



**Sandip Foundation's**  
**Sandip Institute of Technology & Research Centre, Nashik**  
**Department Of Civil Engineering**  
**Academic Year 2017-18**  
**Report on Site Visit**

1. **Event Title:-** Visit to Mumbai Port Trust, Mumbai
2. **Event Date:-** 11<sup>th</sup> September ,2017
3. **Event Conduction Duration:-** One day
4. **Event Venue:-** Indira Dock, Mumbai port trust, New Hamallage Bldg,1st Floor  
Mumbai-400 009
5. **Event Resource Person Details (Speaker Image, Speaker name, Designation, company name):-** Mr. S.V. Shaikh (Labour Inspector)
6. **Name of Event Coordinator :-** Prof. S.P.Khokale, Prof. R.V. Thorat.
7. **Event Objective :-** To study the basics of Docks & harbour

**8. Event Summary :-**

Mumbai Port has long been the principal gateway to India and has played a pivotal role in the development of the national economy, trade & commerce and prosperity of Mumbai city in particular. The port has achieved this position through continuous endeavor to serve the changing needs of maritime trade. Though traditionally designed to handle general cargo, over the years, the port has adapted to changing shipping trends and cargo packaging from break bulk to unitisation/ palletisation and containerization. Besides, it has also developed specialized berths for handling POL and chemicals. For decades, Mumbai Port was India's premier port. Even today, with the development of other ports, it caters to 10% of the country's sea-borne trade handled by Major Ports of the country in terms of volume. It caters about 19% of POL Traffic handled by Major Ports.

Having weathered and survived many a changes in maritime trade in its long history, Mumbai Port is today facing challenges posed by competition from adjoining ports and private ports, changing traffic patterns, inherent physical constraints and continuing labour intensive operations, etc.

**Location:-** The Port of Mumbai is situated almost midway (Latitude 18o 54' N, Longitude 72o 49' E) on the West coast of India and is gifted with a natural deep water Harbour of about 400 square kilometres protected by the mainland of Konkan on its East and Island of Mumbai on its West. The deep waters in the Harbour provide ample shelter for shipping throughout the year. The approaches to the Harbour are well lighted, with the Prongs Lighthouse to the North, visible 27 kilometres and the Kennery Light House to the south visible 29 kms. The entrance of the Harbour which has approaches from the South-west is between Prongs Reef and the Thull Reef lying off the mainland to the South-east, a distance of about 9 kilometers.

The main navigational Harbour Channel is, for the great part, a natural deep-water fairway. The channel has been deepened to 11 metres. With a mean high water neap tide of 3.3 metres, the channel is adequate to meet the requirement of a large number of cargo vessels, passenger ships and deep drafted tankers. With good lighting arrangements navigation is allowed at the port round the clock.

### **Dry Cargo Handling**

There is an enclosed wet dock namely Indira Dock having a total water area of 24.04 hectares and a quayside of about 4000 metres. The Indira Dock, has an Entrance Lock 228.6 metres long and 30.5 metres wide through which vessels can enter or leave the docks at any state of tide. There are 21 berths inside the basin and 5 berths along the harbour wall, with a designed depth of 9.14 metres and 7.5 metres respectively. The depth of berths inside the basin can be increased by 1.20 metres by impounding water by electric pumps. There are two berths on the Southward extension of East arm of the Indira Dock, namely Ballard Pier Station and Ballard Pier Extension. The Ballard Pier Extension berth, is 244 metres long and has a modern passenger Terminal Building. It has a designed depth of 9.75 metres CD. The Ballard Pier Station berth caters to container vessels and has a designed depth of 9.1 metres CD.

### **Marine Oil Terminals**

For handling Crude oil and Petroleum products, there are four jetties at Jawahar Dweep. One of the jetties at Jawahar Dweep, which was commissioned in 1984 can handle tankers with the maximum loaded draft of 12.7 metres corresponding to 125,000 Displacement tons. Two of the jetties can accommodate tankers upto 70,000 Displacement Tons and 228.6 m length and the third one can take tankers of 213.4 m length and upto 48,000 Displacement Tons. Chemical and POL products are handled at two jetties at Pir Pau. Old Pir Pau jetty can accommodate tankers of 170.7 m length while the new one commissioned in December 1996 can handle tankers with a length of 197 m and a draft of 10.5 m. All the jetties are connected to Oil Refineries by a network of pipelines.

### **Bundars**

Besides the wet docks, there are along the harbour front a number of bundars and open wharves where the traffic carried by barges/sailing vessels are handled.

### **Dry Dock**

The port has one dry dock, inside the Indira Dock, viz. Hughes Dry Dock which is 304 metres long.

### **Storage**

There are transit sheds at most of the berths and a number of warehouses in the Port area for storage of uncleared cargo and pre-shipment storage of export cargo

## **9. Event Outcomes**

After visiting the Mumbai Port Trust, students are able to understand the details & working of different units of Docks & Harbour.

10. Event photos :-



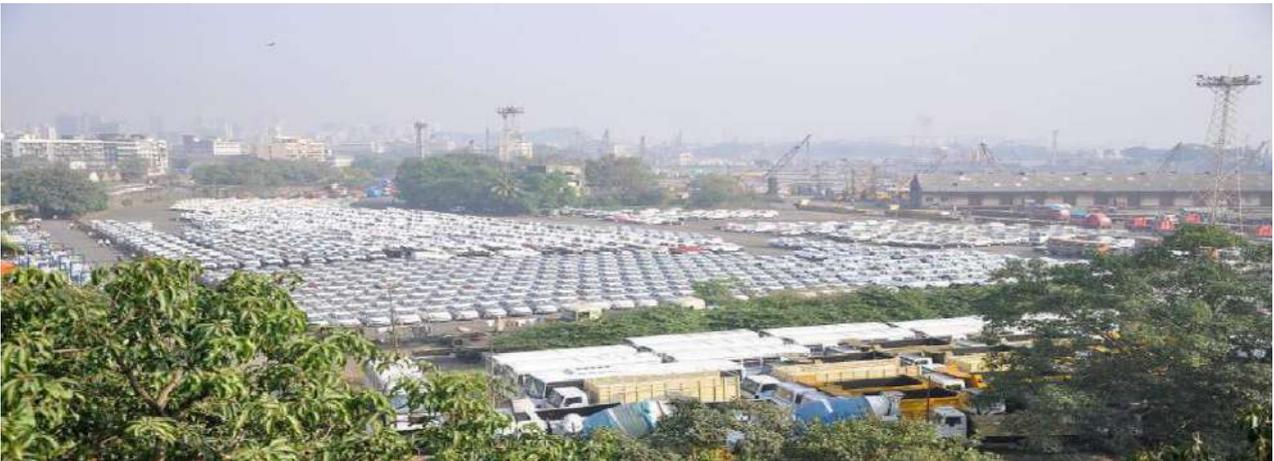
**Mumbai International Cruse Terminal**



**Mumbai International Cruse Terminal**



**Loading & unloading yard**



**Storage Space for Export & Import of cars**



**Auto Vessel ( Transport 3000 Nos of Cars at a time)**



**Covered Storage space for Important material**



**Large Cargo Vessel**



**Large mountain view of Indira dock**



**Small vessal guiding to large vessal**



**Dry dock with gates**