

Bulk

Bulk commodity vs bulk cargo

Four main characteristics of bulk commodities which influence their sustainability for transport in bulk:

- Volume
- Handling and stowage
- Cargo value
- Regularity of flow

Factors in the bulk market

Commodity supply industries

Steel production

Growing infrastructure development in developing countries

Urbanization

Used to be Europe, USA and Japan, now BRIC [Brasil, Russia, India, China]

Overcapacity in the fleet + large orderbook

Efficiency

Price and volume

Reefers

Refrigerator ships

Temperature controlled transportation

Usually food

Competition from containers

Ships

Capesize bulk carrier > 100.000 dwt, Coal and ore, ULOC, VLOC

Panamax bulk carrier 60.000-100.000 dwt, Coal, crude oil and petroleum, Latin-America

Handymax bulk carrier 40.000-60.000 dwt, Small and large ports, often 4 cranes

Handysize bulk carrier 10.000-40.000 dwt, the smallest bulk carriers, often 4 cranes

OBO carrier Oil/Bulk/Ore, Dry and wet bulk, Cleaning is demanding, expensive to build, not built any more

History

1850: The first bulk ships built

1900: The first diesel fueled ships with integrated loading and unloading equipment

1958: Thorvald Klaveness built the worlds first special made bulk carrier, Carried fertilizer from Norway

1961: Klaveness was the first in the world to carry cement

Industrial revolution

From short-sea to deep-sea

Increased trade between the industrialized countries

Increased energy need, increased production

Larger and quicker ships

Specialised bulk carriers

Dry bulk

Major bulk:

- Iron ore
- Coal
- Grain
- Phosphate rocks
- Bauxite and alumina

Minor bulk:

- Forest products
- Sugar
- Agribulk

Future trends

Surplus in the market

China's growth? Stagnation?

Other BRIC countries

International bulk fleet

Baltic dry index

Ship types

Bulk-carriers

Ore-carriers

OBO / Combination Carriers

Iron ore

20% of the dry bulk

Measured in tons

Steel

Mining

Very dusty

Coal

Electricity production

Fuel for heating

Mining

Environmentally questionable

Corn

Food production

Rice, corn, oatmeal, wheat

Demanding transportation—high risk

Ventilation and protection from bad weather and bugs

Phosphate

Fertilizer

Dusty and absorbs moisture

Bauxite

Production of aluminum

Indonesia –50% of the export

Kina –70% of import

Hydro

Uncertain trade in the future due to Indonesian stop in export

Minor bulk

Represents the rest of the dry bulk industry

Sugar, minerals, forest products

