Co-funded by the
Erasmus+ Programme
of the European Union

PORT & MARINE CONSTRUCTIONS

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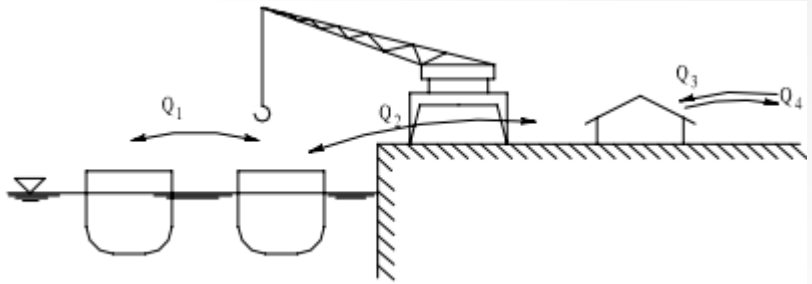
CHAPTER 2. FACTORS AFFECTING THE DESIGN OF PORT PLANNING

1. Goods
2. Ship
3. Vehicles and equipment for loading and unloading goods
4. Natural conditions for port planning design

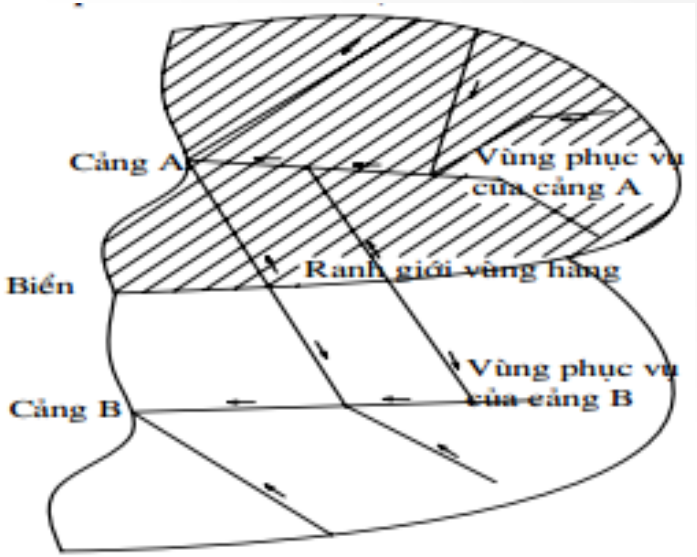
GOODS

- Volume of goods passing through the port (Q)
- Q = Q1 + Q2 (T)
- Q1: Ship-to-ship conveyance
- Q2: The volume of goods passing through the wharf route from onshore to ship or from ship to shore



AMOUNT OF GOODS PASSING THROUGH THE PORT

- Principles of determining the quantity of designed goods
- Determine the attractive area of the port (the port's service area. The limit of two adjacent ports is called the cargo line.
- A delivery line is a line where goods are located at a point on which, when traveling to two adjacent ports, have the same economic cost.



AMOUNT OF GOODS PASSING THROUGH THE PORT

- Economic survey within the service area of the port, this work is carried out in all national economic branches with the following basic contents: - Administrative and population distribution. - The distribution of mine reserves, mining output, service objects, transportation flows. - Product volume, import and export demand, requirements for equipment and supplies of industry, agriculture, fishery, construction, transportation...
- The amount of cargo through the port used for design is usually taken in the future from 5 ÷ 10 years compared to the time when the design started.

AMOUNT OF GOODS PASSING THROUGH THE PORT

- Unequal coefficient of goods
- Q_t^{max}: the largest monthly volume of the year. Q_t^{tb}: average volume of 1 month of the year.

$$K_{kd} = \frac{Q_t^{max}}{Q_t^{tb}}$$