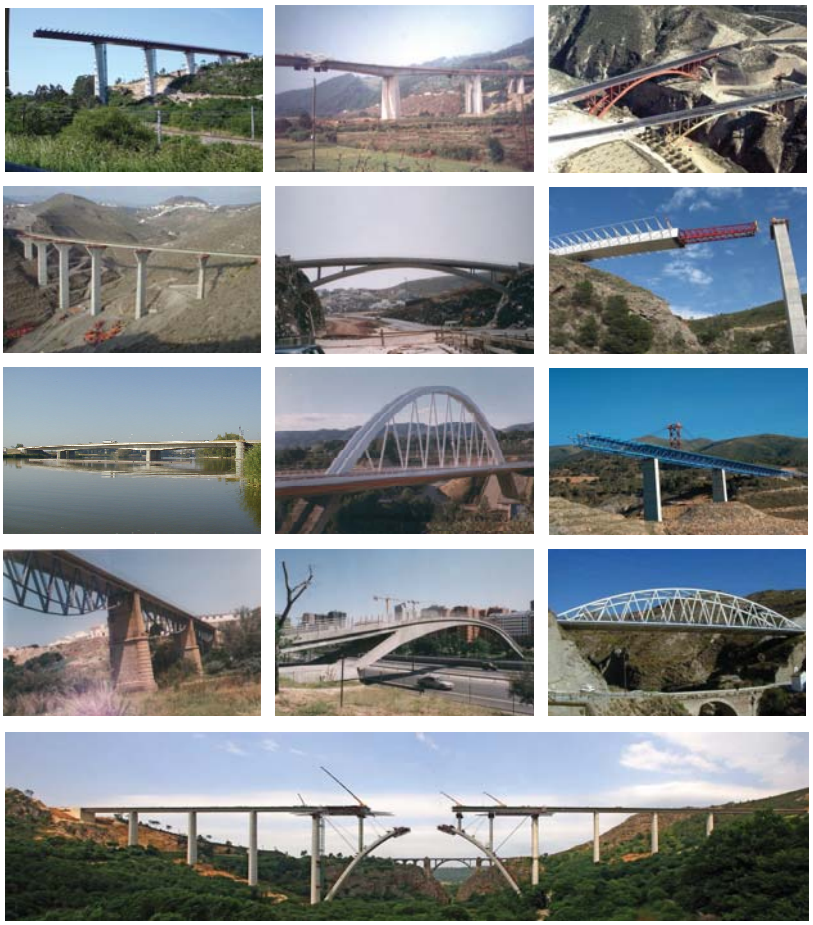
TORROJA INGENIERÍA



CIVIL ENGINEERING

- DESIGN
- PROJECT MANAGEMENT
- MAINTENANCE AND REHABILITATION
- INDEPENDENT CHECKING
- STANDARDS DEVELOPMENT

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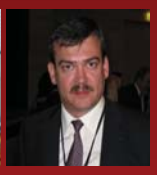
EXECUTIVE LEADERSHIP TEAM

José A. Torroja
President

José Mª de Villar
Chairman & CEO

José M. Simón-Talero
General Manager

Pilar Muñoz
Financial Director



Pedro P. Sánchez
Director of Human Resources

J. Andrés del Valle
Quality Director

Ángel Carriazo
Technical Director

Our History

In 1927 Prof. Eduardo Torroja created his own "bureau of studies", where all his well-known designs were ellaborated. In 1961 Eduardo Torroja passed away, and his son José Antonio, who had joined the company some years ago, continued the same activity of designing structures. In 1967, the original "bureau of studies" was transformed into a consultancy firm keeping the original name.

In 2004, new partners were incorporated and some new fields of activities were opened, establishing the actual TORROJA INGENIERIA S.L.

Today and always, our main philosophy is providing the best quality of services to our clients in order to fulfil all their needs and requirements.

About Us

Our activity has always been mainly focused on consultancy services concerning civil engineering, both on the design and the project management of a wide range of structures, highlighting bridges, buildings, special structures, water tanks, harbours…

We have developed our activity mainly on the Spanish market but we have also participated in several international services, mainly in the USA, Canada, Africa, Australia and South America, with a wide experiencie in the use and application of international standards and codes: AASHTO-LFRD (USA), European Eurocodes (EC), BS (UK), NBR/DNIT (Brazil), CAN/CSA-S6-06 (Canada), AREMA (USA/Canada – Railway), AS-5100 (Australia), N.PRY.CAR.6-01 (Mexico)… We have also collaborated with the European Commission.

In the mid 90's, TORROJA INGENIERIA S.L. began the investigation and development of Management Systems for the Maintenance of Structures, being the precursors of new methods of inspection and evaluation of existing structures and also creating new assessment methods to evaluate the potential risk of scour in structures crossing over watercourses. To the date, the staff of TORROJA INGENIERÍA S.L. has performed over 5000 inspections of bridges.

Nowadays, more than 20 engineers and architects work for the company. The average experience of the technical department engineers is around 15 years.

From the very first beginning of our company, the research and development of new methods of calculation of structures has been an important part of our daily work. Nowadays, the "investigation and research department" is working on new numerical models for control and dimensioning of different structural typologies and also on developing new methods of inspection of existing structures.

Although our activity was initially developed mostly in Spain, the expansion of new international markets has encouraged the company to create subsidiaries, such as TORROJA INTERNATIONAL LLC in 2011, based in the U.S.A., TORROJA PR, L.L.C., in 2012, based in Puerto Rico, and TORROJA ENGENHARIA, in 2013, based in Brazil.

SINGULAR BRIDGES

Segmental Cantilever Construction

- Ponte sobre o río Piracicaba (Brasil)
- Viaduct of Silva I (Las Palmas)
- Viaduct of Ontón (Cantabria)
- Viaduct of Piracicaba (SP-Brasil)
- Viaduct of Agüera (Cantabria)
- Bridge of Ribarroja(Tarragona)
- Border bridge over Miño river
- Bridge of Rontegui (Bilbao)
- Bridge over Miño river (Orense)
- Bridge over Ulla bridge (Pontevedra)
- Viaduct of Juanambú (Colombia)
- Viaduct ofl Cinca (Huesca)
- Bridge over Duero river (Zamora)
- Bridge "Las Fuentes" (Zaragoza)
- Viaduct of Silva II (Las Palmas)
- Viaduct ofl Dúrcal (Granada)

Precast Segmental Cantilever Construction

- Viaduct of Huarea (Granada). A-7
- Viaducto Rodrigo I (Tenerife)
- Viaducto Rodrigo II (Tenerife)
- Viaduct of Niágara (Tenerife)
- Viaduct of Tejina (Tenerife)

Self-Launching Movable Scaffolding Construction

- Viaduct of Castro. AVE (A Coruña)
- Viaduct over Esla river (Valladolid)
- Viaduct of Porma river (Valladolid)
- Viaducto "Garcia Sola" (Badajoz)
- Viaduct of Sáramo. AVE (A Coruña)
- Viaduct of Agualimpia (México)

Incremental Launching Construction

- Viaduct of Porcía (Asturias). A-8
- Bridge of Andarax (Almería)
- Viaduct of Riquianez (Las Palmas)
- Viaduct of Vicario (Granada). A-44
- Viaduct of Rules (Granada). A-44
- Viaduct of Alvares (Asturias). A-8

Viaduct of Huarea

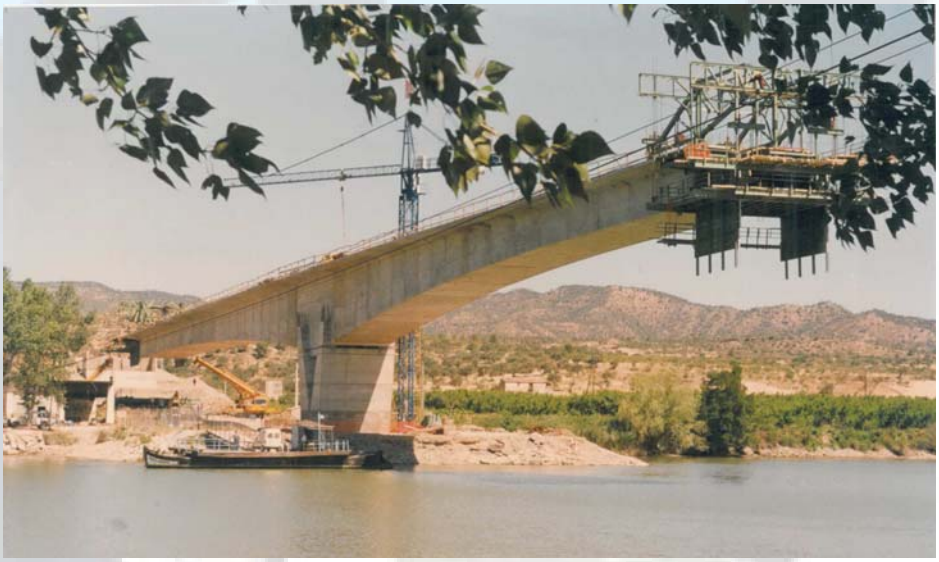
Typology: Segmental precast continuous girder
Length: 301,52 m
Spans: 90,76+120,0+90,76 m
Deck width: 11,5 m
Max. height: 73,5m
Construction method: Balanced cantilever using launching equipment for precast segments

Viaduct of Rules

Typology: Steel truss
Length: 585 m
Spans: 85 + 2x140 + 2x110 m
Deck width: 24 m
Max. height: 98 m
Construction method: Launched deck

Viaduct of Catoira

Typology: Continuous concrete box girder (main bridge)
Length: 272,0 m (main bridge) y 449,0 (access)
Spans: 64,0+144,0+64,0 m (main bridge) y 14x30,0+29,0 m (access)Deck width: 9,6 m
Max. height: 11,0 m
Construction method: Balanced cantilever (main bridge)



Viaduct of Alvares

Typology: 7 spans composite continuous girder
Length: 383,8 m
Spans: 2x49,0+102,08+3x49,0+36,75 m
Deck width: 27,0 m
Max. height: 70,0 m
Construction method: Launched bridge

Viaduct of Porcía

Typology: Composite steel-concrete continuous girder
Length: 236 m
Spans: 48,0+60,0+80,0+48,0 m
Deck width: 26,0 m
Max. height: 35,0 m
Construction method: Incremental launching construction, using launching nose 28 m length

Viaduct of Riquiánez

Typology: Continuous girder box girder
Length: 350 m
Spans: 37 + 6x46 + 37 m
Deck width: 14,0 m
Max. height: 70,3 m
Construction method: Launching of the deck

Viaduct of Castro

Typology: Continuous prestressed box girder with constant depth
Length: 244 m
Spans: 30,0+4x46,0+30,0 m
Deck width: 14,0 m
Max. height: 42,0 m
Construction method: Conventional falsework, supported by two provisional

Portuguese Border bridge over Miño river

Typology: Continuous concrete box girder
Length: 380 m
Spans: 105 + 170 + 105 m
Deck width: 12,8 m
Max. height: 32,0 m
Construction method: Balanced cantilever

Viaduct of Silva II

Typology: Continuous concrete box girder
Length: 432,4 m
Spans: 50,15+108,8+114,5+108,8+50,15 m
Deck width: 15,5 m
Max. height: 120,0 m
Construction method: Balanced cantilever using movable scaffoldings

SINGULAR BRIDGES

Precast Prestressed Concrete Girders

- Bridge “Los Frailes” (Albacete)
- Viaduct of Valga (Pontevedra)
- Bridge over A-1 highway (Madrid)
- Viaduct of Cañeda (Cantabria)
- Viaduct “Boca sur de Lantueno”
- Viaduct “Boca norte de Lantueno”
- Bridge over A-42 highway (Madrid)
- Bridge “Joâo Landim”. (Guinea Bissau)
- Viaduct over Guadalquivir river (Jaén)

Arch Bridges

- Bridge of Onteniente (Valencia)
- Viaduct of Ulla. AVE (A Coruña).
- Viaduct of Tamaraceite (Las Palmas)
- Viaduct of Tablate II (Granada). A-44
- Bridge of Lanjarón (Granada). A-44
- Bridge over AP-68 highway (Zaragoza)

Cable-Stayed Bridges

- Bridge “La Rinconada” over Guadalquivir river (Sevilla)
- Viaduct over Lérez river (Pontevedra)

Footbridges

- Footbridge of Ribadesella (Asturias)
- Footbridge over M-30 Ring-road (Madrid)
- Footbridge of Almazán (Soria)
- Footbridge of Villacastín (Segovia)
- Footbridge of North access to Las Palmas
- Footbridge of Abandoibarra (Bilbao)

Viaduct of Montabliz (Supervision of construction)

Typology: Continuous box girder
Length: 721 m
Span: 110,0+155,0+175,0+155,0+126,0 m
Deck width: 26,1 m
Max.height: 145,0 m
Construction method: Balanced cantilever using four form travellers

Viaduct of Lanjarón

Typology: Composite Bow String
Length: 112,6 m
Span: 112,6 m
Rise: 15,0 m
Deck width: 12,4 m
Max.height: 80,0 m
Construction method: Launched arch and deck

Bridge “Joâo Landim”

Typology: Precast beams
Length: 720 m
Spans: 16x45.0 m
Deck width: 11 m
Construction method: Cranes on vessels

Bridge of Onteniente

Typology: Composite arch with variable section and hanging deck
Length: 184 m
Span: 140 m
Rise: 35,0 m
Deck width: 28,9 m
Max.height: 40,0 m
Construction method: Self-supported arch, deck built with self-launched

Footbridge over M-30 Ring-Road

Typology: Reinforced concrete arch structures, with deck on top
Length: 130 m
Span: 103 m
Rise: 15,0 m
Deck width: 3,0 m
Max.height: 11,0 m
Construction method: Precast parts

Viaduct “Boca Sur”

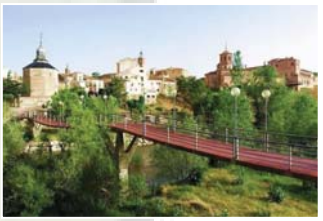
Typology: Precast U-beam girder
Length: 112,5 and 75,0 m (right) and 356.0 (left)
Spans: 3x37,5 y 18,75+37,5+18,75 (right) and 28,0+8x37,5+28,0 m (left)
Deck width: 11,5 m
Max. height: 42,0 m
Construction method: Beams positioned using beam launcher

Viaduct of Tamaraceite

Typology: Composite arch with variable section and hanging deck
Length: 211 m
Span: 162 m
Rise: 41,0 m
Deck width: 30,0 m
Max.height: 25,0 m
Construction method: Self-supported arch, deck lifted from the arch

Viaduct of Tablate II

Typology: Deck arch bridge Length: 176 m
Span: 124,5 m
Rise: 21,25 m
Deck width: 13,5 m
Max.height: 100 m
Construction method: Cantilever construction using temporary diagonal bracing



Footbridge of Almazán

Typology: Prestressed concrete spannband (tensional band)
Length: 173 m
Span: 15,0+4x35,0+18,0 m
Deck width: 3,25 m
Max.height: 4,0 m
Construction method: Precast slabs placed on prestressed tendons

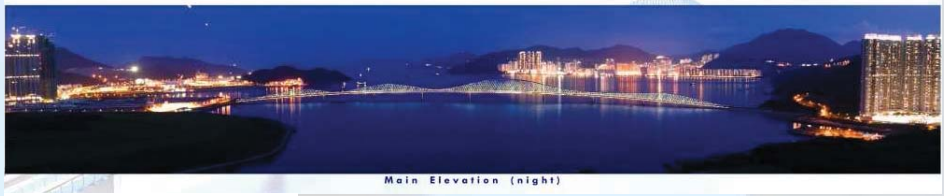
Bridge “La Rinconada”

Typology: Cable stayed bridge
Length: 706 m
Span:
30,0+7x40,0+43,0+231,0+31,0+3x30,0 m
Deck width: 39,0 m
Max.height: 15,0 m
Construction method: Balanced cantilever using temporary cables

SPECIAL BRIDGES

- Design ideas event for the bridge of The Cross Bay Link (Hong Kong)
- Design Contest for the Ota-gawa Channel Bridge-Hiroshima (Japan)
- Bridge “Puertas de Extremadura” over Guadiana river (Badajoz)

Bridge for the Cross Bay Link (Hong Kong)



Ota-gawa Channel Bridge-Hiroshima (Japan)

Puente “Puertas de Extremadura (Badajoz)

RAILWAY BRIDGES

- High Speed Railway Madrid-Zaragoza
  - Viaduct over Jalón river
  - Viaducto over Blanco river
- High Speed Railway Barcelona-French Border
  - Viaduct over Ter river
  - Viaduct over Xunclá river
  - Viaduct over Congost river
- High Speed Railway Orense-Santiago
  - Viaduct of Ulla
  - Viaduct of Saramo
  - Viaduct of Castro
- High Speed Railway Burgos-Basque Country
  - Viaduct of Oroncillo
  - Crossing over Madrid-Burgos railway
- High Speed Railway México Querétaro
  - Viaduct over Agualimpia creek (México)
- Detailed design railway bridge S-105 M-8 Motorway. Scotland (UK)

Viaduct of Sáramo (HSR)

Typology: Continuous box girder with constant depth
Length: 1485 m
Span: 46,40+24x58,0+46,40 m
Deck width: 14,0 m
Max.height: 75,0 m
Construction method: Self-launched formwork

Viaducto over Ulla river (HSR)

Typology: Concrete deck arch bridge
Length: 630 m
Span: 43,0 + 4x52,0 +179,0 +3x52,0 + 42,5 m
Rise: 105,0 m
Deck width: 14,0 m
Max.height: 115,0 m
Construction method:
Arch: cantilever construction.
Deck: span by span segmental construction using movable scaffolding from the arch

HIGHWAY BRIDGES

- Detailed design ETR-407 East. Ontario (Canada) . 32 bridges.
- Detailed design Bridges S-119 & S-104. Scottish road, M-8 Motorway (UK).
- SH 288 Toll lanes Project in Harris County-Texas. 3 Interchanges - 32 structures. Proposal Phase. (USA)
- Bridges girders and transfloor slabs optimization executive report. Warrel Creek to Nambucca Heads. (Australia)
- Mediterranean Highway A-7. Section Motril-Carchuna. 5 structures.
- Santiago de Teide – Adeje Highway (Tenerife). 5 viaducts
- Widening 3rd. lane AP-6 toll highway. Section: San Rafael-Villacastín. 3 viaducts & 10 structures (Segovia).
- Distributor Highway of Málaga. 10 structures
- Highway Karonga-Chilumba-Chiweta (Malawi). 16 bridges.
- A-3 Highway. Section: Motilla-Minglanilla. 5 viaducts & 17 structures.
- A-30 Murcia Highway. Section: Venta del Olivo-Enlace de Archena. 29 structures.
- A-44 Sierra Nevada Highway. Section Alhendín – Vélez de Benaudalla. 10 viaducts & 34 structures.
- A-67 Cantabria-Meseta Highway. Section: Pesquera-Reinosa. 8 viaducts & 6 structures.
- A-8 Cantabrian Highway. Section: Tamón-Villalegre. 3 viaducts & 11 structures.
- Mediterranean Highway A-7. Section Albuñol-Adra. 3 viaducts & 15 structures.
- León-Astorga Toll Highway. 4 viaducts & 49 structures.
- Radial 4 Toll Highway. Madrid.
- AG-11 Barbanza Highway (Galicia)
- A-60 Valladolid -León Highway, Section Santas Martas-León. 3 viaducts & 57 structures.
- “Ronda Litoral” (coast ringroad) at Barcelona. Sections “Vila Olímpica” and “El Morrot”.






Widening AP-6 Toll highway Viaduct “La Jarosa” (Madrid)

A-44. Bailén-Motril Highway. Underpass

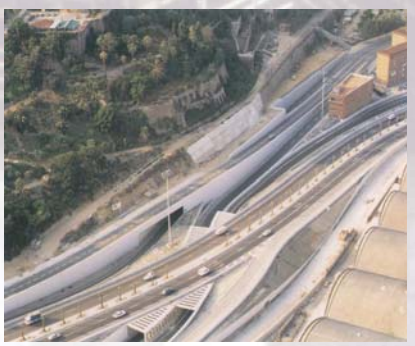
A-67 Reinosa-Pesquera Highway Viaduct “Boca Norte” of Lantueno tunnel

ROADS

- Valencia South Round.
- Link road to ringroad M-45. Coslada (Madrid).
- Expansion of road M-300. Madrid
- Widening AP-6 toll highway. Section: Guadarrama-San Rafael
- M-401 Road. Getafe (Madrid)
- Karonga - Chilumba Road. 110 km (Malawi)
- M-402 Road. Leganés (Madrid)
- GC-1 Highway. Section Gando-Maspalomas
- Onteniente West Round
- A-55 Highway. Tuy (Pontevedra)
- N-403 Toledo-Maqueda Road
- Interchange at industrial area "Cobo Calleja".
- Link between AP-6 & N-VI. Ramp 3. Guadarrama Section. Madrid
- 6-lane expansion at road GC-1 (Las Palmas de Gran Canaria)
- New road M-402. Link between road M-406 and road N-401. Leganés (Madrid)
- Access to C.A.S.A. Factory at Getafe. Road M-406. (Madrid)

OTHER STRUCTURES

- Barcelona Olimpic Harbour
- Elevated Water Tank. Riyadh. Arabia Saudí.
- New subway Atocha station. Madrid
- Structural design of a 120 m high steel tower for a wind turbine
- Cut-and-cover tunnel at Alcaravaneras (Las Palmas)
- Roof of the Dog-racing Stadium gallery. Carabanchel. Madrid.



"Ronda Litoral" (coast ringroad) at Barcelona. Section: Villa Olímpica

A-67 Cantabria-Meseta Highway. Section: Reinosa-Pesquera

"Ronda Litoral" (coast ringroad) at Barcelona. Section: Morrot

A-8 Cantabrian Highway. Section: Tamón-Villaalegre

Expansion of road M-300. Los Hueros. Madrid

Barcelona Olimpic Harbour

Elevated Water Tank. Riyadh. Arabia Saudí.

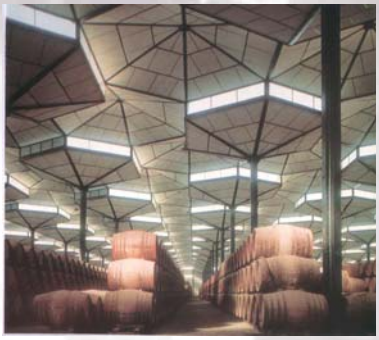
Dog-Racing Stadium. Madrid

BUILDINGS

- Fire Stations of Hortaleza, Villaverde and Barajas. Madrid.
- Sailing School and Recption Building of the Barcelona Olimpic Harbour.
- Chirazulu and Thyolo hospitals. Malawi.
- Church “Virgen de Guadalupe”. Madrid.
- Church “San Luis Gonzaga”. Barcelona
- Cellar and Vinification Warehouse “Las Copas”. Jerez de la Frontera. Cádiz
- “Estufa fría” greenhouse (Parque JC I - Madrid)
- Auditorium “Campo de las Naciones” (Madrid)

Fire Station of Hortaleza. Madrid

Chiradzulu Hospital. Malawi



Vinification Warehouse “Las Copas”. Jerez de la Frontera

Church “Virgen de Guadalupe”. Madrid

Thyolo Hospital. Malawi

“Estufa fría” greenhouse. Madrid

Auditorium “Juan Carlos I” Park. Madrid

MAINTENANCE & REHABILITATION OF STRUCTURES

- Widening of Viaducto “San Pedro de la Ribera”. A-8 Cantabrian Highway. Asturias
- Rehabilitation of 5 structures at the roads BR-373 and BR-376. Paraná (Brasil)
- Rehabilitation of 6 bridges at the highway PR-22, at Puerto Rico.
- Improvement of the structural capacity of the viaducts of San Rafael and La Jarosa. AP-6
- Replacement of the Viaducts of Arenales, Sotillo and Lavadero. AP-6 (Segovia)
- Project of Rehabilitation of the Bridge “Daniel del Olmo”. Valladolid
- Project of Rehabilitation of the Bridge of Canalejas over the river Vinalopó. Elche.
- Project of Rehabilitation of the Bridge over the river Duero at Tordesillas.
- Project of Rehabilitation of the Bridge over the river Duratón at Peñafiel.
- Project of Rehabilitation of the Bridge of Altamira over the river Vinalopó. Elche.
- Project of emergency re-construction of the bridge over the river Magarola at Highway N-II. Esparraguera (Barcelona).
- Project of replacement of the deck of the underpass of the road TE-V-6015, from Teruel to Castralvo at the road N-234, Station. 117+089
- Project of Rehabilitation of the Bridge of Santa Teresa over the river Vinalopó.
- Project of Rehabilitation of the Bridge of San Telmo over the river Guadalquivir. Sevilla
- Study on the structural capacity of the steel structure of the main tower at the “Palacio de Correos”. Madrid
- Project of emergency underpinning of the piers of the bridge over the river Duero, at the road N-601. Boecillo (Valladolid).
- Detailed inspections and Rehabilitation Projects of 42 structures included in the Main Spanish State Highways Network (RIGE). Ministerio de Fomento.

Improvement of the structural capacity of the bridge Daniel del Olmo (Valladolid)

Rehabilitation of the Bridge of Altamira (Elche)

Improvement of the structural capacity of the viaduct of San Rafael. Segovia

Widening of the Viaduct of San Pedro de la Ribera

Tipology: Continuous concrete box girder
Length: 750 m
Spans: 75 + 4x150 + 75 m
Deck width: Widening from12 to 23 m
Max. heightt: 81,0 m
Construction method: 5 movable cranes moving simultaneously

Rehabilitation and restoration of the capacity of the bridge of Santa Teresa (Elche)

Reconstruction of the viaduct of Arenales. AP-6 (Segovia)

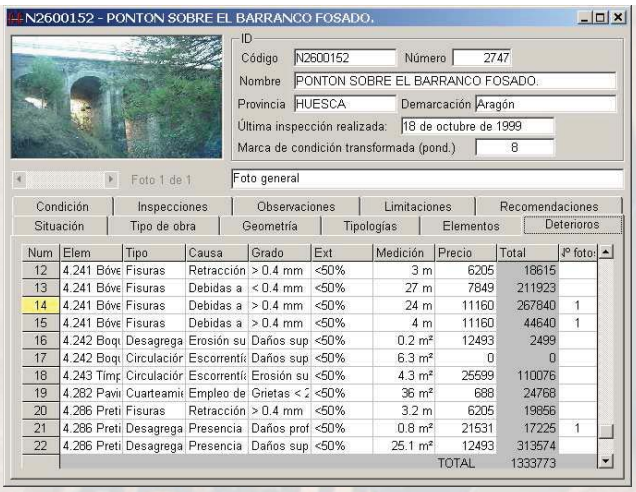
Reconstruction of some spans of the Bridge on the river Magarola (Barcelona)

BRIDGE MANAGEMENT

- Implementation of the Bridge Management System at the toll highways operated by Abertis Autopistas España.
  3421 bridges in the database
- Implementation of the Walls and Retaining Structures Management System. Abertis.
- Implementation of the Bridge Management System. “Autopistas del Atlántico, Concesionaria Española (AUDASA)”.
  550 bridges in the database
- Implementation of the Bridge Management System. Ministerio de Fomento. more than 8500 bridges in the database.

BRIDGE INSPECTION

- Basic inspection of 244 structures in the Motorway BR-116 (SP-Brasil)
- Standard inspection of 3421 bridges at the toll highways of Abertis
- Standard inspection of 497 walls and retaining structures at the toll highways of Abertis
- Detailed inspection of 103 bridges included in the highways network of Abertis.
- Inspection with auxiliary access aids of 37 bridges included in the highways network of Abertis.
- Basic inspection of the railway bridges at the high speed railway line Tarragona-Barcelona. ADIF.
- Standard inspection of the 60 bridges at the Municipality of Bilbao.
- Supervision and verification of 850 standard inspections. Ministerio de Fomento.
- Inspection with auxiliary Access aids of 65 bridges of the Main Spanish State Highways Network (RIGE). Ministerio de Fomento.
- Detailed inspection of the bridges at the border between Spain and Portugal. Ministerio de Fomento.
- Standard inspection of 550 bridges of the highways network of AUDASA.



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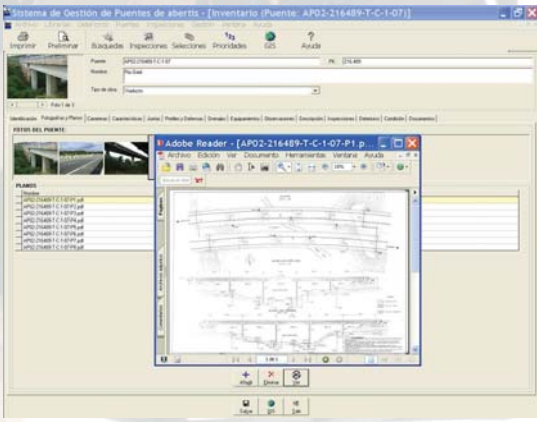


Implementation of Structures Management and Maintenance Systems





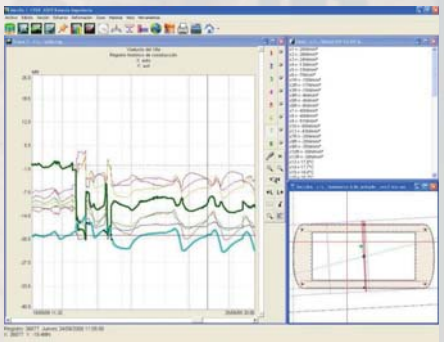


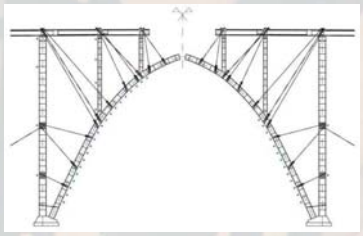


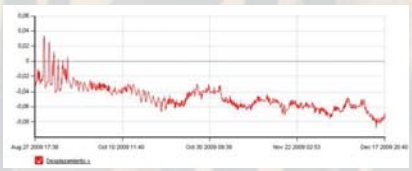
Viaducts inspections

BRIDGE MONITORING

- Monitoring of the viaduct “Urbana Norte” (Mexico DF)
- Monitoring of the Viaduct over the river Ulla. High Speed Railway (A Coruña)





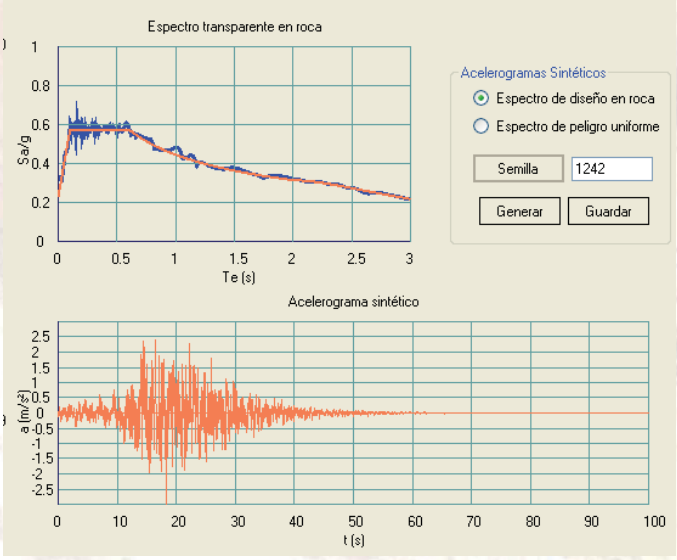


Monitoring of the Viaducto ver the river Ulla. High Speed Railway.

Monitoring of the Viaduct Urbana Norte. Mexico

SUPERVISION OF PROJECTS

- Independent checking of structures of the “HIGHWAY 407 –EAST EXTENSION. Toronto. (Canadá)
- Independent checking of structures of the “NORTH TARRANT EXPRESS SEGMENT 3A (NTE-EXT). Texas. (EE.UU)
- Supervision of structures of the Project “Execução das obras de construção da duplicação da Serra do Cafezal na BR-116". Brazil
- Supervision of the viaducts “Atos” and “Fontanal” of the project “Autovía Mudejar"
- Supervision of structures of the Project “AUTOPISTA- VIA RÁPIDA LOS POETAS. México”
- Independent checking, Value Engineering / Cost effective design of structures LBJ EXPRESS. Texas (EE.UU.)
- Monitoring, checking and ellaboration of reports prior to the supervision of the Projects of design and construction of the Highways announced by the Ministry of Public Works (Ministerio de Fomento). Period 2000-2008. España



URBAN PLANNING

- Urban plans for the “Paseo Carlos I”, “Avenida Litoral” and “Paseos Marítimos” at the seafronts of the Olympic Ville at Barcelona.
- Urban plans and Street re-organization at the Technical Park of the coast beltway. Barcelona.
- Urban plans for the areas around the Meteorology Building. Barcelona.
- Urban plans and finishing for the docks at the Olympic Port of Barcelona.
- Juan Carlos I Park. Campo de las Naciones. Madrid.
- Urban plans for the Urban Area II-6 “Ensanche de Carabanchel”. Madrid.
- Urban plans for the Sánchez Bustillo Square. Madrid.
- Boulevard “Ronda Sur de Valencia”, sections between Campos Crespo St and Fuente de San Luis St. Valencia.
- Urban plans for the Area of Preferential Rehabilitation “Puente de Vallecas”. Phase 1. Madrid.
- Urban plans for the “Paseo de la Castellana”. Section: Colón Sq. – Ortega y Gasset St. Madrid.
- Urban plans for the “Sector 12ª – Club de Campo”. San Sebastián de los Reyes (Madrid).
- Urban plans for the “A.P.E. 16.01 – Club Banesto” at Hortaleza, Madrid.
- Urban plans for the “Sector R-8 Los hueros” at Villalbilla (Madrid).
- Urban plans for the “Sector R-6 Valdelaguila-1” at Villalbilla (Madrid)
- Urban plans for “UZP 2.03 – Los Ahijones”, Madrid.

Urban plans for the Sánchez Bustillo Square. Madrid

Coast beltway. Olympic Ville. Barcelona

Urban plans for the “Sector 12A - Club de Campo". San Sebastián de los Reyes (Madrid).

Juan Carlos I Park. Madrid

Urban plans for the Urban Area II-6 "Ensanche de Carabanchel”. Madrid.

Urban Plans for the “Sector R-8 Los Hueros” at Villalbilla (Madrid).

CODES AND STANDARDS

- Spanish Code of actions on road bridges. – Updating to the Eurocodes – IAP (2011)
- New Spanish Code of actions on railway bridges – IAPF (2010)
- Spanish Code for the design and execution of steel structures – EAE (2008)
- Spanish Code of actions on railway bridges – IAPF (2006)
- Spanish Code for Concrete Structures –EHE (1998)
- Spanish Code of actions on road bridges. – IAP (1998)
- Spanish Code for the design and execution of prestressed concrete structures – EP (1986, 1993)
- Spanish Code for the design and execution of reinforced concrete structures– EH (1982, 1988, 1991)

PERSONAL HONOURS

José Antonio Torroja Cavanillas

- Honorary President of ACHE – Spanish Structural Concrete Association (2010)
- National Civil Engineer Award – Government of Spain (2006)
- Doctor "Honoris Causa" - Ecole de Ponts et Chaussées, Paris (2006)
- Medal of Honour of the Spanish Civil Engineers Institution (2001)
- Doctor "Honoris Causa" – Barcelona Civil Engineers University (1980)

José María de Villar Luengo

- Professional Medal of Merit of the Spanish Civil Engineers Institution (2007)
- Medal of Honour of ACHE – Spanish Structural Concrete Association (1992)

José Manuel Simón-Talero Muñoz

- Medal of Honour of ACHE – Spanish Structural Concrete Association (2008)

AWARDED WORKS

Viaduct over Ulla river. HSR Orense-Santiago (Design & Supervision of construction)

- AWARD "ACHE-2011". Spanish Structural Concrete Association
- 5th AWARD "ACUEDUCTO DE SEGOVIA", Spanish Institution of Civil Engineers (2012)
- AWARD "SAN TELMO 2011". Galician Institution of Civil Engineers

Viaduct of Silva II (Design & Supervision of construction)

- 5th AWARD "POTENCIA DE MAQUINARIA DE OP E INGENIERÍA CIVIL 2010"

Viaduct of Montabliz (Supervision & control of construction)

- 4th AWARD "ACUEDUCTO DE SEGOVIA Spanish Institution of Civil Engineers (2010)
- NOMINEE-2010 FIB AWARDS FOR OUTSTANDING CONCRETE STRUCTURES

Ota-gawa Channel Bridge (Hiroshima, Japan)

- NOMINEE-INTERNATIONAL BRIDGE DESIGN CONTEST (2008)

"Estufa fría" greenhouse (Parque JC I - Madrid)

- BUILDING AND ARCHITECTURAL DESIGN QUALITY AWARD – GOVERNMENT OF MADRID (2001)

Casino de la Reina Garden

- NOMINEE - XVI URBAN PLANNING AWARD – Municipality of Madrid (2001)

Urban plans for the Sánchez Bustillo Square. Madrid.

- 13th URBAN PLANNING AWARD – MUNICIPALITY OF MADRID (1998)

Barcelona Olimpic Harbour

- CONSTRUMAT-93 AWARD TO THE BEST CIVIL ENGINEERING CONSTRUCTION

Urban Planning of the P.A.U. II-6 "Ensanche de Carabanchel". Madrid

- 8th URBAN PLANNING AWARD – Municipality of Madrid (1993)

Bridge"Las Fuentes". Zaragoza-Spain

- CONSTRUMAT-91 AWARD TO THE BEST CIVIL ENGINEERING CONSTRUCTION

Juan Carlos I Park (Madrid) and Fire Station Building at Villaverde (Madrid)

- NOMINEE - "II BIENAL OF ARQUITECTURE DESIGN" - Comillas (Santander) (1993)

Urban Planning of "Sierra de Queixa"

- URBAN PLANNING NATIONAL AWARD- Government of Spain (1980)

Cellar and Vinification Warehouse "Las Copas". Jerez de la Frontera. Cádiz

- OUTSTANDING STEEL STRUCTURE – SERCOMETAL (1977)

CLIENTS

- European Commission
- Ministery of Public Works (Spain) – Road Directorate
- Ministery of Public Works (Spain) – Railway Directorate
- Ministery of Environmental Affairs (Spain)
- Spanish Railway Public Administration (ADIF)
- Regional Government of Madrid
- Regional Government of Valencia
- Regional Government of Catalunya (GISA)
- Regional Government of Galicia
- Regional Government of Andalucia (GIASA)
- Regional Government of Canary Islands
- Municipality of Madrid
- Municipality of Sevilla
- Municipality of Elche
- Municipality of Valladolid
- Ferrovial-Agromán (Spain)
- Dragados (Spain)
- ACS (Spain)
- OHL Construction
- OHL Concessions
- ACCIONA Infrastructures
- AMEY Ferrovial (UK)
- Fomento de Construcciones y Contratas (FCC)
- SACYR
- ISOLUX CORSAN
- ABERTIS Autopistas (Spain)
- AIA Engineers, Ltd. (USA
- WEBBER LLC Houston-Texas (USA)
- ENGEVIX Engenharia (Brasil)
- ARTERIS Concessionária (Brasil)
- Accesos de Madrid CESA (Spain)
- Autopistas del Atlántico AUDASA (Spain)
- CINTRA Concessions (Spain)
- Iberpistas SACE (Spain)
- Urbaconsult S.A. (Spain)
- Euroestudios (Spain)
- METROPISTAS (Puerto Rico)
- CCR Rodonorte (Brasil)
- GPO Ingeniería (Spain)
- Inmobiliaria URBIS (Spain)
- HERCESA Inmobiliaria (Spain)

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