

Kusile Power Plant (South Africa)



Project description

Kusile is a coal-fired power station that is currently under construction in South Africa, close to the cities of Johannesburg and Pretoria. When fully commissioned (expected in 2018), the station will consist of six units, each rated at approximately 800 MW, giving a total of 4800 MW - approximately 12.5% of South Africa's power generation capacity. As such, it will be one of the largest coal-fired power stations in the world. The plant is being built by Hitachi Power Africa, using turbines provided by Alstom, whose turbines generate 80% of South Africa's electricity.

mageba scope

To support coal conveyors in each of the power plant's six units, mageba supplied 48 RESTON®SPHERICAL bearings (for primary conveyors) and 4 RESTON®POT bearings (for inclined conveyors). These were designed for loads of up to 8500 kN. While some of the bearings are of the fixed type, resisting movements in all directions, most can accommodate longitudinal sliding movements of up to +/- 220 mm – some as free sliding and others as guided sliding bearings. Sliding is facilitated by PTFE in the case of the pot bearings, and ROBO®SLIDE high-grade sliding material in the case of the spherical bearings.

Highlights & facts

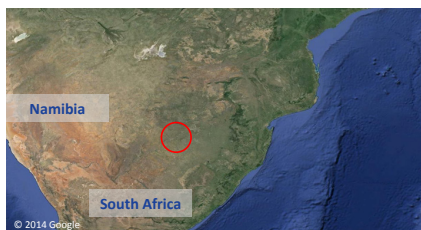
mageba products:

Type:	RESTON®SPHERICAL and RESTON®POT bearings
Features:	ROBO®SLIDE high-grade sliding material
Installation:	2013 - 2017

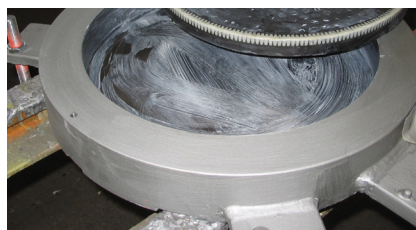
Structure:

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

The plant is located close to South Africa's capital, Pretoria, and biggest city, Johannesburg.



Assembly of a RESTON®POT bearing, showing its elastomeric pad during placing into its steel pot.



Assembly of a RESTON®SPHERICAL bearing, showing its two ROBO®SLIDE sliding surfaces.

