

DRINTEC™ PROCESS IN FRP TANKS

DrinTec™ activity has started well this last quarter with the selling of a series of beds of calcite deposits for constant height for the remineralization of desalinated water. Example of one of them installed on Telde, Gran Canaria, pictured. It is in this case a water-rich volcanic CO₂ as remineralization treatment is essential to meet the water quality RD140/2003 supply.

The design criteria were as follows:

Specifications for the D 2040 mm tank

Flowrate	m ³ /d	1,000
Diameter	mm	2,040
Superficial velocity	m/h	13.3
Empty Bed Contact Time	mm	2,430
Height of the tank	min	11
Minimum operational pressure	mm	4,750
Weight of the limestone	bar	0.45
Capacity bed	kg	11,445
Capacity of the tank in-built silo	kg	2,000
Autonomy of the tank (avg. 52 g CaCO ₃ /m ³)	days	>30
Total weight of the tank (including CaCO ₃ and H ₂ O)	kg	~26,600

On the other hand DrinTec™ is finishing the supply of medium size calcite bed plant in civil works which will include new underdrains and modular spillways for a plant of 13,500 m³/d also located in the municipality of Telde.

Given the limited space available the design criteria are presented in the accompanying table.

	UNITS	Design Criteria
Flowrate	m ³ /d	13,500
Number of cells	n	3
Flowrate per cell	m ³ /d	4,500
Cell width	m	2.35
Cell length	m	3.02
Cell surface	m ²	35.4
Upflow velocity	m/h	15.9
Bed height	m	2.9
Empty Bed Contact Time	min	11
Air flow for sponging	Nm ³ /h	80

