



Water Equipment

Buffer Zones in Storm Water Treatment Plants



Location	Spain
Environment	Urban or coastal
Fabricator	Hidrostant
Stainless steel grade	304 (EN 1.4301), in coastal locations 316 (EN 1.4401)
Product type	Cold rolled
Surface finish	Glass bead blasted
Producer or supplier	Inoxcenter (Acerinox Group)
Source of information	Cedinox Magazine

In warm climatic regions like Spain, there can be long periods of drought followed by sudden violent thunderstorms and heavy rainfall. To ensure that the water treatment system can cope, large capacity buffer basins have been built, which reduce the risk of flooding. Apart from the large volumes of water, there is another problem: when it starts raining, solid matter and pollutants, which may have accumulated over several months, are washed away within minutes. Consequently, the initial surge of water is heavily charged with sand, dirt and pollutants. For this reason, the water treatment system is designed to allow sedimentation of the solids, which can then be collected and disposed of safely. As hydrogen sulphide is likely to be present, stainless steel is the preferred material to prevent corrosion and also to extend the life of the water treatment plants.