

A maintenance revolution for the UK - update

Plasser UK's Mark Simmons details the latest on the Robel mobile maintenance system for Network Rail.

It is quite difficult to believe, but it has just been over a year since the contract was signed for Robel to produce eight mobile maintenance systems for Network Rail. While everyone understood the ambitious timescale, and the constant attention and management to ensure that the plan was followed, I certainly didn't appreciate the impact that the one year anniversary would have.

Latest visit

As part of the project team's ninth progress meeting, we carried out a build inspection and had the opportunity to sit at the operator's position and imagine controlling the work going on inside the maintenance unit. Within a year, a completely new type of vehicle to the UK, comprising of three separate parts, has completed detailed design and construction has reached a point where the bulk of the mechanical assembly is complete. This includes nearly all the hydraulic and pneumatic pipework and the electrical assembly is far advanced. In that respect, we are still on target to have the three parts mechanically coupled together before the end of the year!



The intermediate car part was, as you may remember, nearly complete at the last review of progress so now it can be found outside on the Robel test-track - visible from the air when flying into Salzburg, as pictured above. That is necessary because the intermediate car for the second system is well underway in production - the frame is completed and now in the assembly hall and the structure is already in place on top.

The Traction Supply Unit (TSU) has the most assembly work and still has the furthest to go. However, the project team were able to walk from end-to-end through the machine and



Above: The first completed intermediate car. Below: Work progressing on the TSU.



have a feel for the space inside the mess room, the corridor and the workshop area - all currently having their interiors fitted.

The drivers' cabs for both the TSU and Mobile Maintenance Unit (MMU) are in a similar state - the drivers' seats are not yet fitted, but the drivers' desks are both in place - so it was possible to stand and imagine

driving the system out to its first successful operation. More important than driving though is operating the MMU. The operating console and its seat are set-up and everyone wanted to have a chance to view the important work going on inside the MMU.

The side-walls were extended to their full opening position and it was



Right: Engine and power unit viewed from inside the TSU.

Above: The TSU exterior showing the engine and equipment in place.

Right: Messing facilities being fitted out inside the TSU.

Below: Exterior view of the MMU with the driving cab on the left.



pleasing to everyone who has been involved in this project from the start how much room is available - especially as they have had to hear me constantly reminding them that the w6a gauge profile for the UK constrains us considerably and our system will be narrower and shorter than those in Europe.

Other developments

The construction progress on the main machines has been so consistently good that it was decided to devote most of this progress meeting to reviewing the development of the tools that will be used inside the vehicle. In principle, existing tools currently in use can be operated. However, in a drive to achieve the best out of the new systems, Robel is redesigning a number of tools specifically for best operation inside the MMU. This involves altering some tools, for example, to remove the motors and power them directly from the supplies (e.g. hydraulic) built into the sidewalls of the machine. This allows the tools to be made shorter and narrower and make best use of the space available.

Various specialist members of the project team, therefore, actually arrived earlier in the week and participated in reviews and demonstrations, checked over concepts and looked at prototypes. The main project team then had a detailed run down of the planning and progress future timescales for all the various tools as well as a review of the results from the earlier workshops.

Of course, the weather was also organised to suit with 20°C and clear skies allowing demonstrations outside, as well as the intermediate car to be seen in all its glory.



Above: Interior of the MMU illustrating the available work area with the side-walls fully deployed.



Above: End of the MMU that will be connected to the intermediate car.

Right: The side-walls extended on the MMU seen from the outside.

