PRACTICAL THE MODEL

LIEBHERR

This model of a Liebherr A900CZW by German firm NZG is the closest to what Story Rail operate. At a scale of 1:50 it saves having to build all the model from scratch. We can make it run on O gauge track with some modifications (albeit being a fraction under scale).

The die-cast model is designed as a 'low rail' continental prototype excavator. Story Rail

operate 'high-rail' excavators. Information on the

both the front and rear parts of the chassis need

can be read on pages 46 and 47. As a result,

replacing.

differences between 'high-rail' and 'low-rail' vehicles

The model needs motorising, so a small motor must fit under the chassis. Unfortunately, some elements of the original moulding are in the way. These areas are circled with a pencil and removed with a micro-milling machine.

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MODIFYING THE CHASSIS Right Making sure that everything runs smoothly and evenly is paramount as we will be relying on the contact made between the rubber tyre and metal wheels to propel this machine – no margin for wobbles permitted! The axles are sourced from Northwest Short Line (NWSL) in the US. The wheelsets are live with the chassis and one wheel is isolated, reducing friction caused by too many pick-ups. NWSL has a good range of wheels to suit most applications and even offer a choice of different axle types!

DETAILING THE BODY

The original excavator body. Only the hydraulic rams are plastic, giving the model a good weight. The hydraulic lines are the correct diameter, but there are twice as many on Story Rail's RRVs!

The rubber hydraulic hoses simply

silver sheet, cut and folded around a pair of pliers to shape

slide over the nickel pipework and are threaded through the support brackets. For the smaller diameters, I used very thin 0 75mm diameter black wire

> The connections for the boom accessories are white metal steam loco parts that are super glued into place. The same applies for the valves and other boxes on the model.

Above First things first, this model needs to be taken apart to assess the room available for fitting of parts. A small Phillips screwdriver is used to remove the screws that are surprisingly tight.

Left The different elements that comprise the model are separated. The way the model is designed makes the task of modifying and fitting elements to it so much easier. Each part can be worked on individually.

BRM | Nove

The body of the model generally lacks detail. A very basic

representation of the hydraulics, grilles

importantly, all the inscriptions offered

on the diecast model are in German

These need removing and changing.

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and other components is offered, but

far more can be done to improve

the model in these areas. More

and unlike anything seen on the

vehicles operated by Story Rail.

USEFUL PROJECT PARTS



The micro-motor gearboxes for this project are sourced from Hong Kong (gizmozone. com). They are of minute proportions, as seen by the adjacent OO gauge motor and gearbox adjacent, but have plenty of power and rotate at 60rpm, perfect for the application at hand!



Operating this machine is a two man job. Two decoders will be fitted from the new Zen range by DCC Concepts. One will drive the chassis and power the directional lights, the other will control the rotation of the turret, work lights and flashing blue beacon. Stay-alive capacitors (also from DCC Concepts) as shown in the photo are vital to ensure constant power as the model only picks up on two axles!

The small interior components of an old relay switch are useful for making discreet electrical pick-ups.

Some handy accessories for the project from msw-modelle.com. From rubber hose, to draw bars used to connect to trailers and lengths of assembled chain with hooks.

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MORE

STAGES

OVERLEAF

III È

Left The new scratch-built elements are evident in this shot of the underside of the chassis. The diecast and primitive looking steps are replaced with new ones cut from brass sheet.



Etched strips of tread plate are then alued over the top of these. The axles need widening by 2mm to allow the rail wheels to fit comfortably in place. The tyres rub

against the steel wheels with just enough friction to power the vehicle along without straining the motor. Note the mitred gear on the driving axle that will mesh with the motor gear when fitted.

> David Parkin's Modern Motive Power detailing etches are useful as they have a selection of tread plates to choose from. When combined with some wire handrails, they look effective

The pipes on these excavators are made from stainless steel and look very clean. I used some 1mm diameter solid nickel silver rod from Albion Alloys, carefully soldered together. The support brackets are simply strips of 0.025 thou nickel