

## **Examples of plant construction**

### - a short presentation-



#### ANLAGEN- UND MASCHINENBAU

#### **HEGE GmbH** plant engineering & construction

Dipl.-Ing. (FH) Rudi Greschner graduate engineer in mechanical engineering

Just take a few minutes!



## manual washing cabin

#### Pic 1

Manual washing is flexible and is done with visual control by the worker.



Transportation Enclosed overhead conveyor

**Cleanliness** The extraction takes place through the gratings under floor.



# manual washing cabin

Pic 2

The pictures show the preparation of the detergent.





**Thermal conditioning** Heating of the bath medium using a plate heat exchanger

**buffer tank** Multi-chamber container with gravity pre-separator



## manual washing cabin

Pic 3

Engines on the transport route



Transport

Power & Free-overhead system



## Leak test basin

#### Pics 1+2

Teile werden in einem Tauchbecken auf Dichtheit geprüft.





PrinipleDense parts are heated in a water bath so far that leaks would have to show<br/>up by rising gas bubbles.

**Bull eyes** Lateral bull eyes and lighting facilitate the leak test.



## Leak test basin

#### Pic 3

System heating



heat exchangerHeating of the water bath by plate heat exchanger<br/>(with suitable heat source)

**alternative** Alternatively, the heating can also be done electrically.



## Vortex sinter plant Fluidized bed pool

fluidized bed in small scale



**Fluidized bed** 

**Suction** 

bed So small can be a vortex sinter plant. The fluidization of the paint powder is carried out by a blower or compressed air
You can clearly see the suction channel at the top edge.

Pic 1



## Vortex sinter plant Fluidized bed pool

Pic 2-3

fluidized bed in large scale



fluidized bed portable

Rings are vortex sintered with this large system.

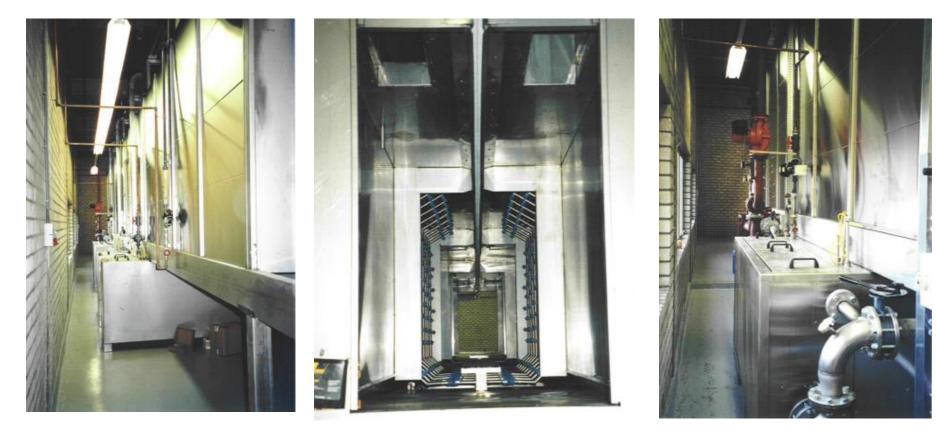
Despite the total weight of the plant of several tons, it was carried out transportable even in the loaded state.



## Pass through conditioning

Bild 1-3

Pass trough-conditioning in large scale



Method

Multi-chamber washing system



## Zinc flake coating

Pass trough-system in large scale



Pass through plant Power & Free-transport system

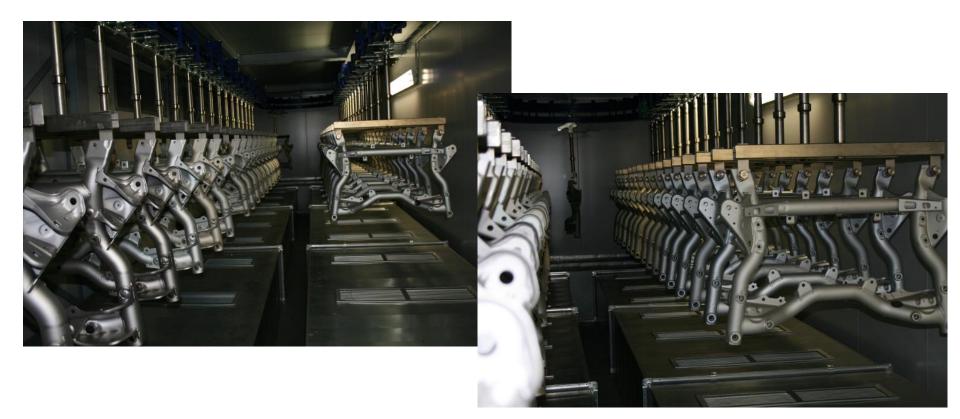
Pic 1



## Zinc flake coating

#### Pics 2-3

A glance inside



#### Stacking range in the oven



## Paint plants for large parts

#### Example 1

View from outsinde



#### **Aggregates** All units are overhead; the facility is easily accessible.

**Ground floors** The maneuvering areas are free.



# Paint plants for large parts



Arbeitsbühnen Seitliche Arbeitsbühnen ermöglichen schwierige Zugänge.

FlächenDie Rangierflächen sind frei.



**Pics 1-3** 

## Production belt reverser

Belt reverser for vehicle in production



#### **Goods carrier for small parts**

**Teflon coating** 







# Manual painting in the continuous process

#### Bilder 1+2

Rahmen in Produktion





#### Werkplatz

Man erkennt die horizontale Absaugwand im Hintergrund. Der Werker braucht keine Schutzausrüstung.

Trocknen

Das Bild zeigt den Durchlauf der Werkstücke durch die Einbrennkammer.



# Manual painting in the continuous process

Pics 3+4

Rahmen in Produktion





#### **Transport**

#### ... with open overhead conveyor

**Heating up paint** The picture shows a preheating chamber for the thermal conditioning of the paint.



**Pics 1-3** 

## Camer oven 450 C°

The oven heats up to 450 C°.

<image>

Tempering<br/>colorsYou can already see the tempering<br/>colors of the interior wall.

**Goods carrier** 



## Adhesive water dryer with heat pump

A small but already very powerful pilot plant



Heat pumpLeft: Heat pump unit with a connected load of 6 kWh.This corresponds to a water discharge of approx. 6 kg / h.Drying cabinetRight: Drying cabinet for storing the dry goods

Pic 1



### **Plant construction tailor-made**

-conclusion

In view: <u>Your process</u>	Decisive for the success of your invests is a solution that is precisely adapted to your production conditions and production targets.
Understanding of the individual process	The right solution for you results not only from the application of the respective state-of-the-art method, but also according to your specific range of parts per shift, the dimensions of the parts and the site conditions.
Business factors	We also include business considerations in our planning. The lowest price for plant manufacturing is of little use to you if the costs of operating the plant, including staff costs., run away.

We have over 30 years of experience in this business that we want to bring to your solution. We thank you for your attention. Contact us !



greschner@hege-anlagen.com