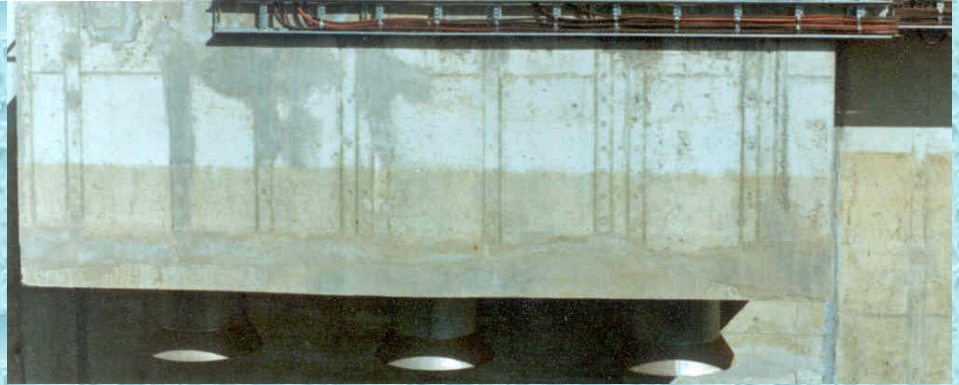
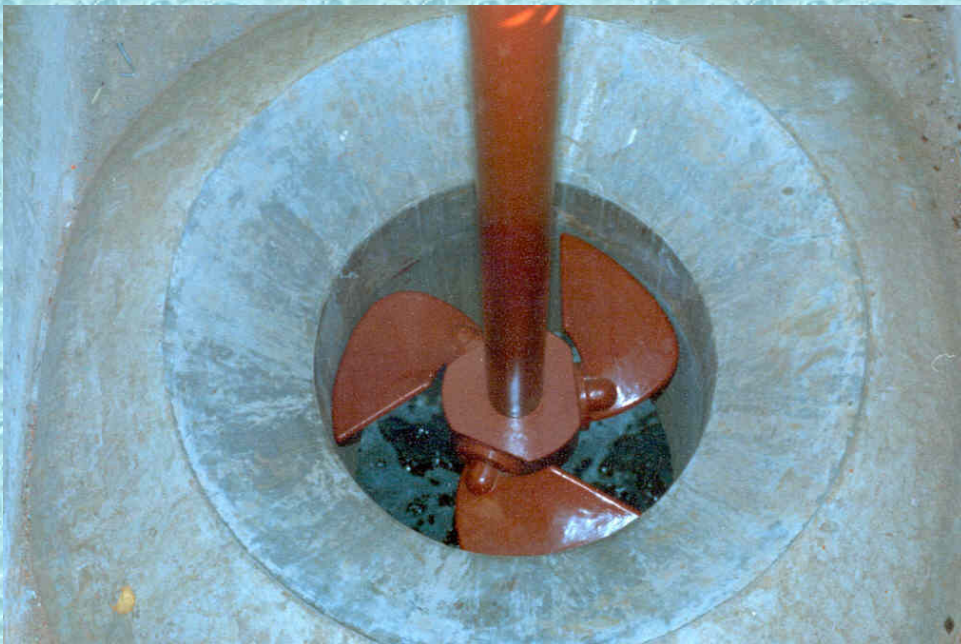




**Low lift
Axial flow
pump**



Typical propeller pump installation showing three pumps in parallel



Typical propeller pump Propeller in throat pipe viewed from above

PROPELLER PUMP

The Axial Flow Propeller Pump has been developed specifically for the recirculation of mixed liquor within the reactors of activated sludge sewage plants.

These pumps are ideally suited to pumping large volumes of liquid to low heads, without the risk of clogging.

Reliability stems from the cantilever design, which eliminates underwater bearings, and the swept back blade form, which reduces the possibility of fouling.



In operation, the propeller draws liquid from the applicable zone of the reactor through a bell mouthed throat pipe and the discharge is collected in a chamber above the propeller.

Flow accumulating in this chamber is piped or channelled to the required point of re-entry to the reactor. Because of process sensitivity to oxygen entrainment, it is important for the flow to re-enter the reactor without cascading and attention should be paid to this detail in the design.

Where pumps operate in parallel, flap gates are used to prevent the flow from one pump returning to the chamber of another.

Features

- Specifically designed for low heads
- Propeller shaft is cantilevered from a substantial frame
- Heavy duty bearings rated for 100 000 hours B10 life positioned above water level
- Swept back blades reduce the risk of clogging
- Blade pitch on medium and larger models adjustable
- Vee belt driven to allow speed changes
- Standard electric motor

Model Designation	Pumping Range	Throat Diameter
Small	- 80 l/sec	300 mm
Medium	100 – 500 l/sec	600 mm
Large	600 – 1000 l/sec	1000 mm