

SDGs Torishima's Initiatives

This page was written in the company magazine.

11 SUSTAINABLE CITIES AND COMMUNITIES



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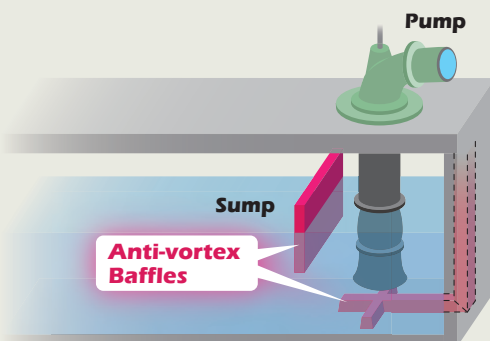
Make cities and human settlements inclusive, safe, resilient and sustainable

There are approximately 7.5 billion people on the planet today, about half of whom live in urban areas, and this is expected to increase in the future. While life in a city is convenient and comfortable, the increase in the population brings with it various problems. In some countries and regions, infrastructure has not kept pace, air is polluted by car exhaust, and large amounts of garbage cannot be disposed of. In addition, the more buildings and people there are, the greater the risk of damage in the event of a disaster. Therefore, it is necessary not only to prepare for emergencies during ordinary times, but also to promote urban development that will enable smooth recovery when a disaster actually occurs.

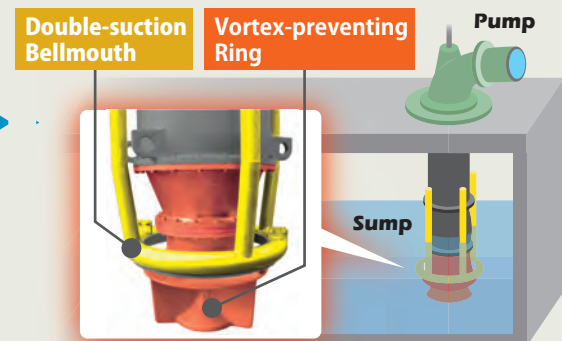
Torishima contributes to disaster mitigation by providing large-capacity pumps that discharge large volumes of rainwater to prevent rivers from overflowing when heavy rains occur, as well as other unique technologies to prevent flood damage. It is impossible for humans to control nature, but we will protect our cities so that we can minimize damage when the time comes.

Pump body with vortex prevention technology

Conventional measure to prevent vortices

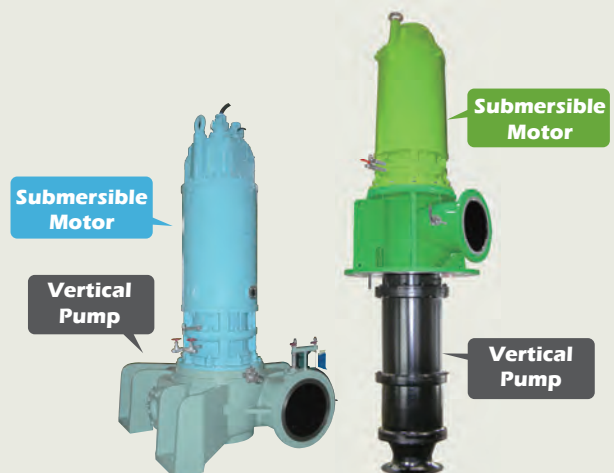


Controlling vortices with the pump itself



When torrential rain hits, drainage pump stations are subjected to large volumes of rainwater flow over short periods. As a result, more pumps are being replaced or added to increase capacity. However, if pumping volume increases without changing the shape and dimensions of existing pump sumps, the water flow within the sump will increase, causing vortices that can damage the pumps. Torishima's vortex prevention technology is more effective than conventional anti-vortex baffles (civil engineering). This new technology can suppress vortex within the pump, so it eliminates the need to install the conventional anti-vortex baffles and reduces civil engineering costs.

Pump with integrated submersible motor



Pump with integrated submersible motor

Torishima supplies pump and motor integrated into one unit. Even when flooded, the pumps can operate underwater and continue providing drainage. By integrating the pump and motor into a single unit, installation is simplified and earthquake resistance is improved.