India to be top infrastructure goods importer by 2020

India will top the United States as the world's biggest importer of infrastructure goods by 2020 and is expected to hold this position till 2030. The demand for materials needed for infrastructure projects like metals, minerals, buildings and transport equipment is expected to increase as the country invests in building its civil infrastructure.

The US is currently the biggest importer of infrastructure-related goods, but by 2020 India will become the lead importer of such goods as it invests in building its domestic networks and is expected to remain at the top of the chart till 2030. At present, the list of countries importing infrastructure goods is topped by the USA, followed by India, Hong Kong, China and Germany.

By 2030, this is likely to undergo a sea-change as India will topple the US to become the largest importer of infrastructure related goods followed by the US in the second place and China, Hong Kong and Korea making into the top five. Meanwhile, China is set to become the top importer of investment equipment (machinery that are required by businesses to boost production) by 2030 as it continues to invest in manufacturing productivity.

COSTA CONCORDIA parbuckling completed

In one of the most costly salvage operations to be carried out till date, the Costa Concordia cruise ship has been salvaged (upright) using an operation called par buckling.

Engineers have successfully righted the wrecked Costa Concordia cruise ship after a marathon operation that lasted around 19 hours and proved a nail biting wait for those involved in the world's most expensive salvage operation.

The 114,000-tonne ship ran aground off the shore of Giglio in Italy on 13 January 2012. Thousands of passengers and crew made it to land safely but 32 people died, including a five-year-old girl. The £500million salvage operation is said to be the largest in maritime history but there will be no savings as the £370million liner, is destined for the scrap yard.

Please see photos of parbuckling on next page.
**Know Your Cargo – Scrap**

**What is Scrap?**

Scrap consists of recyclable materials left over from product manufacturing and consumption, such as parts of vehicles, building supplies, and surplus materials. Unlike waste, scrap can have significant monetary value. Scrap metal originates both in business and residential environments. Scrap is often taken to a wrecking yard (also known as a scrap yard, junkyard, or breaker's yard), where it is processed for later melting into new products.

Marine transportation of scrap is mainly related to metal scrap transportation. The metals and alloys can range from normal steel, iron, and brass to expensive scrap such as gold, silver, zinc, copper. In the strictest terms of the meaning since the cargo is SCRAP, there is no chance of contamination, rust etc. and with good controls in place is quite a manageable cargo.

**Scrap Handling:** This cargo is non-combustible or has a low fire-risk except when cargo contains swarf (fine metal turnings liable to spontaneous combustion). This cargo shall be kept as dry as practicable before loading, during loading and during voyage. This cargo shall not be loaded during precipitation. During loading of this cargo all non-working hatches of the cargo spaces to which this cargo is loaded shall be closed. Iron will oxidize, (rust) and in a finely divided form will oxidize rapidly. This oxidation is an exothermic reaction, heat is evolved. In large compact quantities as in a cargo hold this heat will be largely retained and as a result the temperature of the mass will increase. This oxidation process is accelerated if the material is wetted or damp, contaminated with certain cutting oils, oily rags or combustible matter. The aluminum or zinc dross and residues are all reactive in the presence of moisture liberating the flammable gas hydrogen and various toxic gases.

Cargo is loaded using electromagnets or spider grabs, depending usually on the size and type of material. This cargo may include articles from the size of car bodies to fine metal turnings (swarf). The weight of individual pieces will also vary greatly, ranging from heavy machinery to tin cans. The IMO Code of Safe Practice for Solid Bulk Cargoes has special requirements for the loading of turnings and borings.

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Iron scrap | Aluminum Scrap | Brass Scrap | Copper Scrap
**Loading on ship / container / trailer:**

Before loading, the cargo spaces shall be prepared as per general loading practices. Areas such as decks and coamings shall be protected with dunnage as they are liable to be damaged by falling cargo.

A layer of this cargo shall be carefully placed over the tank top in the square to cushion any fall out. Drivers of electromagnetic cranes and grab shall be instructed not to release their loads too high above the pile. The usual method of loading is to form a pile along the centre line and use the slope to roll material into the ends and sides. Every effort must be made to load the cargo in the sides of the hold so as to have an even distribution. If this is not done, the light high volume pieces will roll to the wings and the small heavy pieces will concentrate in the square.

Prior to loading especially turnings and boring scrap, the temperature of the material should not exceed 55°C. The surface temperature of the material should be taken prior to, during and after loading and daily during the voyage. If the surface temperature exceeds 90°C during loading, further loading should cease and should not recommence until the temperature has fallen below 85°C. The ship should not depart unless the temperature is below 65°C and has shown a steady or downward trend in temperature for at least eight hours.

**There are several risks associated with this cargo:**

**Turnings, Borings and Engine Blocks scrap:** Spontaneous combustion is one of the major hazards associated with scarp. Very often scrap consists of items / parts of engines, wherein traces of Lubricating Oils, Diesel Oils, Grease, Wax, Solvents, un-burnt fuel residues etc. are present and may result in fires / explosions during the transportation, handling, loading, discharging etc. Considerable friction is created during loading / discharging and it is quite common to see sparks arising out of metal pieces rubbing against each other. However, this risk is now considerably minimized, because of strict implantation of anti pollution and dumping laws worldwide.
KNOW YOUR CARGO – Scrap

**Thefts:**

With increasing value of scrap items in the international market and ease of disposal, scrap thefts have increased over the years. Thefts are mainly seen in metal scraps such as copper, aluminum and zinc. Most of these cargos are transported from product manufacturing factories for recycling. The cargo is loaded on trailers / containers for transportation either inland or as export shipment. In most of the cases the trucks / trailers are hijacked or the cargo is stolen from the trailer. Proper checks in the logistics chain are very important to prevent such kind of hijacks / thefts.

**Poor Tonnage:**

It must be borne in mind that the scrap trade (in Bulk) usually involves use of old ships. It will be extremely rare for a ship on this trade to be below 20 years. Quite frequently, vessels on regular scrap runs are almost at the end of their life. This is particularly so since the scrap is literally dropped into the ships holds, after being demagnetized from the grabs. Since there are odd pieces of scrap of varying weights and dimensions, these cause considerable damage to the ships tanks, holds, hull and fittings. It is common to find the vessels in scrap trade have several doublers / patches on hull. Thus, a thorough inspection of the vessels condition by a competent surveyor is mandatory prior to loading.

**Shortages:**

Typically bulk scrap shipments are quantified on the basis of draft surveys as the stowage factor for scrap cargo cannot be correctly determined. Considerable handling losses take place during the loading process. Thus the Draft survey is supposed to quantify the actual quantity loaded on board. However, we are all aware of the limitations of a Draft Survey. Shortages are a major problem with bulk scrap shipments.

**Radioactive Waste Scrap, Arms and Ammunition:**

In today’s world, there is a growing concern about radioactive scrap being dumped -- probably some kind of certification from the Client confirming that the cargo is Non Radioactive or Contaminated would be useful. Special attention shall be given to the huge consignments of scrap from war torn countries as they may contain live as well as spent arms, ammunition, bombs etc.
INCOTERMS

The Incoterms (International commercial terms) were first conceived by the International Chamber of Commerce (ICC) in 1921, and brought to fruition with the first Incoterms rules in 1936. The Incoterms were created in 1936 with the purpose of providing a set of international rules for the interpretation of the most commonly used trade terms in foreign trade.

This set in motion a long and vibrant history of Incoterms publications that continues today with Incoterms 2010, which are in effect from 1 January 2011. A Trade Terms Committee with the assistance of the ICC National Committees developed the first six rules in 1923: FOB, FAS, FOT, FOR, Free Delivered CIF and C&F, which were the precursor of what would later be known as the Incoterms rules. The 11 Incoterms 2010 rules are presented in two distinct classes:

RULES FOR SEA AND INLAND WATERWAY TRANSPORT

In the first class of Incoterms 2010 rules, the point of delivery and the place to which the goods are carried to the buyer are both ports, hence the label “sea and inland waterway” rules. FAS, FOB, CFR and CIF belong to this class. Under the last three Incoterms rules, all mention of the ship’s rail as the point of delivery has been omitted in preference for the goods being delivered when they are “on board” the vessel. This more closely reflects modern commercial reality and avoids the rather dated image of the risk swinging to and fro across an imaginary perpendicular line.

FAS FREE ALONGSIDE SHIP
FOB FREE ON BOARD
CFR COST AND FREIGHT
CIF COST INSURANCE AND FREIGHT

RULES FOR SEA AND INLAND WATERWAY TRANSPORT

• FAS Free alongside Ship: “Free Alongside Ship” means that the seller delivers when the goods are placed alongside the vessel (e.g., on a quay or a barge) nominated by the buyer at the named port of shipment. The risk of loss of or damage to the goods passes when the goods are alongside the ship, and the buyer bears all costs from that moment onwards.

• FOB Free On Board: “Free On Board” means that the seller delivers the goods on board the vessel nominated by the buyer at the named port of shipment or procures the goods already so delivered. The risk of loss of or damage to the goods passes when the goods are on board the vessel, and the buyer bears all costs from that moment onwards.

• CFR Cost and Freight: “Cost and Freight” means that the seller delivers the goods on board the vessel or procures the goods already so delivered. The risk of loss of or damage to the goods passes when the goods are on board the vessel. The seller must contract for and pay the costs and freight necessary to bring the goods to the named port of destination.

• CIF Cost, Insurance and Freight: “Cost, Insurance and Freight” means that the seller delivers the goods on board the vessel or procures the goods already so delivered. The risk of loss of or damage to the goods passes when the goods are on board the vessel. The seller must contract for and pay the costs and freight necessary to bring the goods to the named port of destination.

‘The seller also contracts for insurance cover against the buyer’s risk of loss of or damage to the goods during the carriage. The buyer should note that under CIF the seller is required to obtain insurance only on minimum cover. Should the buyer wish to have more insurance protection, it will need either to agree as much expressly with the seller or to make its own extra insurance arrangements.”
INCOTERMS

RULES FOR ANY MODE OR MODES OF TRANSPORT
The second class includes the seven Incoterms 2010 rules that can be used irrespective of the mode of transport selected and irrespective of whether one or more than one mode of transport is employed.

EXW, FCA, CPT, CIP, DAT, DAP and DDP belong to this class. They can be used even when there is no maritime transport at all. It is important to remember, however, that these rules can be used in cases where a ship is used for part of the carriage.

EXW EX WORKS
FCA FREE CARRIER
CPT CARRIAGE PAID TO
CIP CARRIAGE AND INSURANCE PAID TO
DAT DELIVERED AT TERMINAL
DAP DELIVERED AT PLACE
DDP DELIVERED DUTY PAID
INCOTERMS

RULES FOR ANY MODE OR MODES OF TRANSPORT

- **EXW** Ex Works: “Ex Works” means that the seller delivers when it places the goods at the disposal of the buyer at the seller’s premises or at another named place (i.e., works factory, warehouse, etc.). The seller does not need to load the goods on any collecting vehicle, nor does it need to clear the goods for export, where such clearance is applicable.

- **FCA** Free Carrier: “Free Carrier” means that the seller delivers the goods to the carrier or another person nominated by the buyer at the seller’s premises or another named place. The parties are well advised to specify as clearly as possible the point within the named place of delivery, as the risk passes to the buyer at that point.

- **CPT** Carriage Paid To: “Carriage Paid To” means that the seller delivers the goods to the carrier or another person nominated by the seller at an agreed place (if any such place is agreed between parties) and that the seller must contract for and pay the costs of carriage necessary to bring the goods to the named place of destination.

- **CIP** Carriage And Insurance Paid To: “Carriage and Insurance Paid to” means that the seller delivers the goods to the carrier or another person nominated by the seller at an agreed place (if any such place is agreed between parties) and that the seller must contract for and pay the costs of carriage necessary to bring the goods to the named place of destination. The seller also contracts for insurance cover against the buyer’s risk of loss of or damage to the goods during the carriage. The buyer should note that under CIP the seller is required to obtain insurance only on minimum cover. Should the buyer wish to have more insurance protection, it will need either to agree as much expressily with the seller or to make its own extra insurance arrangements.

- **DAT** Delivered At Terminal: “Delivered at Terminal” means that the seller delivers when the goods, once unloaded from the arriving means of transport, are placed at the disposal of the buyer at a named terminal at the named port or place of destination. “Terminal” includes a place, whether covered or not, such as a quay, warehouse, container yard or road, rail or air cargo terminal. The seller bears all risks involved in bringing the goods to and unloading them at the terminal at the named port or place of destination.

- **DAP** Delivered at Place: “Delivered at Place” means that the seller delivers when the goods are placed at the disposal of the buyer on the arriving means of transport ready for unloading at the named place of destination. The seller bears all risks involved in bringing the goods to the named place.

- **DDP** Delivered Duty Paid: “Delivered Duty Paid” means that the seller delivers the goods when the goods are placed at the disposal of the buyer, cleared for import on the arriving means of transport ready for unloading at the named place of destination. The seller bears all the costs and risks involved in bringing the goods to the place of destination and has an obligation to clear the goods not only for export but also for import, to pay any duty for both export and import and to carry out all customs formalities.

DIVERT YOUR COURSE

This is the transcript of the ACTUAL radio conversation of a US naval ship with Canadian authorities off the coast of Newfoundland in October 1995. Radio conversation released by the Chief of Naval Operations 10-10-95.

Canadians: Please divert your course 15 degrees the South to avoid a collision.

Americans: Recommend you divert your course 15 degrees the North to avoid a collision.

Canadians: Negative. You will have to divert your course 15 degrees to the South to avoid a collision.

Americans: This is the Captain of a US Navy ship. I say again, divert YOUR course.

Canadians: No. I say again, you divert YOUR course.

Americans: THIS IS THE AIRCRAFT CARRIER USS LINCOLN, THE SECOND LARGEST SHIP IN THE UNITED STATES’ ATLANTIC FLEET. WE ARE ACCOMPANIED BY THREE DESTROYERS, THREE CRUISERS AND NUMEROUS SUPPORT VESSELS. I DEMAND THAT YOU CHANGE YOUR COURSE 15 DEGREES NORTH, I SAY AGAIN, THAT’S ONE FIVE DEGREES NORTH, OR COUNTER-MEASURES WILL BE UNDERTAKEN TO ENSURE THE SAFETY OF THIS SHIP.

Canadians: This is a lighthouse. Your call!

FEEDBACK

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