

Medupi Power Plant (South Africa)



Project description

Medupi is a coal-fired power plant in northern South Africa. When completed in approximately 2018, it will have six boilers, each powering an 800 MW turbine. In total, it will thus produce 4800 MW of power, making it the fourth largest coal plant in the southern hemisphere and the biggest dry-cooled power station in the world. The planned operational life of the station is 50 years.

The primary construction contractor is Hitachi Power Africa, with Alstom providing the steam turbines.

mageba scope

In total, mageba supplied 52 structural bearings to support parts of each of the power plant's six units. These comprised 4 RESTON®POT bearings and 48 RESTON®SPHERICAL bearings, designed to carry vertical loads of up to 8100 kN and to accommodate sliding movements of up to 440 mm.

The RESTON®SPHERICAL bearings were fabricated using ROBO®SLIDE high-grade sliding material as an alternative to PTFE. As well as being far more durable than PTFE, ROBO®SLIDE is also much stronger, greatly increasing the load-bearing capacity of spherical bearings in particular since these otherwise consist almost entirely of steel.

Highlights & facts

mageba products:

Type: RESTON®SPHERICAL and RESTON®POT bearings
Features: ROBO®SLIDE high-grade sliding material
Installation: 2012 - 2016

Structure:

Country: South Africa
Type: Power plant
In service: 2014
Capacity: 4800 MW
Contractor: Hitachi Power Africa
Owner: Eskom

The plant is located in northern South Africa, near the country's border with Botswana.

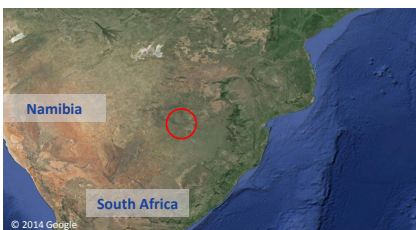
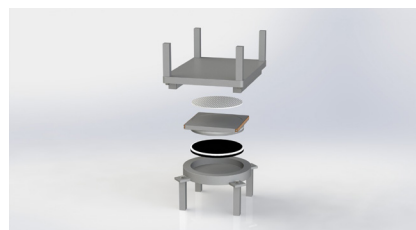


Illustration (exploded view) of a RESTON®POT bearing of the guided sliding type.



Assembly of a typical RESTON®SPHERICAL bearing, showing greased ROBO®SLIDE disc.

