

### **DORNOW - Waste Water Cleaning**

## **Waste Water Cleaning Basins** **(Production Series DORNOW -A and -B)** **for the separation of sinking particles** **(in special design also of floating particles)** **from waste water -** **with automatic discharge facility**

The waste water cleaning basins (production series DORNOW - A and - B) serve, above all, as subsidence zones for waste waters with slowly working discharge devices.

Substances and particles heavier than water have the possibility to deposit at the bottom. Lighter particles float on the water surface.

In the basins are conveying devices, consisting of plastic chains with drivers. The plastic drivers move at a very low speed - if necessary around the clock - without causing any noticeable whirl over the bottoms and near the water surface of the cleaning basins. Thus, they remove, at one side of the basin, the deposited particles (type A) and at the other side of the cleaning basin also the matter/particles floating on the surface (type B).

At one point of the basins the waste water is let in as gently as possible, at another point the water precleaned that way leaves the cleaning basins again.

The water precleaned this way can be reused for other purposes wherever necessary.

### **Advantages and disadvantages of waste water cleaning basins:**

With a minimum of electric energy (0.18 kW) one will achieve a cleansing of the waste water to a high degree. One should compare here the energy consumption of a decanter or of fast rotating separators.

Moreover, the slow movement of the conveying facility reduces wear and tear, in contrast to the a.m. alternative devices.

It must surely be considered as a disadvantage of the cleaning basins that they occupy some floor space. However, they can, in certain cases, be also put up in the open air - protected from frost.

### Sizes and construction types of cleaning basins

The cleaning basins of the production series DORNOW -A and -B are available in different sizes and construction types. Many special designs can be supplied, too.

#### 1. General dimensions, capacities of cleaning basins (prod. series DORNOW - A):

**Waste water cleaning basins** (production series DORNOW A from 10 - 25 m<sup>3</sup>) **made of stainless steel**, with adjustable discharge device only for sinking matter/particles:

##### Item-No.      Denominations, capacities (volumes), gen. dim. (lxwxh) appr., in mm

1010	Waste water cleaning basin A-A- <b>VA</b> , cap. 10 m <sup>3</sup> , 8250 x 1800 x 2150
1011	like 1010, but type A-B- <b>VA</b> , cap. 15 m <sup>3</sup> , 8600 x 1800 x 2550
1012	like 1010, but type A-C- <b>VA</b> , cap. 20 m <sup>3</sup> , 8950 x 1800 x 3250
1013	like 1010, but type A-D- <b>VA</b> , cap. 25 m <sup>3</sup> , 9000 x 1800 x 4000

**Waste water cleaning basins** (production series DORNOW A from 10 - 25 m<sup>3</sup>) **made of mild steel**, ground-coated, lacquered, with adjustable discharge device only for sinking matter/particles:

##### Item-No.      Denominations, capacities (volumes), gen. dim. (lxwxh) appr., in mm

1020	Waste water cleaning basins A-A- <b>ST</b> , cap. 10 m <sup>3</sup> , 8250 x 1800 x 2150
1021	like 1010, but type A-B- <b>ST</b> , cap. 15 m <sup>3</sup> , 8600 x 1800 x 2550
1022	like 1010, but type A-C- <b>ST</b> , cap. 20 m <sup>3</sup> , 8950 x 1800 x 3250
1023	like 1010, but type A-D- <b>ST</b> , cap. 25 m <sup>3</sup> , 9000 x 1800 x 4000

#### 2. General dimensions (production series DORNOW - B):

**Waste water cleaning basins** (production series DORNOW B from 10 - 25 m<sup>3</sup>) **made of stainless steel**, with adjustable discharge device for sinking **and** matter/particles **floating on the surface**:

##### Item-No.      Denominations, capacities (volumes), gen. dim. (lxwxh) appr., in mm

1030	Waste water cleaning basins B-A- <b>VA</b> , cap. 10 m <sup>3</sup> , 9750 x 1800 x 2150
1031	like 1010, but type B-B- <b>VA</b> , cap. 15 m <sup>3</sup> , 10100 x 1800 x 2550
1032	like 1010, but type B-C- <b>VA</b> , cap. 20 m <sup>3</sup> , 10450 x 1800 x 3250
1033	like 1010, but type B-D- <b>VA</b> , cap. 25 m <sup>3</sup> , 10500 x 1800 x 4000

**Waste water cleaning basins** (production series DORNOW B from 10 - 25 m<sup>3</sup>) **made of mild steel**, ground-coated, lacquered, with adjustable discharge device for sinking **and** matter/particles **floating on the surface**:

**Item-No.      Denominations, capacities (volumes), gen. dim. (lxwxh) appr., in mm**

1040	Waste water cleaning basins B-A- <b>ST</b> , cap. 10 m <sup>3</sup> , 9750 x 1800 x 2150
1041	like 1010, but type B-B- <b>ST</b> , cap. 15 m <sup>3</sup> , 10100 x 1800 x 2550
1042	like 1010, but type B-C- <b>ST</b> , cap. 20 m <sup>3</sup> , 10450 x 1800 x 3250
1043	like 1010, but typ B-D- <b>ST</b> , cap. 25 m <sup>3</sup> , 10500 x 1800 x 4000

**Connection of slowly rotating DORNOW separators before cleaning vats**

Our slowly rotating separators of the types 360 (Item-No. 1000) and 390 (Item-No. 1001) can be connected before the cleaning basins. The sieve fabrics can be exchanged, so that an adaptation to the requirements is possible. The separators are also available with automatic sieve cleansing facilities.

**Please have also a look at the papers (published on the Web) and the brochure listed below:**

- Treatise Q59\*:      "A simple way of cleaning waste water in the potato and vegetable processing industry"
- Treatise Q74\*:      "Separation of solid matter from liquids - drum separators type 360 and type 390"
- Brochure P201:      "Waste water treatment and separation technology"

\* Published on the Web in English and German

A list of interesting articles and essays regarding the topics of the preparation and processing of tubers and vegetables and associated specialist areas can be found at our Internet site at [www.dornow.de](http://www.dornow.de), Treatises.



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