

Welding Engineering in the Rail Sector

OVERVIEW

The joining of metals may seem fairly straightforward, but the welding of critical infrastructure and rolling stock main frame structures requires a detailed knowledge of weld design, materials / metallurgy, welding processes and inspection techniques. The reliability and safety of our rail network requires a detailed knowledge and grasp of industry standards and how welding and inspection techniques are applied in a sound, competent and practical manner. We work across many industries in support of welding activities, whose goals are based around zero incidents and maximum efficiency. Our 3rd party overview coupled with working as the Owners Engineer, offers many advantages to the Rail industry seeking Welding Engineering support on crucial National infrastructure projects.



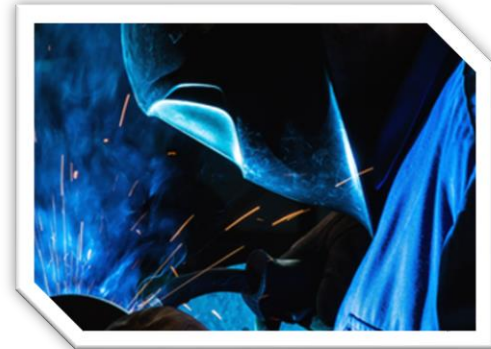
SOLUTION

At Frazer-Nash we are able to offer an experienced team of Welding & Material Engineers to support you on challenges being faced when it comes to the welding of components, structures or rolling stock. We can guide you in terms of weld design, welding processes, weld procedure development and site supervision / auditing of welding and inspection activities.

Our solution is based around our fundamental values of "We Care". We care about how welding is reviewed, planned, carried out and inspected – which all feeds into our core value of safety and reliability - of all rail related structures.

Our consultancy services are available on a very basic level, with a quick review of a welding procedure, right through to detailed project management of all welding activities on a crucial piece of Rail infrastructure; which could include oversight of welding activities on site, for example the carrying out of welding audits on Rolling Stock to EN 15085.

Frazer-Nash offers a One-Stop-Solution to all your welding activities and their management.



CAPABILITY & EXPERIENCE

- Detailed, in-depth Welding compliance audits in accordance with EN15085, EN1090 or ISO 3834.
- 3rd Party witness on the welding of key structural components to ensure compliance with Welding Procedures and related NDT.
- Development and review of weld maps, inspection data and welder qualification registers.
- Evaluate weld performance categorisation (FMEA).
- Oversight of Welder training & qualifications.
- Review of Rail applicable welding codes and standards.
- Development and Qualification of Welding procedures & specifications, including 3rd party oversight of NDT and mechanical testing.
- Metallurgical Investigations & Failure Analysis
- Owner's Engineer and 3rd party reviews.
- Materials and metallurgical advice & guidance.
- Welding reliability and safety.
- Oversight of NDT and Inspection procedures.
- Regulatory advice and guidance on welding activities.
- R&D of the latest welding processes and their applications.
- Integrated service support, such as:
 - Corrosion management
 - Asset Integrity Management
 - Risk and Reliability

