Process in action

Brunel and the Atlantic

Update

In the 1960s it was argued that the biggest ships would become was limited by the size of the Panama and Suez canals. The design of these vessels took the generic titles Panamax and Suezmax.

- The maximum dimensions allowed for a ship transiting the Panama canal are length 294.13 m, width 32.31 m, draft 12.04. A Panamax cargo ship would typically have a dead weight tonnage (DWT) of 65,000-80,000 tonnes and a maximum cargo intake of 52,500 tonnes.
- A lot of effort was put into designing such ships for the Suez canal, even though the Suez canal was blocked by Egypt after being nationalized (it was owned by Britain and France) and an invasion.
- Further study showed that the most economic and technologically viable size for a tanker transporting oil from the Arabian Gulf to Europe was about 125,000 tonnes (going empty through Suez and returning full around Africa, so effort was also put into the design of theses ships. The maximum dimensions allowed for a ship transiting the canal are: width 46 m and draft 18.9 m (no length restrictions as there are no locks). Improvements are in progress to increase the maximum draft to 22 m in order to allow supertankers.
- Technology advanced and tankers of up to 750,000 tonnes were built (going around Africa both ways), until various oil supply crises arose and the very large tankers were mothballed (and many eventually scrapped).

(See also Process in Action on Airbus and Boeing, Chapter 4)