

# Volvo concept models

Ian Webb reviews an interesting new range of models.

**S**cale models are usually produced as promotional items to support the marketing effort for real machines. Occasionally models are commissioned of historic machines perhaps to celebrate a corporate anniversary.

Volvo has taken a new step by producing three futuristic concept models which might indicate the way machines will develop.

The models are in 1:50 scale and are marketed by Motorart, although the maker's name does not appear on the packaging or the model. They are all limited edition models and come with a sheet which has instructions, and also narrative about the thinking behind the concept machines.



Above: Three Volvos of the future.

## Gryphin

The Gryphin is a wheel loader and the main design idea is that it will have fully independent wheels which have noiseless electric wheel motors and a zero emission electric engine. This will allow it to 'climb' to some extent. The cab has large areas of glass that will tint automatically in bright light or heat up in cold weather.

The main functions of the machine can be managed automatically with an extendible counterweight improving stability by 20 per cent. The fully

independent suspension will allow the machine to be lowered for travelling at speed or raised for uneven ground.

The Gryphin model has nice rubber tyres mounted on interesting hubs which represent the electric drive and the independent suspension has been modelled well and works effectively. The cab has fine lattice work and the interior is crisp with the joystick controls being the only ones present, and the cab door opens up like a flash sports car.

At the rear, the adjustable counterweight can be pulled out and retracted although there are no obvious lights detailed anywhere. The bucket-raising mechanism is simple and effective and it is not entirely clear how one of the linkages is powered but then this is a futuristic machine after all. When lifting the bucket very high, the lift cylinder piston pops out of the jacket which is not so good.

**Overall rating: Recommended**



Above: The Gryphin stands high on fully independent suspension.



Above: The lifting door provides access.



# Centaur

The Centaur is an articulated dumptruck and its most innovative feature is that the front cab section can be uncoupled from the trailer with computer control and gyroscopes enabling it to balance on two wheels. This would allow the cab unit to quickly and easily attach to alternative trailers such as a water bowser or pipe carrier. Proximity sensors around the machine would detect people and objects for maximum safety.

Again the drive mechanism is an

electric motor in each wheel and the fully independent suspension would allow a variety of drive heights. The tipping body is telescopic, closing up as it tilts to force material out and maintain a low centre of gravity.

The model version has the very large wheels of the concept and the hubs also seem to pay homage to sports car design. The independent suspension is very good with significant movement possible. Lights are indicated at the front and back.

At the front, the cab is certainly futuristic with some steps folding down and the windscreen rising to allow easy entry. This cab has a steering control and foot pedals also. It is detachable from the tipper body and to allow it to appear to balance a special intermediate ski is provided.

The tipper is interesting as it has no lift cylinder modelled. It is telescopic like the concept and has an opening tailgate which works well.

**Overall rating: Highly recommended**



Above: The Centaur has a detachable front axle.



Above: Unusual front entry with stairs.

# Sfinx

The Sfinx is an excavator and is another machine driven by electric motors. The power source is a fuel cell which is able to move as an active counterweight and compensate for the forces on the machine making it more stable and efficient. It has four independent tracks which have variable contact area for different ground conditions or even for high speed travel.

The cab is removable so that it can become a remote workstation with the

excavator unit working at distance, perhaps in hazardous conditions. Another innovation is the lattice structure of the boom which reduces the material content.

The model has independent rubber tracks which roll well and they are fully adjustable and configurable like the concept except there is no steering mechanism. Some weird-looking poses can be produced.

The body is sleek and has the large

movable section at the rear to act as a variable counterweight. The operator's cab is also modelled to be fully detachable although it is not fitted to an extending boom like the concept machine.

The boom and bucket work conventionally and are modelled with lattice structures.

**Overall rating: Highly recommended**



Above: The Sfinx has a very flexible track arrangement.



Above: A detachable cab allows remote control working.

These are interesting and unusual models and it remains to be seen whether they are popular with collectors. They are well made and of high quality with a good selection of features, and the paintwork seems to have a metallic finish. It is more difficult to judge whether they are

detailed as there is no reference point of a real machine, but certainly the cab interiors are good.

The only negative point is that they are expensive at around £200 each. They are available from the Volvo merchandise shop at [www.volvomercandise.com](http://www.volvomercandise.com)

which probably indicates that they will be produced in limited numbers.

Ian Webb reviews construction models on his website and you can read more at [www.CranesEtc.co.uk](http://www.CranesEtc.co.uk)