Maritime Works

ACCIONA has enormous experience in the building of maritime works and possesses the very latest technology needed to execute them. An example of this is the Kugira floating dock, one of the biggest in the world of its kind, capable of producing caissons - 70 m long, 36 m wide and 35 m high - in just 10 days.

Flagship projects

- **Algeciras Port (Spain):** Container terminal. Outer jetty: 16,010 m³.

- **LNG Caisson (Spain):** Total capacity: 250,000 m³ of gas.

- **Rota Naval Base (Cadiz, Spain):** Caissons and rockfill. Concrete: 61,166 m³. Steel: 4,982 MT.

- ** Açú Port (São João da Barra, Brazil):** 2 mixed jetties. Caissons and rockfill. Length: 4.895 km.
Some references

- **Terminal TX2, Açú Port (São João da Barra, Brazil):** 2 mixed jetties. Caissons and rockfill. Length: 4.895 km.
- **Rota Naval Base (Cadiz, Spain):** Lengthening of Quays 1 (306 m) and 2 (849 m). Concrete caissons built by the Kugira.
- **Extension of the waste materials dock in Cartagena Port (Murcia, Spain):** Concrete blocks (30-50): 16,767 m³. Steel in caissons: 14,763 MT. Concrete in caissons: 180,974 m³.
- **Ferrol Outer Port (A Coruña, Spain):**
  - **Phase 1 (2001):** Excavation: 11,542,203 m³ by mechanical means. Excavation in rock: 8,210,822 m³, using explosives. Outer breakwater: 1,871,771 m³. Concrete: 560,298 m³. Steel: 7,486,228 kg in passive reinforcement.
  - **Phase 2 (2008):** Outer breakwater: 81,091 m³. Concrete: 76,383 m³. Steel: 5,444,428 kg in passive reinforcement.
- **Algeciras Port Container Terminal (Cadiz, Spain):** Outer breakwater: 16,010 m³. Concrete: 3,837 m³. Steel: in reinforcement: 110,000 kg. Piles: 712 linear meters.
- **Casablanca Port Container Terminal (Morocco):** Outer breakwater: 2,100 m³. Concrete caissons. Ro-Ro ramp. Dredging: 1,500,000 m³. Hydraulic filling: 3,270,000 m³.
- **Veracruz Port dry dock and isolation quay (Mexico):** Length: 205 m. Width: 30 m. Depth: 7 m. Construction on land recovered from the sea.
- **Beirut Port (Lebanon):** Outer breakwater: 350 m long; 186,420 m³ of rockfill; 9,700 m³ of reinforced concrete. Quay: 250 m long; 580 blocks; 3,165 m³ of reinforced concrete. Breakwater: 820 m long; 350,000 m³ of rockfill.
- **Avilés Port, Raíces Quay extension (Asturias, Spain):** Length 130 m. Depth: 12 m. Ships up to 35,000 DWT.
- **Tarragona Port, outer breakwater extension (Spain):** Length: 830 m. Concrete caissons built by the Kugira: length: 67 m; width: 24 m; height: 32 m.
- **Las Palmas de Gran Canaria Port (Spain):** Caisson dock formed by two alignments of 329 m and 423 m. Surface area: 150,000 m². Concrete paving: 49,000 m³. Railtrack laid: 1,326 m.
- **Remodeling of the Méndez Nuñez sector of A Coruña Port (Spain):** Embarkation quay formed by two alignments of 250 m and 110 m. Depth: 6 m. Caisson quay for ships: length: 482 m; depth: 11 m.
- **International Coal Terminal, Algeciras Port (Spain):** Length: 360 m. Two pontoons: up to 270,000 DWT and 10,000 DWT. Conveyor belt system: unloading: 4,500 t/hr; loading: 1,500 t/hr.
- **Cadiz Port dry dock (Spain):** Concrete caissons in U-form. Length: 525 m. Width: 100 m. Depth: 10.5 m.
- **Adriatic LNG Terminal (Algeciras, Cadiz, Spain):** Total capacity: 250,000 m³ of gas. Length: 180 m. Width: 88 m. Height: 47 m. Concrete volume: 90,000 m³.