

Adapted from: *Oxford English for Careers "Engineering" / "Technology"*



Discuss the questions:

- a) Why do you think it takes longer to build an oil platform than a standard ship?
- b) What is the main material used in shipbuilding?
- c) What conditions or environmental factors are important design considerations for ship?

Read the text and check your answers

- d) What property of steel can cause problems for shipbuilders?
- e) What is the name for steel combined with other metals?
- f) What is the name for damage caused to materials by sea water?

Would you like to do this job? Why/why not?

Hello, my name's Matt.

I work for a shipbuilding company in Korea. We make container ships, bulk carriers, oil tankers, and offshore platforms.

The construction time is longer for an oil platform than for a standard ship because often we cannot use standard parts or procedures on a platform. Every oil platform is unique and must be made to order. I lead a small team providing materials engineering support to our design office and the construction yard. My main role is to advise on the best material for each application.

Engineers have developed some amazing new materials over the past hundred years, but for shipbuilding, welded steel is the most suitable product. Of course, we have to be sure of the quality of steel. When steel is too brittle, it can crack and cause serious problems. We use steel alloys –steel mixed with small amounts of other elements- for the best performance.

Ships are exposed to sea water corrosion so they have to be specially painted and the materials have to withstand a lot of stress in low temperatures. In the worst wave conditions, the materials are under a lot of stress.

The best part of my job is working with engineers from our customers and design contractors.

It's a huge team effort to design and build a ship, and cooperation is important.