

A maintenance revolution for the UK - update

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

The last review on the progress of the Robel Mobile Maintenance System for Network Rail featured in *Rail Infrastructure* Issue No: 96. Concept design was frozen and detailed design underway, plus the project team had the thrill of seeing the first plates cut for the initial machine.

Vision to reality

The team's latest visit to the Robel factory in Freilassing was no less exciting, but also brought home the reality of a production line keeping up with the tight delivery schedule that will produce eight systems consisting of three machines, each delivered in little over a year. That was brought home forcibly when we saw the first plates cut for the second system already. It reminded the whole project that the machines were progressing through the factory according to schedule and everything needs to be in place to receive the first of the machines into the UK in July 2015.

That means having a stabling point with access and a shore supply as well as an operating and maintenance crew trained and prepared. Also a plan of work, operating methodology and the logistics to ensure all the necessary tools and materials are ready for the machine on its first shift. Not only that first shift, but the next and the one after that - and before you know it a stabling point, crew and logistics for the second system and the third.

Of course, a highlight of the visit was to see that the simple set of plates seen last time had begun to transform into the frame of a machine.



Build progress

In the two photos above, you can see the intermediate car frame upside-down in the assembly hall. This gives a really good view showing it complete with rail-storage facility, shaped to accommodate the side tail-lifts and fitted out for the braking system. Those inspecting the first of the 24 machine frames that will be produced were heard on a number of occasions commenting on the care, precision and detailed attention with which the assembly was taking place.

Standing next to the frame were also the I-beams forming the spine of the intermediate car, as pictured right. These will carry the through-cranes and stacked on top of them are the constructed sections that will form the framework for the vehicle sides. To make it easier for those not used to assembling 22 metre long jigsaws in their heads, a 3D layout had been strategically placed.

Further down the factory, the first bogie frames were spied, waiting near the assembled wheelsets in preparation for assembly and eventual installation under the frame.



New Equipment



For those who had not had their fill of assembling pieces of machines in their head, a quick look in the metal waste bins outside showed how carefully cut-out each plate was, as pictured top left. This allows Robel to maximise the use of each sheet being cut and minimise the waste generated.

Moving from the assembly hall to the

frame shop the team were able to get a close-up view of the long sections for the frame of the traction and supply unit (69.40 TSU). Behind those, the bolsters for each end sat together waiting to join it all together, as pictured above. The lead designer helpfully pointed out that the different ends can be easily distinguished. The bolster on the top is shaped ready to be fitted



with the standard buffers, draw-hook and coupling of the end of a machine while the other is prepared for the draw-bar semi-permanent coupling that will connect it to the intermediate car frame which had been looked at earlier in the assembly hall.

Keep up the good work!

Being able to visibly check the construction is a far more rewarding way of monitoring the progress of the production, especially when it is clear that it is still well on target to meet the ambitious delivery schedule.