

SANDVIK

Model Review

Steven Downes looks at some different models for plant enthusiasts.

Sandvik Mining and Construction is a subsidiary of the Sandvik Group and produces a range of specialist equipment for the surface and underground mining sector. These types of machine are not usually seen in model form, so it is refreshing to see that Conrad has been commissioned to produce a new range of highly-detailed 1/50 scale diecast models.

The DP1500i is a self-propelled surface drilling rig featuring a crawler chassis and operator cabin with an HL1560 hydraulic rock drill, which gives a high rotational torque for drilling into various rock conditions. Conrad has done a great job capturing all the details of the full-size machine into the 1/50 scale diecast model presented here.

The tracked undercarriage has two small hydraulic cylinders, which allow the track frames to pivot by about 15 degrees in both forward and backward direction, with moulded plastic tracks fitted to the frames. The rear body casting has a crisply-cast vent texture on both side panels and top engine housing, along with a chrome exhaust and rear-facing work lights with painted lenses.

The rock drill is mounted to a cradle which slides along the feed, while the replicated drill rod positioning system swings out and can hold one of the metal drill rods, which are supplied in the box and fit into the rod holder.



The boom features a telescoping section and a number of hydraulic cylinders, which allow the boom to be positioned at a number of different angles, allowing both horizontal and vertical drilling poses.

The large cab has been fully reproduced with a detailed interior, consisting

of contoured seat, joystick controls and display console. The large front window has an opening cab guard screen which is a nice touch on the model, while the work lights integrated into the roof and lower cab have silver painted lenses, adding to the level of realism throughout.

The model is finished in the striking orange and grey Sandvik livery, with accurate placement of the machine's designation on the cab sides and rear body.

The second model release is the Sandvik LH621 underground wheel loader, which has been accurately modelled from the full-size

machine. The LH621 is powered by a low emission, 475hp Detroit Diesel S60 DDEC engine and Dana 8421H transmission with a high breakout force, smart geometry and responsive controls which result in high



The Sandvik DP1500i Self-Propelled Surface Drilling Rig from Conrad in 1/50 scale.



**Sandvik LH621
Underground
Wheel Loader.**

productivity and low operating costs.

The rear engine compartment has open sides, revealing the internal engine components that have been replicated, including the engine block, exhaust stack, cooling systems and hydraulic piping. The large plastic radiator has an open grill which allows the cooling fan to be seen within, while authentic chevron safety markings have been printed on the bumper which has integrated work lights with painted lenses.

The side-mounted, fully-enclosed cab offers excellent protection to the operator and the interior detailing, including driver's seat and steering wheel are visible through the glazed windows.

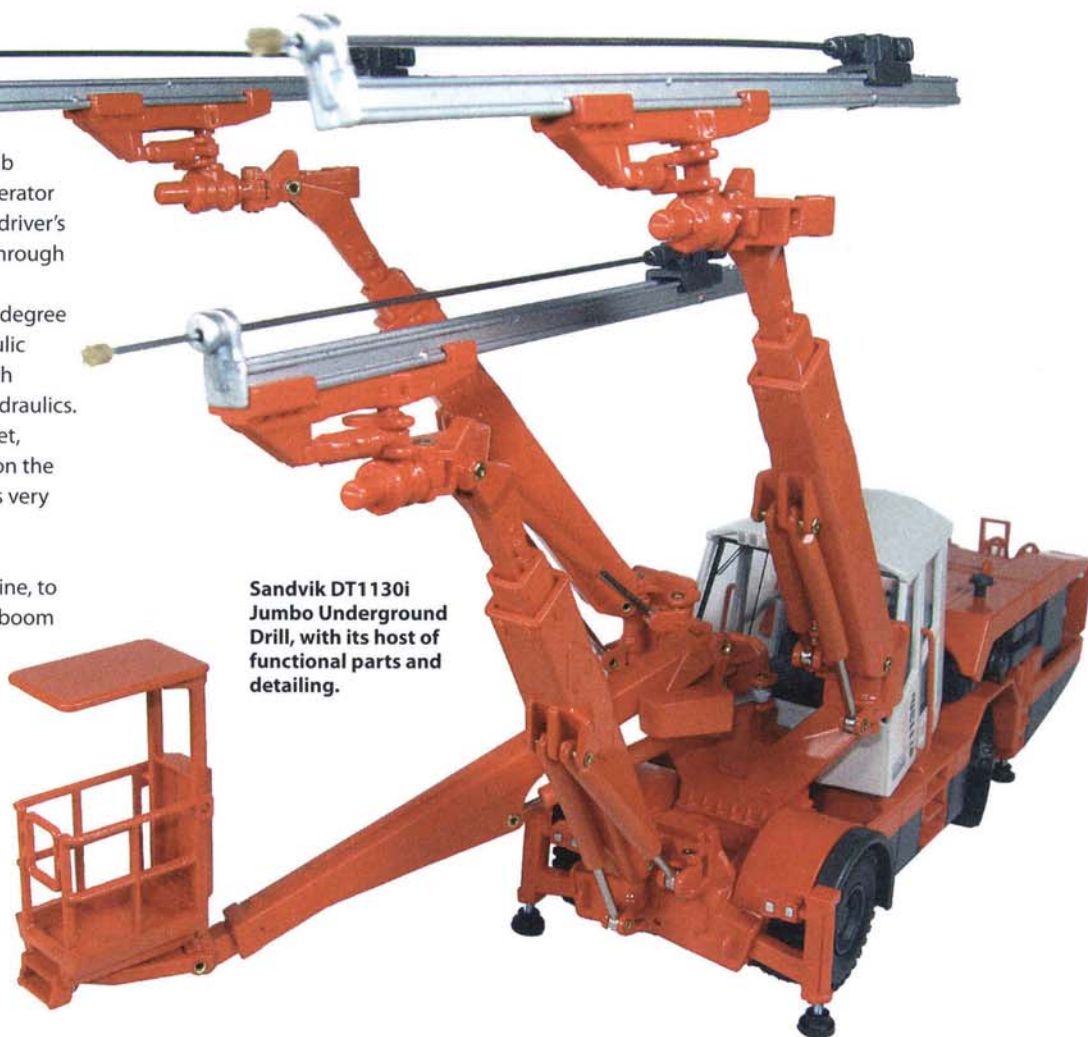
The articulated chassis has a good degree of movement, with two small hydraulic cylinders used for steering along with flexible piping to the front loader hydraulics. The range of movement of the bucket, complete with wear plate detailing on the bottom and cutting edge surfaces, is very realistic and cushioning stops have been added to the back of the bucket, just like the real machine, to prevent the bucket from hitting the boom when the bucket hydraulic is fully extended. The paintwork reflects the Sandvik colours with authentic printing of the safety markings and anti-slip strips on the upper deck adding greatly to the realistic appearance.

The Sandvik DT1130i Jumbo Underground drill is used for tunnelling and cavern excavation work, utilising three TB150 telescopic booms with HFX5T rock drills, which deliver superior

performance and long life along with a basket boom which is used for utility and bolting work, while the TC11 carrier has a 148hp engine with Clark transmission and a HP575 power pack consisting of 75kW three-phase motor. The 1/50 scale model from

Conrad is an excellent replica with a host of functional parts and detailing throughout capturing every aspect of the full-size DT1130i machine.

The enclosed cab features a replicated interior with two separate stations. The raised seating position at the rear of the cab is used for manoeuvring the machine into position, with the operator sitting side on to give a good view of the rear of the machine.



**Sandvik DT1130i
Jumbo Underground
Drill, with its host of
functional parts and
detailing.**

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The main, centrally-located operator station has a contoured seat, with display panels and controls for operating the three main drill booms, which are clearly visible through the large front windscreen, which is complete with printed windscreen wipers.

The entire cab can be elevated via a two-stage central support and side-fitted ladders, complete with grab rails, extend with the cab, which is a great touch on the model. Accurately-scaled grab rails have also been added to the cab frame, with front and rear-facing work lights integrated into the cab roof, complete with painted lenses. The open design of the rear engine compartment reveals the various electrical and hydraulic components within, including an electrical cable drum with simulated electrical cable and a water hose, along with fold-down rear access ladder and two stabilisers mounted behind the rear wheel arch, which can be lowered to give a stable footing for the model. The rear wheels have working steering with a good degree of turn, while the front of the model features a double set of wheels with authentic treaded rubber tyres, along with two more stabilisers, which extend from the chassis with screw-

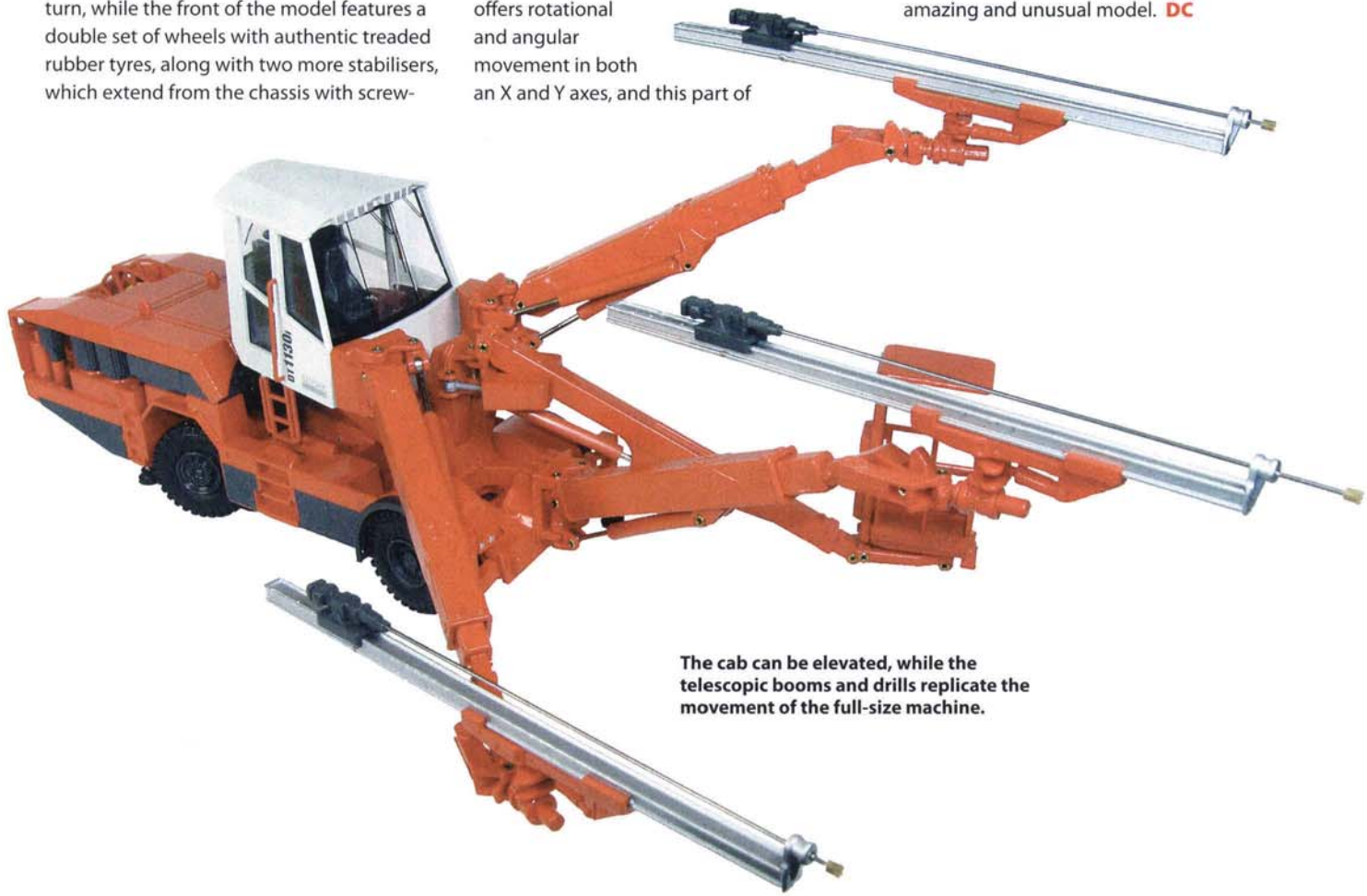
threaded pads that can be lowered to raise the wheels off the ground.

The two section telescopic boom mounted to the chassis is fitted with a workman basket, used for utility and bolt driving purposes, which has all-round railings and roof panel for total operator safety and can be both tilted and rotated to obtain the perfect reach. Each feed is connected to the boom via a linkage which offers rotational and angular movement in both an X and Y axes, and this part of

the model fully replicates the movement of the full-size machine. The drill motor slides smoothly along the mast and a metal drill rod with detailed drill tip is fitted to each mast. Each feed slides smoothly along the frame mounted to one of the three main, three section telescopic booms which have both height and angular movement and all this functionality shows just how much engineering has gone into producing this amazing and unusual model. **DC**



Rear view of the Sandvik DT1130i Jumbo Underground Drill is equally detailed.



The cab can be elevated, while the telescopic booms and drills replicate the movement of the full-size machine.