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All About Fuel For Hercules

Types of Fuel

Did you know that a very important part of making a steamboat work is the fuel? There are lots of different types of fuels that a steamboat can use. The first type of fuel is coal. You might see coal if you are going to a barbecue. Here, it is used to help create the fire to cook your food. The second type of fuel that can be used on a steamboat is oil. You probably know about oil because it is used in cars to help them travel. The last type of fuel that a steamboat can use is diesel. In our everyday lives, we see school buses that use diesel. Similar to oil, diesel helps the buses move from one place to another.



coal



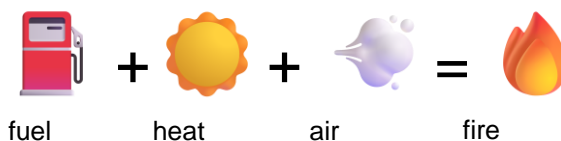
oil



diesel

How It All Works

Fuel is a type of chemical. It has chemical energy in it. Chemical energy is stored in chemicals and helps reactions occur. When fuel is combined with heat (in the form of a small fire) and air, a reaction happens. The result is a larger fire that is able to burn for a long time. The more fuel there is, the longer the fire will burn. In this reaction, chemical energy from the fuel is transferred, or converted, to heat energy in the form of fire.



In the boiler room, fuel and heat, in the form of a small fire, are combined to create an even larger fire. This fire is used to boil water so that it converts into steam.



Oil

In 1907, Hercules was built in Camden, New Jersey by the company John H. Dialogue & Son. Hercules was ordered by the Shipowners & Merchants Tug Boat Company, which was located in San Francisco. Many steamboats during this time period were built to use coal as its fuel. However, coal was not easily found on the west coast, where San Francisco is. Oil was much more common in that part of the country. As a result, Hercules was built to use oil, rather than coal. The oil was used to create a large fire, so that water could be converted into steam.



On its trip from New Jersey to San Francisco, Hercules towed another tugboat, Goliath. During this journey, it stored 105,000 gallons of oil to make its trip. Goliath also stored 105,000 gallons of oil for Hercules. Amazingly, it did not have to stop anywhere along the trip to refuel!

Sources

<https://tile.loc.gov/storage-services/master/pnp/habshaer/ca/ca1500/ca1507/data/ca1507data.pdf>

[Tugboat Hercules: Historic Structure Report Draft](#)

Maps.google.com