

## Bucket ladder dredger

A bucket ladder dredger is a type of dredging machine that is commonly used for deepening waterways, mining materials from the seabed, and excavating sand and gravel.

The dredger consists of a series of buckets attached to a ladder-like structure that is mounted on a barge or pontoon. The ladder is lowered into the water, and the buckets scoop up sediment from the bottom of the waterway. The sediment is then lifted to the surface and deposited onto a conveyor belt or into a barge for transport.

Bucket ladder dredgers are typically used in shallow waters where the dredging depth is less than 20 meters. They are able to dredge a large amount of material quickly and efficiently, and are often used for harbor deepening and maintenance, as well as for mining operations.

One of the key advantages of a bucket ladder dredger is that it can be used in a variety of water conditions, including rough seas and tidal currents. Additionally, the dredger can be adapted to different types of sediment, such as sand, silt, and clay.

However, bucket ladder dredgers do have some limitations. They are not well-suited for dredging hard materials such as rock, and they are not very maneuverable, making them less effective in areas with complex geometry. Additionally, they can be expensive to operate, requiring a large crew and a significant amount of fuel.