

Constanta Wind Farm (Romania)



Project description

The Fantanele-Cogealac Wind Farm in Constanta County, eastern Romania was constructed between 2008 and 2012, becoming the largest onshore wind farm in Europe. With 240 wind turbines on a site of area 110 km², it has a total power generating capacity of 600 MW. The spinning rotor of each turbine has a diameter of 99 metres, and is connected to the supporting hub at a height of 100 metres above ground level.

mageba scope

In 2010, mageba supplied four vibration damping systems to control the movements of parts of a key transformer on the wind farm. Each system comprises a RESTON®SA shock absorber and a LASTO®BLOCK elastomeric bearing. The shock absorbers were designed for a force of 15 kN and a stroke of +/- 50 mm, and were fabricated from stainless steel to maximise durability.

Two of the shock absorbers were subjected to laboratory testing before delivery to site.

Highlights & facts

mageba products:

Type: RESTON®SA shock absorbers, LASTO®BLOCK elastomeric bearings

Features: Shock absorbers and bearings combined to form composite units

Installation: 2010

Structure:

City: Constanta

Country: Romania

Type: Wind farm transformer

Completed: 2011

Client: Areva Energietechnik GmbH

Owner: CEZ Romania

Constanta is located in eastern Romania, on the west side of the Black Sea



A RESTON®SA shock absorber, fabricated from stainless steel, following laboratory testing



Performance as tested at 65 mm/minute (Effort [kN, Y-axis] versus Movement [mm, X-axis])

