“The most innovative building technologies”

Motorways

Sacyr has built roads and fast tracks for more than 16 billion euros. More than 3,300 km, more than 64 km of tunnels and more than 107 km of viaducts projects in Spain, Portugal, Italy, Ireland, Chile, Costa Rica, Colombia, Uruguay, Peru and India. It has 3,600 km of motorway concession and the preservation of more than 4,000 km of roads. The group is 7th on the ranking of transport infrastructure contract managers in the world of Public Works Financing (PWF) with 24 motorways contracted in seven countries.

The Pumarejo Bridge

The Pumarejo Bridge in Barranquilla will be the longest bridge of Colombia, with an extension of 2.28 km. This bridge will be a cable-stayed bridge and will span 380 meters between the 80 meter-high pylons, the deck will be 38.1 meters wide in the cable-stayed section and 35.1 meters wide in the access sections; the clearance gauge for the passage of vessels will be 45 meters.

Award Pumarejo Bridge in Barranquilla (Colombia)

Sign Pumarejo Bridge in Barranquilla (Colombia)

New technologies using recycled materials

Sacyr has developed the technology necessary to create asphalt mixes using recycled material at less than 100ºC, which will be used for maintaining and re-surfacing the motorways and will have a lower environmental impact. A European project is also being developed to make this viable in city streets.

Warm bituminous mixes technology

New thermography techniques

A **research project** by Sacyr has given rise to a change in the national regulations on **thermal segregations** to make road surfaces more durable using infra-red thermography techniques and mobile transfer silos.

Sacyr, winner of best environmental practices award

Las Pedrizas Motorway

Las Pedrizas Motorway. Given the high complexity of construction due to the relief of the land, 29% of the 28 kilometre route consists of viaducts and tunnels. Construction of embankment using large, chopped scrap tyres, based on an R+D+i project (to find out if it was technically and economically viable to build lightweight embankments using this type of waste).

Las Pedrizas Motorway

Las Pedrizas Motorway

Talavera de la Reina ring road

Talavera de la Reina ring road (Toledo). Its suspension bridge is notable for the innovation that has been applied in the deepest foundations (56 piles with depths of 2,500 mm and 33 m, capable of transferring a 110,000 ton load to the earth) ever made in Spain, with a single sloping 192 m high pile to support a 318 m span with concrete deck (deemed to be a world record in this type of bridges) and the installation of the second longest stay cables in Europe (408 m).

Talavera de la Reina ring road

Los Carneros by-pass

Los Carneros by-pass of the N-430 in Badajoz. Includes a unique 561 metre long viaduct for crossing the Guadiana River (99+132+132+110+88 m). To adapt this type of deck to the complex construction process, some auxiliary metal structures were installed due to the limited space available.

Los Carneros by-pass, N-430 (Badajoz)

Salerno – Reggio Calabria Motorway

Salerno – Reggio Calabria Motorway (Italy). 31 kilometre section that, due to the complex relief of the land, requires the building of 38 viaducts (total of 12.2 km) 11 double tunnels (pipe length of 15.3 km) and 8 double cut-and-cover tunnels (2.2 km).