

INTERESTING FACTS ABOUT THE PANAMA CANAL



The Panama Canal is designated as one of the "Seven Wonders of the Modern World and a Monument of the Millennium" by the American Society of Civil Engineers. The earth and rubble removed between Colon and Balboa was enough to bury Manhattan to a depth of 12 feet.

INTERESTING FACTS ABOUT THE PANAMA CANAL

CURRENT LOCKS

Size: **1000' x 110' x 42'**

Locations:

Gatun Locks - **3 steps and 6 chambers**

Pedro Miguel - **1 step and 2 chambers**

Miraflores - **2 steps, 4 chambers**

Water Flow: By **gravity**, down and across chambers

Panamax Ship: **965' x 106' x 39 ½'**

Maximum Cargo: **4400 TEUs** – container ship

Gates: **4 or more miter gates** swing per chamber

Water: **52 million gallons** lost to sea per transit

NEW LOCKS

Size: **1400' x 180' x 60'**

Locations:

Gatun East: **3 steps, 3 chambers, 9 basins**

Miraflores West: **3 steps, 3 chambers, 9 basins**

Water Flow: By **gravity**, down and across holding basins

Post Panamax Ship: **1200' x 160' x 50'**

Max Cargo: **12600 TEUs** – container ship

Gates: 2 ea **200' wide** one piece rolling gates on tracks

Water: **60% recycled**, less lost to sea than now

MORE FACTS

First ground broken by French **January 1, 1880**

Active work started by the French **January 20, 1882**

Excavation by French (cubic yards) **78,146,906**

Excavation by French useful to present Canal (cubic yards) **29,908,000**

Amount of money spent by the French **\$260,000,000**

Number of lives lost during French control **20,000**

Amount United States paid French for their rights and property **\$40,000,000**

Canal Zone acquired by U.S. from Panama by treaty **February 23, 1904**

Amount United States paid Panama for Canal Zone **\$10,000,000**

Rental paid by U.S. to Panama beginning in 1913 per annum **\$250,000**

Work began by the United States **May 4, 1904**

First ship through the Canal **September 26, 1913**

Date of official opening **August 15, 1914**

Name of first official ship to transit canal **S.S. Ancon**

Canal Zone in square miles **436**

Length of Canal from Atlantic to Pacific **51 miles**

Width of the Canal Zone **10 miles**

Time to transit Canal **8-10 hours**

Number of ships crossing daily **40**

Number of ships crossing each year **12-15 thousand**

Time of passage through locks **3 hours**

Maximum bottom width of the channel **1000 feet**

Minimum bottom width of the channel at Culebra Cut **300 feet**

Number of locks in pairs **12**

Locks, usable length **1000 feet**

Locks, usable width **164 square miles**

Amount of water filling each lock **52 million gallons**

Gatun Lake (area) **164 square miles**

Gatun Lake is at a nominal **85 feet above the Pacific Level**

The draft of vessels using the canal is limited to **40 feet** when the lake is at **85 feet**.

The channels are maintained to a depth greater than **40 feet** to a **nominal 45 foot depth**.

Some areas in Gatun Lake where the old Chagres River channel ran are considerably deeper than **45 feet**.

During periods of heavy rainfall and there is a surplus of water, Gatun Lake is maintained at a level of not greater than **87 feet**.

Gatun Lake level is controlled at the Gatun Dam both through a **hydropower generating plant and over spillways at the dam**.

During periods of sparse rainfall, Gatun Lake is maintained to the **85 foot by releasing water through Madden Dam** flowing down the Chagres River to where it meets the lake at Gamboa.

There have been occasions of extremely dry weather (low rainfall) where it has become impossible to maintain the 85 foot level. During those relatively rare occasions, it has been necessary to **limit the draft of transiting vessels**.

In the case of bulk carriers operating at maximum drafts, the canal gives **two weeks notice of any draft restrictions**, thereby allowing the ships to compensate for the draft limitation.

Gatun Lake (normal surface level above sea level) **85 feet**

Culebra Cut (channel depth) **45 feet**

Amount of excavation by Americans in cubic yards **232,353,000**
Total concrete for canal in cubic yards **5,000,000**
Weight of 1 cubic yard of concrete **1.5 tons**
Estimated cost of the Panama Canal built by U.S. **\$375,000,000**
Number of lives lost during United States control **5,609**
Toll charge for Disney Magic cruise ship in 2008 **\$313,200**
First Panama Railroad completed **1855**
Length of Panama Railroad **47.11 miles**
Panama Railroad costs **\$8,984,922**
Amount of carloads of dirt removed daily by railroad **200**
Tide on the Pacific side **20 feet**
Tide on the Atlantic side **2.5 feet**
Average rainfall on Atlantic side **130 inches**
Average rainfall on Pacific side **70 inches**
Estimated cost for expansion of the Panama Canal **\$5.25 billion**
Estimated year of completion of expansion **2014**