



## Vertical ladders made from GRP

It is virtually impossible to optimise systems in the chemical industry using ready-made solutions.

### Certified quality

All TC structures are usually developed having regard to DIN EN ISO 14122. Qualification to DIN EN ISO 9001:2008 confirms the high level of our quality management. The pultruded GRP structural sections by Exel Composites comply with EN 13706/E23.

We will be happy to advise you on site and put your requirements regarding corrosion-resistant access systems into practice. We offer you a one-stop shop for structural design, production and installation on site.



Vertical ladders made from GRP including handrails have been custom-designed and produced by TC ready for installation on site at the customer's premises.

### GRP in the chemical industry

- Resistance in corrosive environments
- Machining and installation without flying sparks
- Resistance to weathering
- Low thermal conductivity
- Electrical insulation
- High strength with low weight
- Cost-effective in transport and handling
- Easy adjustment on site



### Ladder with handrail on a transformer

GRP access systems have many advantages. They are not electrically conductive. They are also very resistant to corrosive environments and when it is cold GRP profiles are more pleasant to the touch than steel profiles.



### Safety cage with side exit

It is possible to implement different variants for entering and exiting the safety cage of a vertical ladder. Exits to both the side and front are possible.



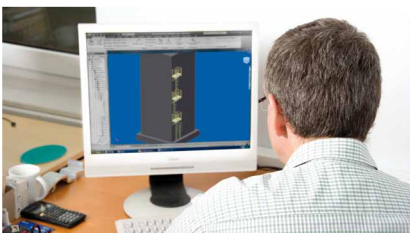
### Platforms making climbing up easier

It is possible to incorporate GRP platforms into the GRP ladder design to make climbing in and out easier and to allow for breaks when climbing up.



### Ladders – custom-made

Your GRP ladder will be custom-made taking your requirements into account. Including special wall brackets.



### Verifiable structural analysis

We already have many structural analyses for our ladders. If you have a specific requirement, we will be happy to supply you additionally with a structural analysis for your ladder which will be calculated by an independent structural engineering office.



### Delivery and installation on site

In addition to delivery, our team of experienced fitters will also carry out installation on site on request.