Dredging Operations 101: How Dredge Works in Waterway Maintenance

Dredging Operations

Dredging is a process of excavating sediments and debris from the bottom of water bodies like lakes, rivers, and oceans. Dredging operations involve the use of a dredge, a machine equipped with a scoop or cutterhead that removes sediment from the bottom of a water body.

Dredging projects are typically undertaken to deepen waterways, maintain navigable channels, or reclaim land from the sea. Dredging services can be provided by a variety of entities, including dredging companies and dredging contractors. These companies offer a range of dredging services, including maintenance dredging, capital dredging, and environmental dredging.

Maintenance dredging involves the removal of sediment from existing channels, while capital dredging involves the creation of new channels or deepening existing ones. Environmental dredging is a specialized form of dredging that involves the removal of contaminated sediments to mitigate environmental damage.

Dredging contractors and companies use a range of dredges, including hydraulic dredges, cutter suction dredges, and clamshell dredges. Hydraulic dredges use high-pressure water jets to loosen sediment and transport it to a holding area, while cutter suction dredges use a rotating cutterhead to break up sediment and suction it up. Clamshell dredges, on the other hand, use a mechanical bucket to scoop up sediment.

In summary, dredging operations involve the use of dredges to excavate sediment from the bottom of water bodies. Dredging projects can be undertaken for a variety of reasons, and dredging services are offered by a range of companies and contractors who use different types of dredges to perform their work.