

Water injection Dredger

A water injection dredger (WID) is a type of dredger that uses high-pressure water jets to remove sediment, mud, and other materials from the bottom of bodies of water. This process is known as hydraulic dredging.

The dredger typically consists of a barge or boat with a pump system on board. The pump system generates a high-pressure water jet that is directed at the seabed or riverbed. The force of the water loosens the sediment, which is then pumped up to the surface and deposited in a containment area.

One of the key advantages of water injection dredging is that it is much less destructive to the surrounding environment than other forms of dredging. For example, it does not produce clouds of mud and sediment that can smother marine life, and it does not generate as much noise pollution. Additionally, because the water jet does not physically touch the seabed, there is less risk of damaging delicate habitats or disrupting the ecosystem.

Water injection dredging is commonly used for maintenance and improvement of shipping channels, ports, and marinas, as well as for the construction of artificial islands, breakwaters, and other coastal structures. It can also be used for environmental remediation, such as removing contaminated sediment from waterways.