

# Caisson Experience



Positioning of Great Belt East Bridge Caisson.

Gerwick has provided engineering services and expert advice on a number of projects involving caissons, including inspection, design, and construction supervision.

Recent projects include:

- South anchorage caisson for Honshu-Shikoku Bison Seto Bridge, Japan.
- Caissons for iron ore loading pier, Queensland, Australia.
- Float-in caissons for Braddock Dam, Pittsburgh, PA.
- Main pier caissons for Greenville Bridge across the Mississippi River.
- Main pier caissons for Sutong Bridge across the Yangtze River, China.
- Main pier caissons for the I-20 Bridge at Vicksburg across the Mississippi River.
- Two pneumatic caissons for the Union Pacific Railroad Bridge across the Columbia River below Pasco, Washington.
- Anchorage and Pylon Piers, Great Belt Suspension Bridge, Denmark.

- Four caissons used to construct Tarsuit Island for oil exploration in the Canadian Arctic.
- Four float-in caissons used to construct the main tower pile caps for the new Carquinez Bridge in Crocket, California.
- Six float-in caissons used to construct pile caps for all river piers on the Bath-Woolwich Bridge across the Kennebec River, Maine.
- Main pier caissons for Cape Girardeau Bridge across the Mississippi River.
- Main tower caissons for Tsing Ma Suspension Bridge, Hong Kong.



Float-in and set-down of 5,400 ton concrete caissons for Tarsuit Island.

## Services Performed:

- Site Inspection
- Conceptual Design
- Detailed Design
- Constructability Studies
- Technical Review
- Construction Supervision
- Mooring Systems
- Positioning Systems
- Dredging and Sand Infill
- Bottom Preparation
- Set-Down
- Installation Methods and Equipment, including:
  - Follower Cofferdams
  - Guide Stalls
  - Airlocks
- Float-in Caissons
- Temporary Support Systems
- Assessment of Hydrodynamic Loads



Tsing Ma Bridge nearing completion.



Construction of caisson-encased Tarsuit Island.