

Hunter Expressway (Australia)



Description of the project

The Hunter Expressway was originally proposed in 1988 but the construction started in 2010 after 22 years. It provides a much needed east west link in the Hunter Valley, connecting Newcastle and the lower Hunter and hence reducing travel time by almost half an hour.

The Eastern Section from F3 to Kurri Kurri comprises three viaducts through the Sugarloaf Range. The viaducts have a total length of 787 m and are up to 47 m in height above the ground.

Scope of products supplied

mageba supplied not only the spherical bearings, shear keys and modular expansion joints for the viaducts but also a structural health monitoring system.

The installed RESTON®SPHERICAL bearings are all equipped with the mageba high-grade sliding material ROBO®SLIDE and have a load carrying capacity of 30'000 kN. The RESTON®FORCE shear keys transmit a total horizontal force of 8500 kN.

The supplied TENSA®MODULAR expansion joints have a total length of 142 m and allow for a total displacement of 680 mm.

In 2013 a hydrostatic tube balance monitoring system has been installed on all viaducts.

Highlights & Facts

mageba Products

Type: 60 RESTON®SPHERICAL bearings
12 RESTON®FORCE shear keys
12 TENSA®MODULAR expansion joints
ROBO®CONTROL structural health monitoring system

Installation: 2011/2013

Expressway

Location: Hunter, NSW
Country: Australia
Construction: 2010-2013
Type: Viaduct
Length: 40 km freeway
Builder: Thies

Location of the Hunter Expressway in New South Wales, Australia



The mageba TENSA®MODULAR expansion joint during installation on the first viaduct



The Hunter Expressway viaducts over Sugarloaf Range with its steep gullies.

