

Supplying working at height and side access solutions in a restricted workshop space

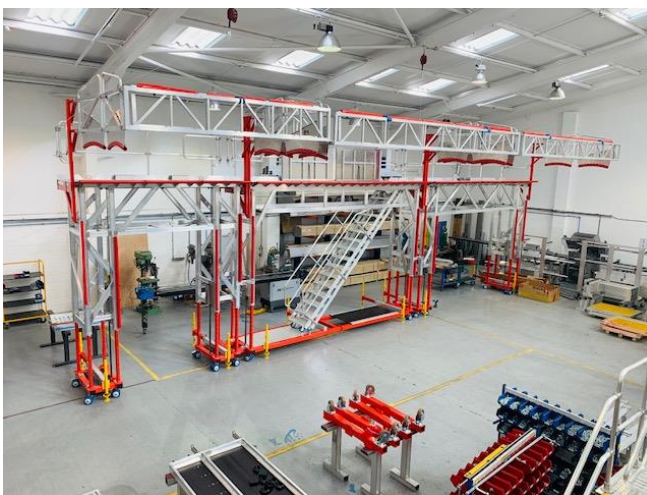
THE CHALLENGE

In 2018 Alstom Trains was awarded the European Railway Traffic Management System (ERTMS) National Implementation Onboard Project in Norway. This project, to be delivered over a six-year period, involves equipping nearly 400 rolling stock vehicles with Alstom's ERTMS system. Part of the installation work requires engineers to work at height on the train roofs and as Alstom has a strict rule that any working above 50cm is 'work at height', it is extremely important to ensure a safe working environment is provided for the engineers at all times. Consequently, Alstom issued a tender for a flexible and movable roof access solution together with a variable side access solution to accommodate the different types and shapes of rolling stock and provide the safe working environment they required.

As well as providing quality, reliable and robust equipment, restrictions and constraints in the workshop made the project even more complex. These constraints included the internal dimensions of the workshop resulting in a reduced space between the train roof and the ceiling, overhead cranes, the space between the tracks and the functional needs for installation. All of these needed to be considered in the proposed design and managed during the installation.

SOLVING THE PROBLEM

When faced with distinctive projects such as Alstom's, a site visit is essential so that the extent of the requirement and any logistical or site restrictions can be viewed and discussed carefully with the customer. Sales Manager, Andrew Walling, visited Alstom's workshop in Oslo to get an exact idea of the working environment and discuss the project in more detail with the project's leaders. This visit proved vital as he was able to discuss design modifications to Semmco's standard products so that they would work within the workshop restrictions but still provide the high level of safety required by Alstom. As a result of this visit and the detailed proposal provided, Semmco was appointed to complete the work and provide a specially modified modular roof access platform and side access platform.



Semmco's roof access platform consists of two distinct sections – the stairs to access the roof and the 'boxing ring' to keep the engineers safe when working on the roof itself. The standard roof access platform has stairs external to its footprint but because of the restricted space between the tracks in the workshop, this standard design would take up too much room and create additional safety issues. Consequently, for the Alstom platform, the stairs were incorporated within its footprint therefore reducing the amount of space occupied by the platform. The boxing ring provides a defined area of work for the engineers, enabling them to

safely access large sections of the train roof without the need to wear fall arrest equipment.

To access the inside of the rolling stock safely and easily, Semmco recommended its side door access platforms. These platforms, that butt up to the side of the train, enable the engineers, whilst carrying equipment, to move in and out of the carriages without any step or trip hazards and prevent tools falling onto the track.

When used together, both platforms enable the engineers to work on top of and inside the rolling stock easily and safely and because of this, safety and productivity is improved.



THE BENEFITS

Alstom has a reputation for and a high regard of EHS and so the success of this project was critical to maintain that reputation. Alfredo Gianoglio, EHS and Quality Manager, Norway and Rune Aune, Senior Adviser, Rolling Stock were delighted, not just with the products but also with the way Semmco worked with Alstom throughout the design process, the approval of drawings and the installation. The installation happened under COVID-19 restrictions, so it had to be carefully planned and orchestrated and involved pre-installation isolation and negative COVID-19 tests for the Semmco employees. Following installation, Semmco also provided on-site training and user and maintenance manuals.

Alfredo explained “The entire process has been extremely professional, and it is rare to work with a company whose employees are genuinely proud of what they do and the company they work for - it’s nice. It has been a pleasure working with the team from Semmco, particularly Andrew and his colleague Rob, who helped with the installation.” Rune added “The products work very well and because they provide a high level of safety our engineers have confidence in using them. Importantly too, our customers who visit our workshop have been very impressed and can see how we practice EHS in reality.”