

SurTec® 700

Catalytical Basket

for Zinc and Zinc Alloy Processes

Properties

- zinc generator basket for high performance zinc generators in non cyanide alkaline zinc and zinc alloy processes
- catalytically coated steel basket for zinc dissolution without external current with very high dissolution rate
- for construction of space saving highly effective new zinc generators
- increases the dissolution rate of existing zinc generators with low capacities
- high zinc concentrations inside the zinc generator for optimum control of the zinc content
- standard sizes for easy dimensioning of the zinc generator – see online calculation: <http://calculation.surtec.com/Zincgenerator.html>
- compact dimensioning of the baskets allow an easy and comfortable handling without additional lifting devices

Application

Place the calculated amount of baskets into the zinc generator. The distance between the baskets must be at least 3 cm.

The zinc generator should be equipped with a circulation pump with a flow rate of at least 10 times the volume of the zinc generator per hour.

The electrolyte circulation should flow along the baskets from the bottom to the top. This can be done by installing a second floor inside the zinc generator. This floor carries the baskets and contains 5 mm holes between the baskets to produce the projected flow (see sketch 1).

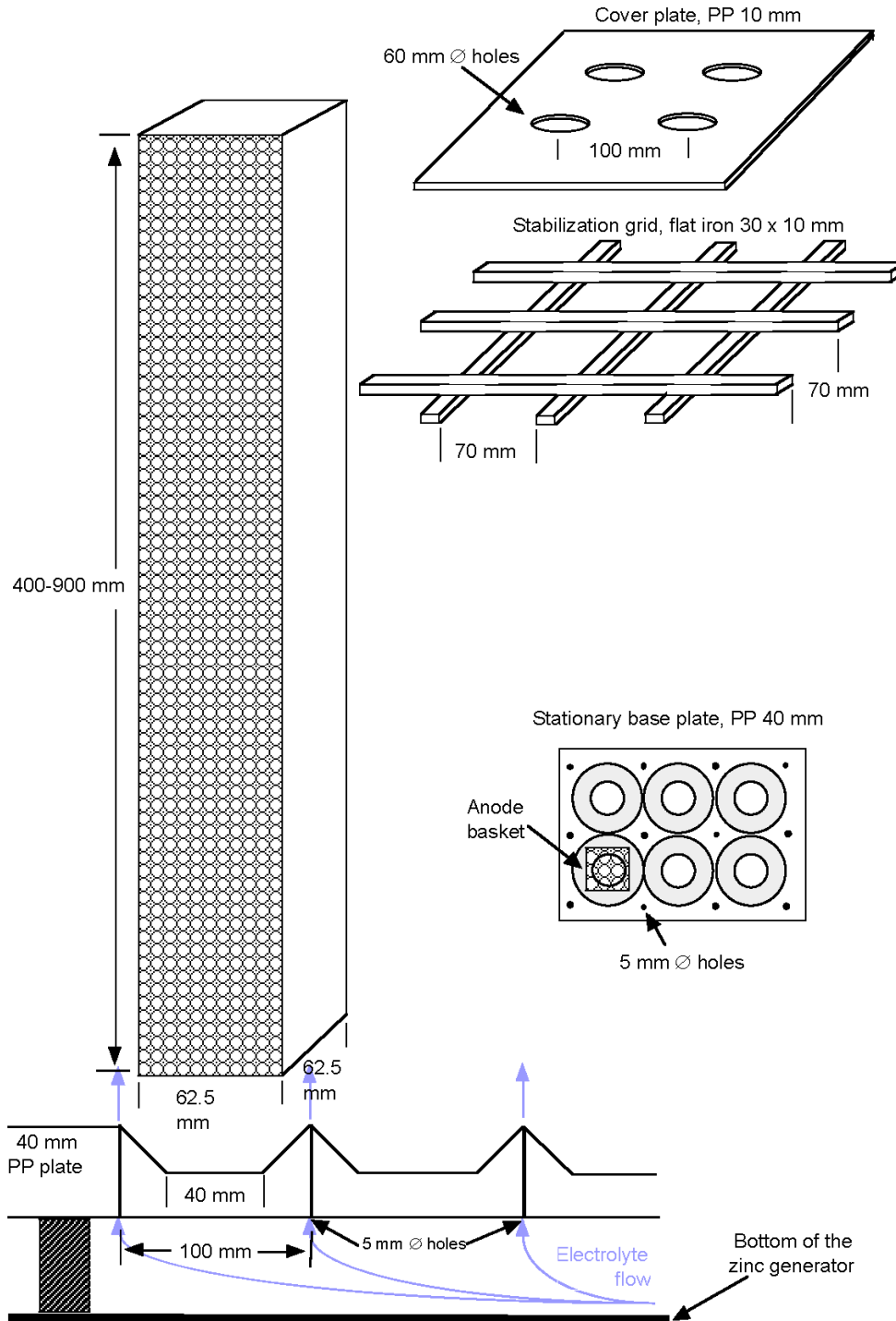
Because of the hydrogen evolution during the dissolution process, the zinc generator must be equipped with an exhausting hood.

Important notes:

Use as zinc metal shape small clippings (Mini-Berlingots), because this guarantees a residue-free dissolution and because of their small dimensions (approx. 2 cm) they have an optimum contact towards the catalyst basket walls. The online calculation above is based upon the use of these Mini-Berlingots. For the use of other anode shapes please contact our Technical Service.

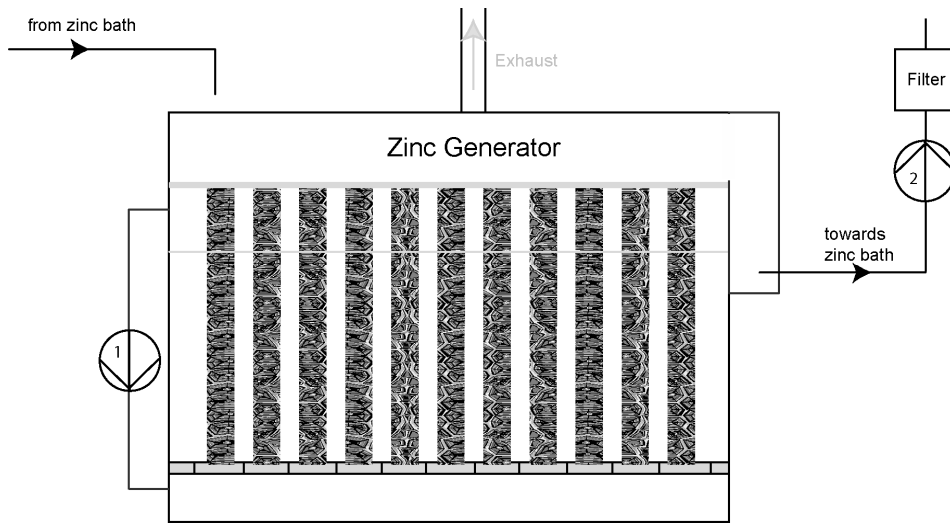
Beside this also the construction of the zinc generator and especially the dimensioning of the circulation pump have influences on the zinc dissolution rate. The principle construction of the zinc generator is shown in the following sketches.

Sketch 1: Construction principle

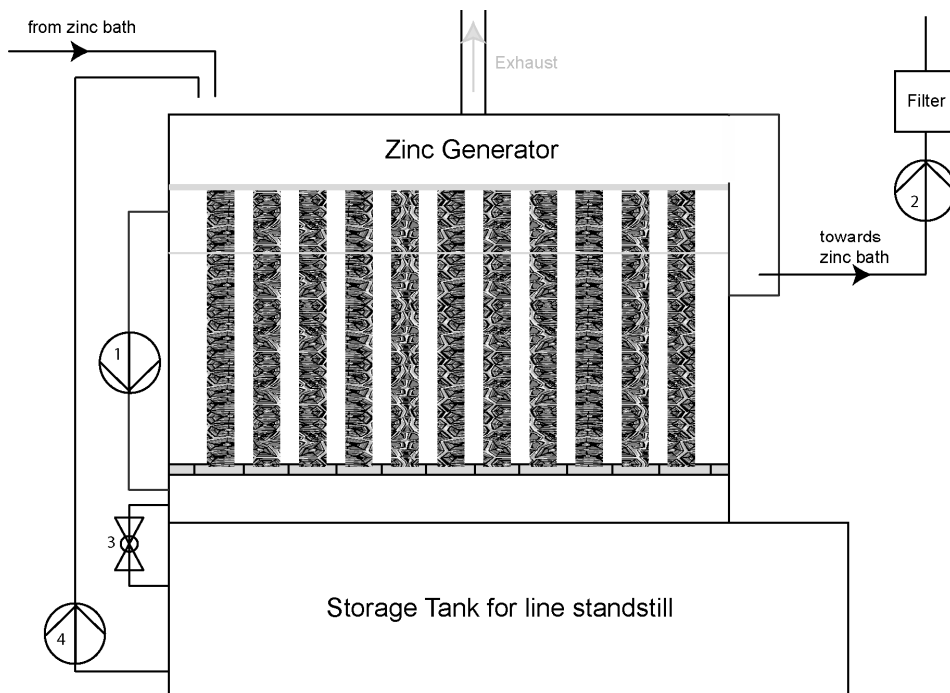


Sketch 2: Construction principle

Sketch 2 a: Continuous plating process



Sketch 2 b: Intermittent plating process



- 1. circulation pump, min. 10 times zinc generator volume per hour
- 2. zinc dosage pump
- 3. valve for emptying the zinc generator
- 4. pump for refilling of the zinc generator

The optimum way of integrating a zinc generator system into an existing or newly planned line is depending on the local conditions.

Technical Specification

- basket made of perforated steel plates
- grey-brown catalytical coating

Availably standard dimensions:

Base area: 6.25 cm x 6.25 cm

Length	Article-No.
40 cm	5088
45 cm	5089
50 cm	5090
55 cm	5091
60 cm	5092
65 cm	5093
70 cm	5094
75 cm	5095
80 cm	5096
85 cm	5097
90 cm	5098

Delivery Time

4 weeks after receipt of the order

Warranty

We are responsible for our products in the context of the valid legal regulations. The warranty exclusively accesses for the delivered state of a product. Warranties and claims for damages after the subsequent treatment of our products do not exist. For details please consider our [general terms and conditions](#).

Further Information and Contact

In our forum, you can discuss topics of the surface technology:

<http://forum.SurTec.com/>

If you have any questions concerning the process, please contact your local technical department: <http://SurTec.com/International.html>