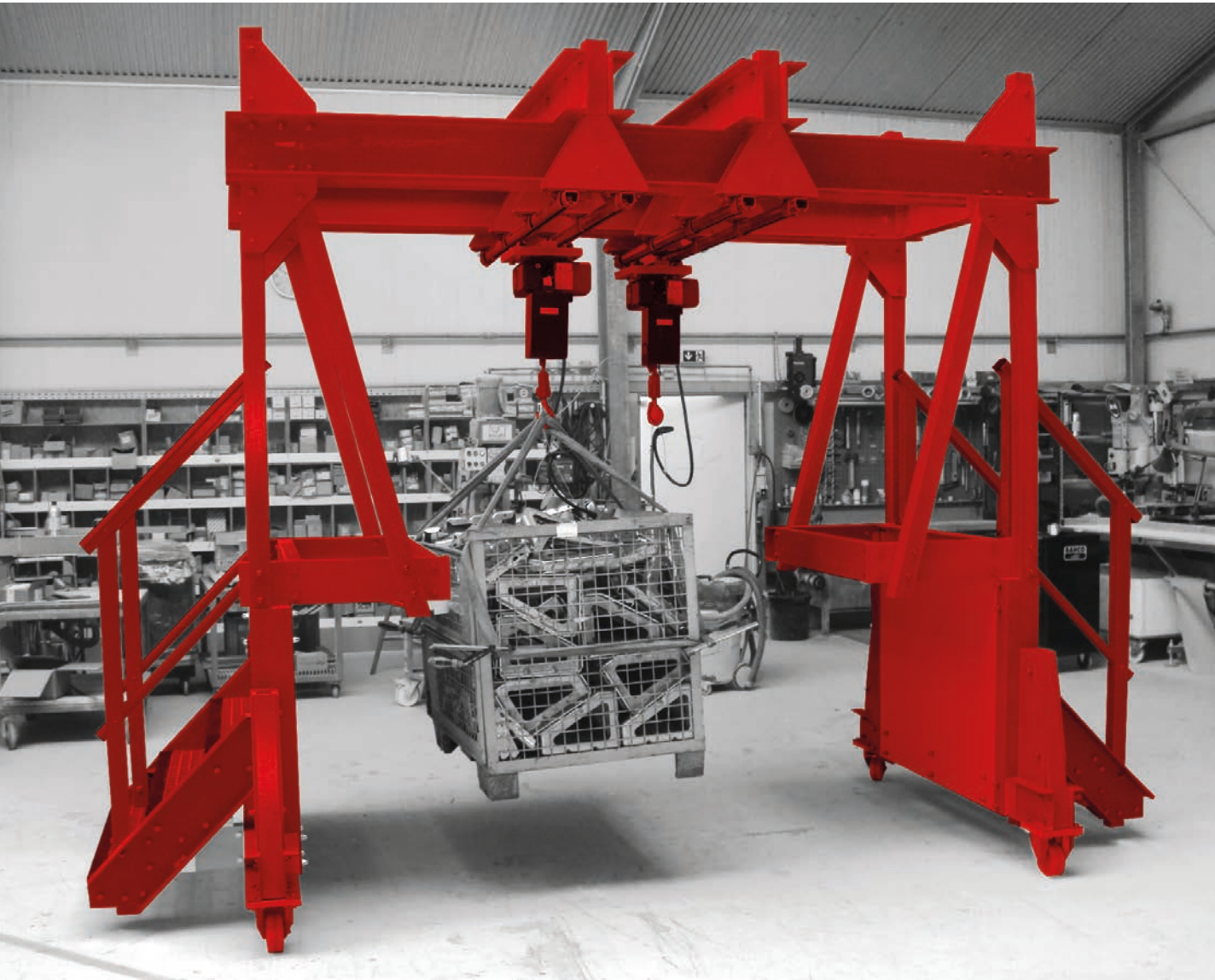


CASE STUDY



Electric crane platform

GRP designs meet requirements for high mechanical stability and are also resistant to many chemicals and corrosion. They do not conduct electricity and are easy to assemble.

We are always delighted to work on special projects for our customers. The task here was to design a special GRP crane platform with a stainless steel crane unit. This was developed and built by TC and is used to raise battery packs by approx. 1 m.

The complete crane platform can be rolled manually to the respective place of use.





Nodes

Composite parts exhibit different mechanical behaviour to metals or homogeneous plastics. This is why we pay particular attention to the connections between the components, in order to ensure that loads are being optimally transferred.



Steps

Three steps were integrated on both sides to enable the operator to reach the important points.



Frame design for crane unit

The image shows how the stainless steel crane unit was connected to the GRP trolley.



Stress test

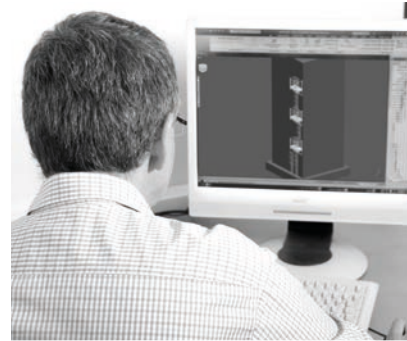
Once it had been completed, the crane platform was subjected to a load test in order to confirm its user friendliness.

Where other materials meet their match.

Solutions based on fibre composite materials have been successfully used in the chemical industry, plant engineering and various other sectors for many decades. Fibre composite materials are much lighter than metals and do not rust. They are weather-resistant and do not conduct electricity. In addition, they are resistant to many chemicals.

GRP in the chemical industry:

- Resistant in corrosive environments
- Can be machined and installed without flying sparks
- Weather-resistant
- Low thermal conductivity
- Electrically insulating
- Very strong but lightweight
- Economical to transport and handle
- Easy to adjust on site



Customised solutions

Do you need a customised solution? Then you've come to the right place. Whether you need a special design for the chemical industry or series production, let's think through the task together.

Verifiable structural analysis

We have already conducted structural analysis of many of our designs. If you have a special requirement, we will be happy to also provide structural analysis for your design, calculated by an independent structural engineering firm.

Delivery and assembly on site

In addition to delivery, our experienced assembly team can also perform installation on site.

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