

消能池 Stilling Basin

何謂消能池？ What is a stilling basin?

【內文 Content】

消能池係指為水力消能設施，通常消能池設置於溢洪道與下游河道之間，藉著消能池之功能，由上游排下來之大量動能與位能，可以轉換成為紊流能量，而最後以摩擦散熱方式，把巨大之能量，藉著水躍與紊流之作用，消耗於消能池中。

同時，由上游之流量，也藉著水躍之跳離消能池之基礎，而不致於破壞其結構。

Stilling Basin refers to a hydraulic energy dissipation facility. The energy dissipation pool is usually set between the spillway and the downstream river. With the function of the energy dissipation pool, the large amount of kinetic energy and potential energy discharged from the upstream can be converted into turbulent energy. Finally, by means of friction heat dissipation, the huge energy is consumed in the energy dissipation pool through the action of hydraulic jump and turbulence.

At the same time, the flow from the upstream also jumps away from the foundation of the energy dissipation pool by the water jump, without destroying its structure.