

## PRESS RELEASE

### **VDL BOVA Magiq now also available as 3-axled Magnum in 2 different lengths**

VDL BOVA has expanded its Magiq range to include two 3-axled models, with a maximum total weight of 24.5 tons and permissible loading capacity of around 8,500 kg.

Since European legislation pertaining to buses longer than 12 metres was amended in 2003, Futura 3-axled models have accounted for over 10% of the entire Futura production volume.

VDL BOVA has therefore also chosen to let the Magiq benefit from the typical advantages of three axles: the large luggage space and high load capacity. The latter aspect in particular makes it possible to install all sorts of systems, including air-conditioning, without encountering weight problems.

#### **The Magiq Magnum**

The shortest 3-axle model, the Magiq HD 131 Magnum, has an overall length of 13.1 metres and a wheelbase identical to that of the standard 12-metre Magiq, namely 6.15 m. The addition of a third steered axle has rendered the rear body slightly larger than that of the 12-metre version, but has not affected its manoeuvrability at all.

The longer 3-axle model, the Magiq HD 139 Magnum, has an overall length of 13.9 metres and a 6.53-metre wheelbase. The latter gives an enormous luggage space, which amounts to almost 12 m<sup>3</sup> in the standard version.

In standard spec, the HD 131 can accommodate 53 passengers and a guide, and the HD 139 57 passengers and a guide. Alternative layouts are available on request. Both versions are single-deck models with a height of 3.665 metres.

#### **Further development**

Originally launched in 1999, the VDL BOVA Magiq has undergone quite a few structural changes during the past few years. Despite having retained its unique character and distinct design, beneath its exterior, the Magiq now reflects more operators' practical requirements.

The result is a revamped VDL BOVA Magiq range, comprising coaches that are lighter than their predecessors, without losing any of their characteristic design elements; elegant, timeless stylistic features – such as the shallow oval – which is reflected in all sorts of components and functional features.

As the next phase of development of the Magiq concept, VDL BOVA has now launched the Magiq with a steered rear axle, a coach that combines the design elements, comfort and driving characteristics of the Magiq concept with more generous dimensions, which offer additional space for both passengers and their luggage. Moreover, there is a greater

margin in the permissible overall weight, which enables the installation of additional facilities without any weight worries.

In terms of dimensions, the new Magiq is almost identical to the original, with interior headroom of 1920 mm, and entrance step height of 340 mm at the front and 368 mm at the rear, when 295/80 R22.5 tyres are fitted.

## **Disc brakes all round**

The VDL BOVA Magiq was designed to be an exceptionally safe coach. Not only does it comply with all European passenger safety standards, it also offers a number of additional features.

Besides its passive safety features, the Magiq is distinguished by significant active measures, in which field its brake system, driving characteristics and road-holding play an essential role. For instance, the Magiq naturally has disc brakes all round, while it has been constructed in such a manner as to retain a low roll axis, even when fully laden. This helps give the bus a greater safety margin in the event of sudden evasive manoeuvres. ABS and ASR are also among its standard features.

To lend the bus maximum stability and steady steering, the air buffers on the driven axle have been fitted as close as possible to the outer edges and combined with a stabiliser and sturdy shock absorbers. A ZF intarder has also been fitted to the rear of the gearbox to provide additional braking force.

## **The smart third axle**

The VDL BOVA Magiq's front axle features ZF RL-75E independent wheel suspension, with double front wishbones and air buffers. This system enables a maximum turning angle of 60 degrees on the interior apex, thus making for substantial manoeuvrability.

The Magiq Magnum's trailing axle is a smart one, as it steers itself at low speed, both in forward and reverse directions. This helps reduce tyre wear due to torsion, and therefore cuts costs.

The steered rear axle enables a rear turning angle of 21 degrees, so that the wheels on the third axle remain precisely on track with the front ones. The ultimate effect is a turning circle of 20.8 metres in the case of the HD 131 and 21.6 metres for the HD 139.

The new VDL BOVA Magiq 3-axle models are equipped with DAF XE, Euro 3 engines with a capacity of 315 kW (430 hp) and 1950 Nm of torque. They are fitted with a manual eight-speed gearbox as standard, with an HGS hydraulic gear-change system.

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