Precast sectionalized concrete anchoring weights to stabilize the structure

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Flow Description

7300-2500 m³/h 5m rapid deployment mobile InvisiHead seawater intake and outfall system made especially for RO plants in KSA. Low-on-SDI self-reliant system made to be installed in shallow 1.5-2.5m surf zones and need the absolute minimum of multimedia and UF pretreatment; trailer-mounted, easily assembled and dismantled.

The cone of clarification is integrated in this mobile version to adequately handle turbulent waters that may contain suspended sediment. The flow velocity across the cross-sectional area leaving the InvisiHead Zone of Diversion is less than 0.13m/s. This velocity meets and exceeds the USEPA standard of 0.15m/s limit. It will leave behind very fine sand of 150µ and larger that will be flushed out of Zone of Diversion by local marine currents and returned to the ambient. If both lower and upper outlets are simultaneously activated, V will drop to 0.065m/s.

Energy consumption: Nearly zero kWh

The InvisiHead® head Loss is negligibly low; the nature of its hyperbolic paraboloidal design fine-tunes the flow streamlines to fit site requirements. The headloss coefficient, Kₗ, was experimentally determined to be <0.1. The head loss at the operating IH at 100% capacity is less than 0.17mm or 0.00017m or 0.000017 bar—It approaches zero. This complements and helps to sustain SWCC’s GWR for lowest energy consumption.