

D40.32.0-1

BULKHEAD GATES (Stop Logs)

**Inspection and
maintenance of
structures and
equipment**

The bulkhead gates are welded steel structures for closing the water intake openings or to isolate a water channel section basically for maintenance and inspection reasons of the equipment inside of the section or on the downstream side structures. In terms of the type of structure, we may classify the stop-logs as follows:

- Surface stop-logs;
- Bottom stop-logs.

In relation to clearance height the bulkhead gates may be supplied in a single panel or in two or more elements.

The bulkhead gate placing and removing in his slot is by means of a lifting equipment, such as a gantry crane bridge hoist crane or any other type of moving equipment with cable hoist. The operation to place or remove the gates or their elements in the slot is assisted by a lifting beam. These beam usually have automatic gate coupling and release devices inside the slot do ease their placement and removal.

Opening and closing operations for the gates shall be performed under balanced

downstream/upstream pressure.

To achieve the pressure balance, during opening operation, the gates may be equipped with by-pass valves whose automatic opening is achieved by the lifting beam weight at the time it couples to lift the gate. The by-pass valves are an integral part of the stop-logs structure.

The stop-log sealing is obtained by using resilient "J" type seals and flat seals attached to the gate structure and with seal seating in the slot embedded parts.

