THE MEETING OF TWO OCEANS
THE NEW PANAMA CANAL
The Expansion of the Panama Canal is currently the most complex and ambitious engineering work in the world.

Works started in August 2009 and are carried out by the Grupo Unidos por el Canal (GUPC), of which Salini Impregilo is a strategic partner. The Central American isthmus, 102 years from the inauguration of the first canal, is now ready to be doubled, thanks to the New Canal that will be inaugurated on June 26. It will allow “Post-Panamax” ships to sail through for the first time.

These ships reach 366 metres in length and are capable of carrying 12,600 TEUs (compared to the previous capacity of 5,000). Technically speaking, the project is based on unmatched technical and design solutions: i.e. a complex closing mechanism of the locks with rolling gates, which allows ships to sail through Gatún Lake, the world’s largest artificial basin, by lifting them 27 metres above sea level. Once the Lake has been crossed, the set of locks on the other side of the isthmus lowers ships to sea level once again, allowing them to exit the Canal.

The “Trade Boom”
Goods currently sailing through the Canal are worth an annual $270 billion. The New Panama Canal could actually triplicate this value.
The system includes 16 rolling gates, 8 on the Pacific side and 8 on the Atlantic side. These gigantic structures weigh between 2,500 and 4,000 tons. They reach 33 metres in height, 58 metres in length and 10 metres in width. Their opening-closing movement, which lasts 5 minutes in total, is an engineering masterpiece.

The project required enormous effort, with nearly 30 thousand people (reaching a peak of 11,500) working at it. Figures are impressive: 290 thousand tons of steel reinforcements, 5 million cubic metres of concrete and 74 million cubic metres of excavations.

The New Panama Canal, whose overall cost amounts to approximately $5 billion, will bring an enormous positive economic impact for Panama, and for global trade in general. The World Bank stated that the New Panama Canal will considerably increase trade between Caribbean countries, modernising infrastructure (mainly ports and railways) of the Dominican Republic, the Bahamas, Jamaica and Haiti. It will impact global trade as a whole, because goods crossing the Canal each year are worth $270 billion (equal to 3% of global trade). This figure could even triplicate once the New Panama Canal has been inaugurated, like the capacity of the ships that will be able to cross it.
Once in function, the New Panama Canal will revolutionize maritime trade. Approximately 12 thousand ships will sail through it each year. It will be connected to 1,700 ports of 150 different countries and to 144 maritime routes.

Since works began on the New Canal, the megaproject’s economic, social and environmental sustainability has always been taken into account. The Consortium has always considered “water consumption” issues. For this very purpose, it created a “Water Saving Basins” dedicated system. This system allows water from Gatun Lake to be reused, therefore reducing its dispersion into the Oceans. Each lock has an auxiliary basin that allows to save up to 60% of water. The Canal’s transit can now be completed using approximately 200 million litres of water, instead of the amount used by the old Canal, which needed 500 million litres.

GUPC, for sustainability purposes, adopted from the very beginning, a set of procedures to safeguard and protect the hundreds of species living in this tropical habitat.