat steel profile and location plate.

A washer and nut are then installed and nut tightened with a torque wrench while the recess in the clamp holds the bolt captive.



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



Result

Lindapter Type AF Girder Clamps provided a drilling and weld free connection with high load capacities.

The connections are approved by the TÜV and in live tests proved they were capable of securing the diesel engine in place during full braking. The first vehicle was successfully delivered to Cologne-Bonn Airport in the summer of 2019.



Diesel engine installed on trailer

Key Benefits

- ✓ High slip resistance for tensile and frictional loads
- ✓ Fully adjustable in the field for easy installation
- ✓ No drilling or welding required
- ✓ Hot Dipped Galvanized finish offers a cost effective and low maintenance solution
- ✓ Recess holds the bolt head captive

