



**ISOLUX CORSAN**

Building the present. Shaping the future

# High-Speed Rail **Ready to build**







### Headquarters

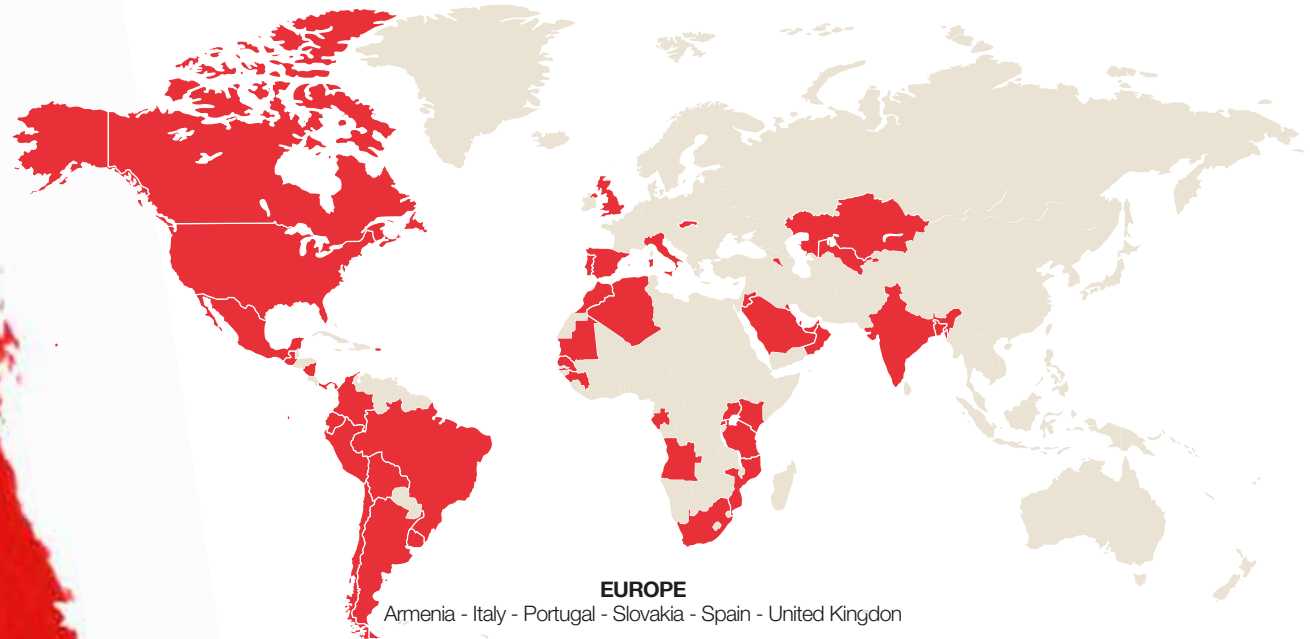
C/ Caballero Andante, 8 | 28021 Madrid | España | Phone: +34 91 449 30 00 / +34 91 449 30 43 / Fax: +34 91 449 38 04

### Offices in North America

**Headquarters** | 3755 South Capital of Texas Hwy. Suite 230. Austin, TX 78704 / Phone + 1 512 416 5510 / Fax +1 512 416 5555

**Indianapolis** | 941 E. 86th Street, Suite 205. Indianapolis, IN 46240

**Saskatoon** | 1414 8th East Street, Suite #102. Saskatoon, SK s7h 0t1. Canada. Phone +1 306 242 4021



#### EUROPE

Armenia - Italy - Portugal - Slovakia - Spain - United Kingdom

#### AMERICA

Argentina - Bolivia - Brazil - Canada - Chile - Colombia - Ecuador - Guatemala  
Mexico - Nicaragua - Panama - Peru - Puerto Rico - USA

#### AFRICA

Algeria - Angola - Congo - Equatorial Guinea - Gabon - Kenya - Morocco  
Mauritania - Mozambique - Rwanda - Senegal - South Africa - Tanzania - Uganda

#### ASIA

Bangladesh - India - Jordan - Kazajistan - Kuwait  
Oman - Qatar - Saudi Arabia - Uzbekistan



[www.isoluxcorsan.com](http://www.isoluxcorsan.com)

## Our Commitments

- ✓ Safety First!
- ✓ Integrity and Excellence Company-wide
- ✓ Quality and Project Control
- ✓ Cutting-edge Technology and Innovation
- ✓ On-time and On-budget Project Delivery
- ✓ Sustainable Project Execution

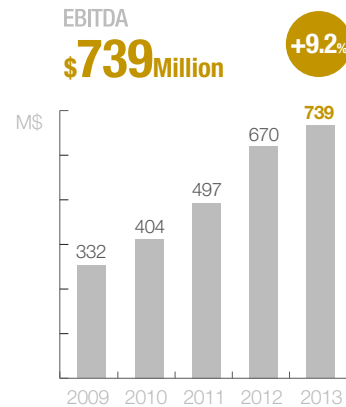
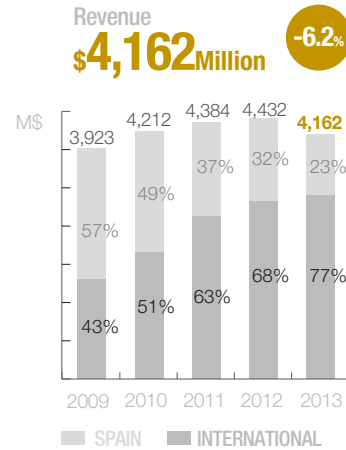
## Our Company

Isolux Corsan is a technology-driven engineering, procurement and construction (EPC) firm with a substantial global presence.

Drawing on our 42 country international experience and qualified experts with broad range disciplines, we deliver a wide range of high-quality services and products supporting civil infrastructure (Rail, Highways, Airports), power generation (conventional and renewable), power transmission and industry markets.

We employ more than 6,200 people in locations that include Spain, USA, Canada, Brazil, Mexico, Argentina, India and Algeria. Our workforce includes highly skilled and motivated specialists in all the Rail disciplines including Civil Infrastructure, TPSS and OCS design, manufacturing and construction. We approach each project, big or small, with the same level of professionalism, business ethics and commitment to excellence. We focus company-wide on Safety, Health and Environment, and Quality.

We build long term relationships with a firm commitment to the most advanced technologies in design, engineering, and construction. Our high standards help us to deliver efficient solutions of unmatched value to transit authorities, highway authorities and private partners.



**Isolux Corsan's portfolio in 2013 reached \$63,832M (86% international)**

**Corsan Corviam is the construction company with a portfolio of around \$5,000M (65% international)**

## Continuous International Growth

Eight years ago, Isolux Corsan made a firm commitment to international business development when our offshore revenue was only 11%.

Today, 77% of that revenue comes from international projects as we continue to pursue strategic overseas development.

## High-Speed Rail: Full Service Delivery

Since being awarded High-Speed Rail contracts on the Zaragoza-Lleida stretch in 1995, Isolux Corsan has built more than \$1.5B in different High-Speed Rail projects.

Isolux Corsan's extensive experience with the most challenging High-Speed Rail segments has contributed to our command of many contracts on the Civil, Track and Electrification Systems.



**Isolux Corsan is an industry-l**



## In 2014, ENR ranked Grupo Isolux Corsan in the 41st position of the Top 250 International Contractors list

Some of the key assets to ensure success in our High-Speed Rail projects are:

- ☞ We understand the complexity of High-Speed Rail networks as a fully integrated system of structures, track, electrification, signaling, and communications.
- ☞ We have extensive know-how in working with international teams, going wherever necessary to identify and utilize global experts in High-Speed Rail design.
- ☞ We have full command of innovative construction methods and systems integration that ensure project reliability and sustainability with minimum cost.
- ☞ We are committed to the most advanced OCS, Traction Power, Signaling and Communications technology available to ensure safe and reliable train operations.
- ☞ Isolux Corsan maintains excellent relationships with the majority of key rolling stock manufacturers and rail technology OEM's in the world.

### 01. HSR. Civil and Track

- 2005 – 09 HSR / Civil Works / Line: Madrid – Zaragoza – Barcelona - French border / Section: Sant Boi de Llobregat – Hospitalet / 2.3 miles / \$420M  
Key projects: Two viaducts (695ft each), two cut and cover tunnels (6,371ft and 4,331ft) and a new intermodal station.
- 2005 – 11 HSR / Civil Works / Line: North-Northwest / Section: Ourense – Lalín / Subsection: Ourense – Amoeiro / 4 miles / \$277M  
Key projects: Three viaducts (2,480ft, 328ft and 100ft), and two NATM tunnels (13,346ft and 2,329ft).
- 2007 – 14 HSR / Civil Works / Line: Madrid – Barcelona – Zaragoza - French border / Section: Nudo de la Trinidad - Montcada / 3 miles / \$215M  
Key projects: Tunnel (10,400ft. 7,545ft were built with TBM owned by Isolux Corsan).
- 2006 – 12 HSR / Civil Works / Line: León – Asturias / Section: Campomanes - Pola de Lena / 3 miles / \$169M  
Key projects: Two viaducts (413ft and 229ft), and two NATM tunnels (8,070ft and 5,466ft).
- 2003 – 07 HSR / Track Works / Line: Seville - Cadiz / Section: Airport of Jerez de la Frontera - Cádiz. Track widening / Subsection: El Portal / 6.3 miles / \$147M  
Key projects: The longest railway viaduct in Europe (10,567ft) Track works (12.5 miles).
- 2012 – Present HSR / Track Works / Line: Atlantic Axis / Section: Vigo - Urzaiz – Souto maior / 11.9 miles / \$73M  
Key projects: Track works (11.9 miles).

### 02. HSR. OCS and Traction Power

- Since 2001 **OCS** of the High-Speed lines Madrid - Valladolid (2 x 109 miles), Atocha - Cerro Negro (2 x 14 miles), Barcelona - French border (2 x 96 miles) and Málaga Station (2 x 4 miles) | \$195  
OCS=446 Miles
- Since 2001 **TPSS** Traction Substations of the High-Speed Rail lines Madrid - Barcelona (375 miles), Madrid - Valencia (219 miles) and Córdoba - Málaga (112 miles) | 706 miles - 24 RSS units | \$481M  
TPSS=19 Substation + 84 V Auto Transformer Station

### 03. Signaling and Communications

- Since 2001 A wide number of signaling, communications and traction control projects for the AVE network in Spain | \$162M
- Since 2012 Albacete - Alicante HSR Line Level 2 ERTMS / ETCS Operating System with Auto Sign Notification and Braking System (ASFA) | \$44M



Leading provider of high-value technical and management solutions for the upcoming High-Speed Rail challenges in the US