Overflow systems are designed to optimise the efficiency of the dredging process by draining excess water and leaving more weight available for the payload. They also limit the amount of turbulence in the hopper. The mixture will then have as much time as possible to settle, which in turn maximises the retention of solids.

**HOW IT WORKS**
IHC’s telescopic system can set the overflow at different levels. This optimises the loading process depending on the dredged material. The sliding inner part can be raised or lowered by means of a hydraulic cylinder.

The ability to control the level of the overflow is paramount in ensuring an optimal, non-turbulent flow inside the hopper. In addition, a mechanical or electromechanical position indicator can be fitted, allowing the dredge master to gauge this.

**DIFFERENT OVERFLOWS**
IHC’s range of overflow systems comprises the telescopic overflow and an upgraded version, the patented Plumigator® overflow (see reverse).

IHC’s telescopic overflow allows different levels to be set by a hydraulic cylinder. It has been carefully designed to guarantee an optimal, non-turbulent flow inside the hopper. The optional Plumigator® configuration tackles the issue of turbidity and air beneath the vessel.
Our continuous focus on innovation has resulted in an upgraded version of the telescopic overflow. The patented Plumigator® overflow tackles issues caused by the overflow process.

These include the undesirable plume created around the vessel, which is known to harm marine life. A loss of performance can also be incurred, as well as additional downtime and maintenance costs. In addition, draft sensors can sometimes give inaccurate readings, which can have an impact on overall vessel performance.

IDENTIFYING THE CAUSE
The issues occur when air is released beneath the vessel by the regular overflow. This combines with entrapped fine soil particles, and the mixture remains near the hull.

As it moves through the propellers, a large surface area will be covered and this appears as a plume. By entering the intake valves of the pumps and auxiliary equipment, the performance and lifetime of the system are affected.

AN INNOVATIVE SOLUTION
IHC’s patented design has been expertly engineered based on the requirements of the market. It significantly limits the influx of air in the overflow, and contributes to a hassle-free operation. The multiple inlet openings also reduce the velocity in the hopper, allowing the mixture extra time to settle.

The Plumigator® overflow not only offers increased flexibility, but delivers a range of other benefits:
• no additional moving parts (hydraulic cylinders or controls) unlike a traditional anti-turbidity valve
• integration with newly-built vessels, or can be retrofitted if required
• reduction of a vessel’s ecological impact.

This state-of-the-art innovation primarily tackles the problem of turbidity and air beneath a vessel. It also enables operators to work in a more environmentally friendly way, comply with international regulations and benefit from less wear to the vessel’s components.