

## Jellyfish removal Koeberg Power Station

Application market	Industry
Market segment	Water Intake & Power
Pumped medium	Seawater
Pump product	Immersible
Country	South Africa



### Challenge

The Koeberg nuclear power plant is located on the west coast of South Africa, just north of Cape Town and within sight of Table Mountain. Seawater supply for cooling is crucial for the reliable operation of the plant. An annual jellyfish inundation clogged the inlet to the cooling unit and thus, was a risk to safe operation of the whole plant. Due to their composition, it was not possible to screen the jellyfish from the water, alternative solutions were demanded.

### Solution

To solve the problem, the Hidrostal Screw Centrifugal Pump is used, which has the unique ability to reliably pump seawater with a very high solids content without clogging. The jellyfish reach an immersible pump unit installed on a floating structure by means of a system of booms, and the jellyfish are pumped away.

### Benefits

The main requirements of the customer could all be fulfilled satisfactorily:

- Supply of cooling water with safe operation and correspondingly high reliability
- Non-clogging pump operation
- Gentle handling of live Jellyfish

Quantity of units sold	2
Pump type	F10K-SS2R + FEVB4
Motor data	45 kW / 4 pole / 50 Hz / Immersible
Material combination	Cast iron pump body, nodular iron impeller and Hidrohard wear parts
Duty point	Flow : 220 litres per second / Head : 14 meters
In operation since	2008