

# ■ Headquarter in Germany



## Board

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# FOUNDRY TECHNOLOGY

## Investment castings in No-Bake Sand

Dipl.-Ing. Peter Storp



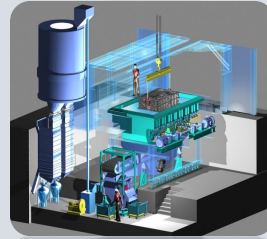




Charging Devices



Blast Cupola



Moulding and Sand  
Regeneration



Sand Preparation  
Plant



Shake Out and Casting  
Coolers

- Charging Cranes for fully automatic Operation
- Accurate addition of additives and alloys
- Charging Cars
- Monorail Systems

- Hotblast Cupola
- Coldblast Cupola
- Cupola with and without lining
- Siphon Runners, Atmospheric or High Pressure
- Dry or wet gas Management
- Generation of Hot Blast
- Desulphuration of Liquid Iron
- Dry and Wet slag granulation

- Mixing Stations
- Moulding lines
- Shake out stations
- Regeneration of No-Bake Sand
- Lump Breaker
- Separation of Iron
- Airlift for transportation
- Sieves and sifter
- Shaft or Fluid-Bed Coolers

- Fluidised Bed Coolers
- Mixer Coolers
- Sand Mixer
- Sifting and storage
- Conveying technologie
- Control systems
- Thermal and mechanical regeneration

- Shakeout conveyors
- Shakeout Drums
- Casting cooler conveyor or tunnel
- Transportation conveyors
- Dedusting systems

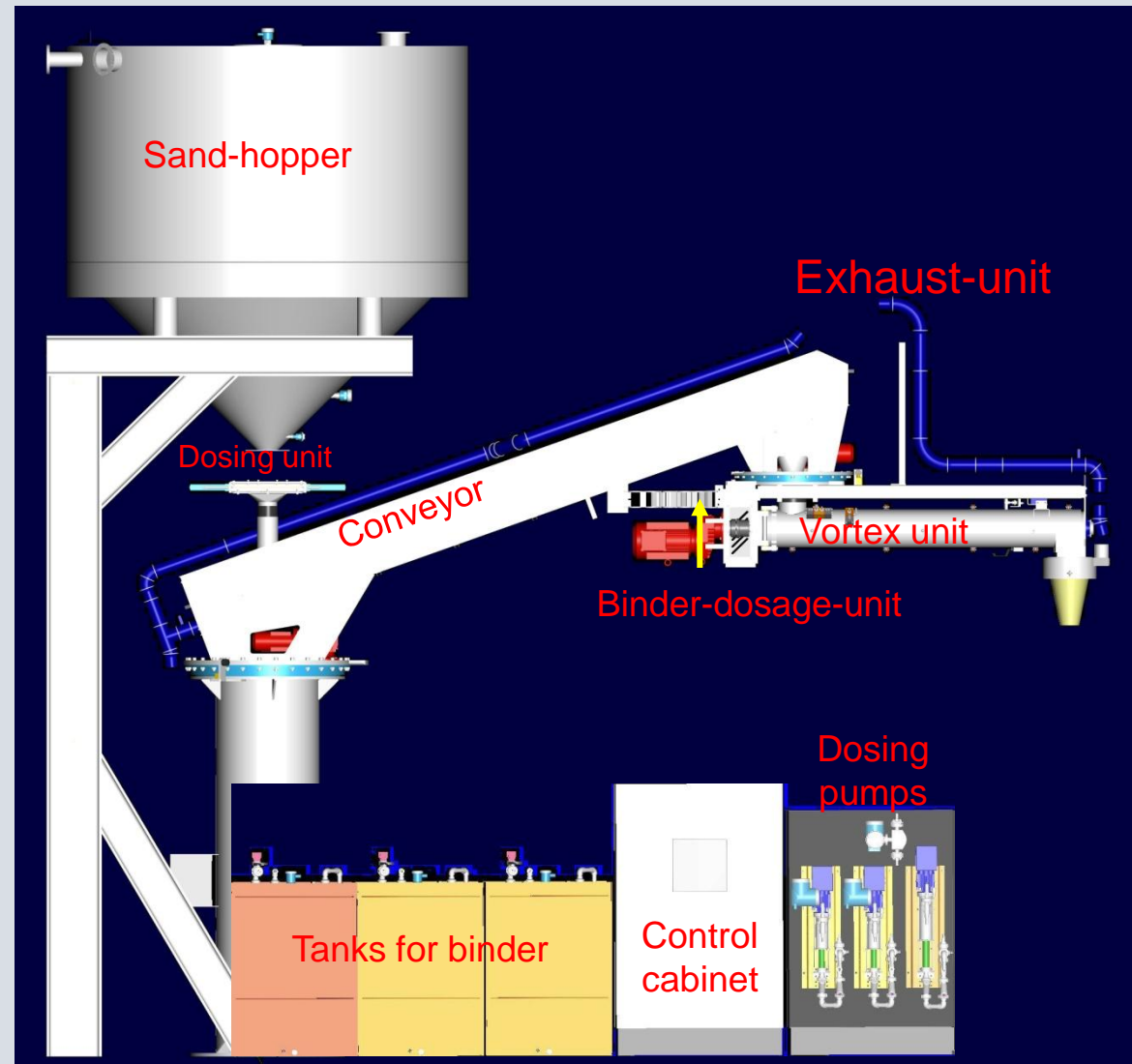






## Continuous-mixer and its ancillary equipment

- Sand-hopper
- Dosing unit
- Conveyor (belt or screw)
- Vortex unit
- Binder-dosage-unit
- Tanks for binder
- Dosing pumps
- Exhaust unit
- Control cabinet





## Example 1:

- Double-articulated, standing
- Two sorts of sand (chromite and new sand)
- Capacity: 30-50 t/h
- Total reach: 7,5 m, 5,0 m belt-conveyor 2,5 m vortex-trough
- Rotation angel: 185° of the belt-conveyor 290° of the vortex-trough
- Height adjustable





## Example 2:

- Double-articulated, mobile on railway
- Two sorts of sand (reclaimed sand and new sand)
- Capacity: 8-25 t/h
- Total reach: 7,0 m, 5,0 m belt-conveyor 2,0 m vortex-trough
- Rotation angel: 90° of the belt-conveyor 270° of the vortex-trough
- Height adjustable, Sand-outlet between 0,5 m to 3,5 m







## High flexibility

- Traveling range
- Height adjusted

## Working circle

- Up to 12m

## Continuous mixing

- Of different sand streams

## Distinguish by high performance

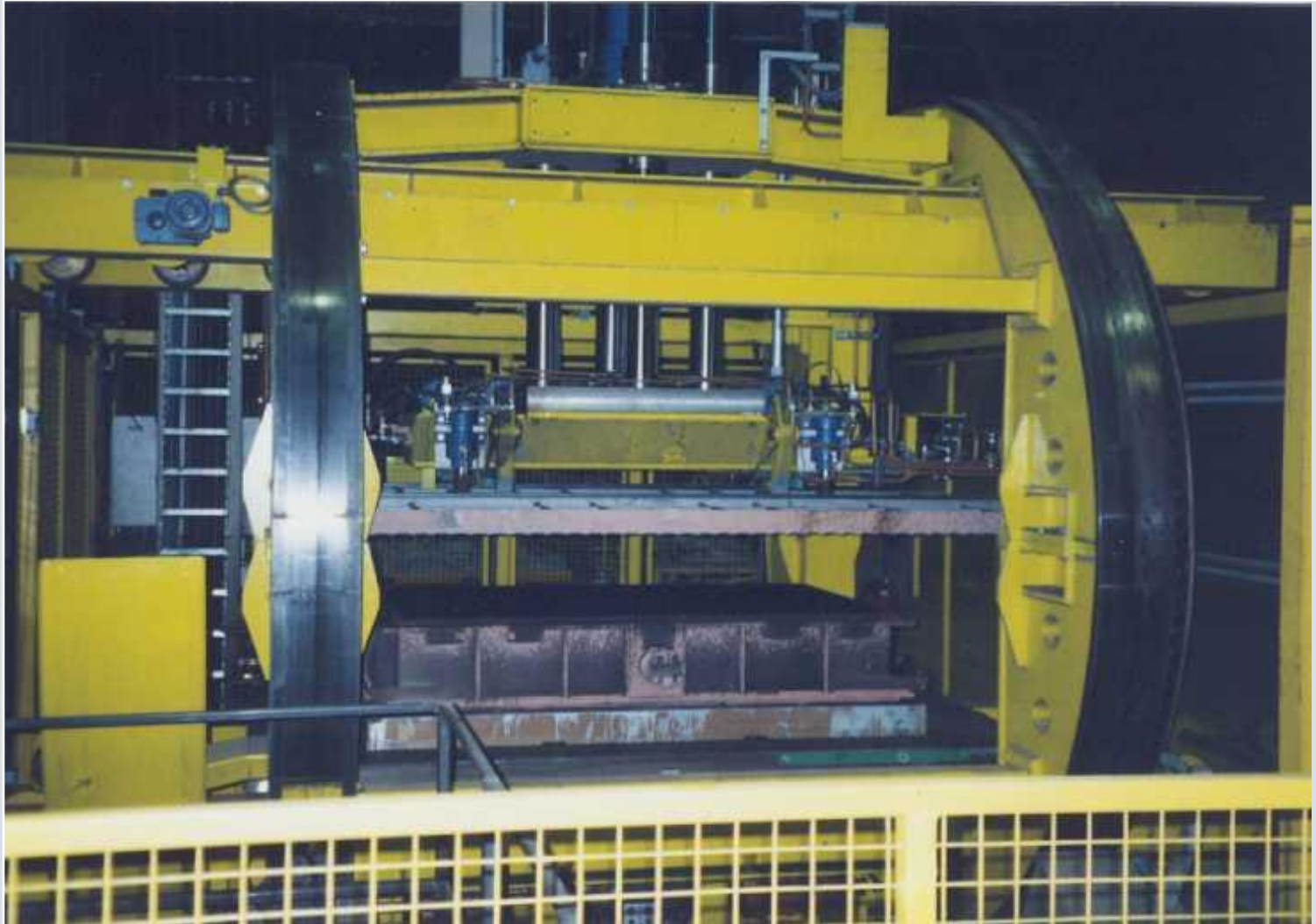
- Easy to operate
- Technically sound
- Cost effectiveness
- Long service live











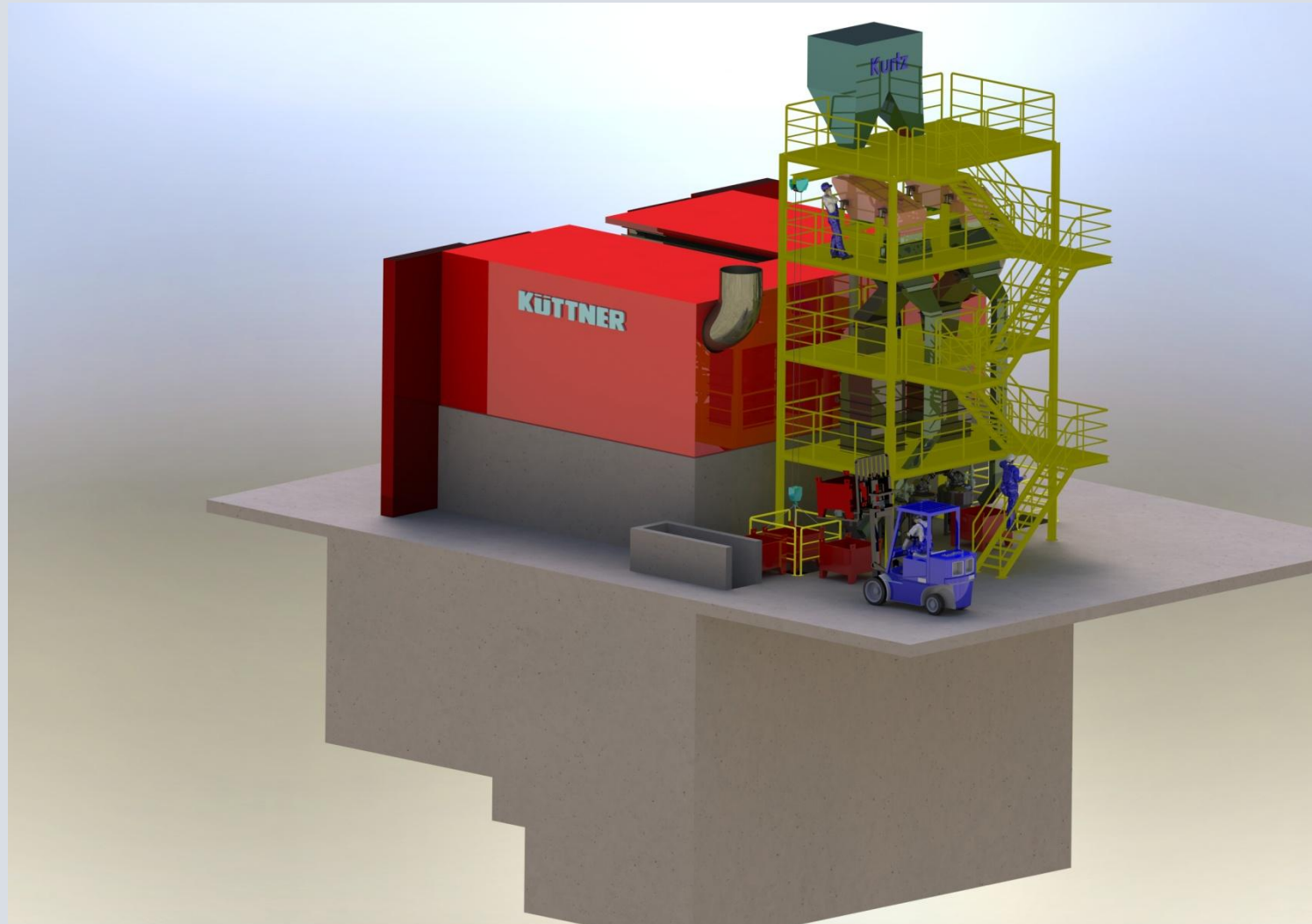








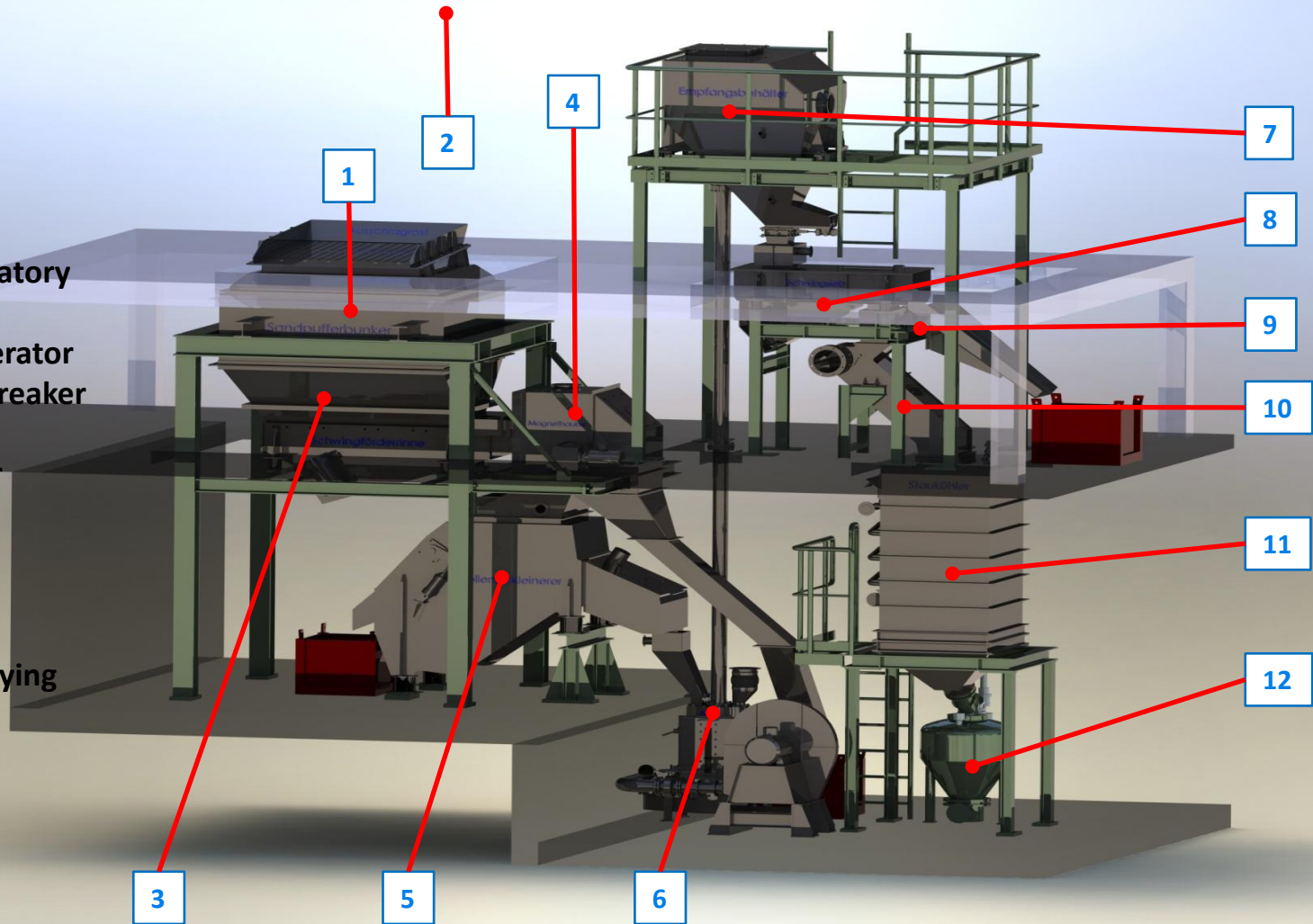




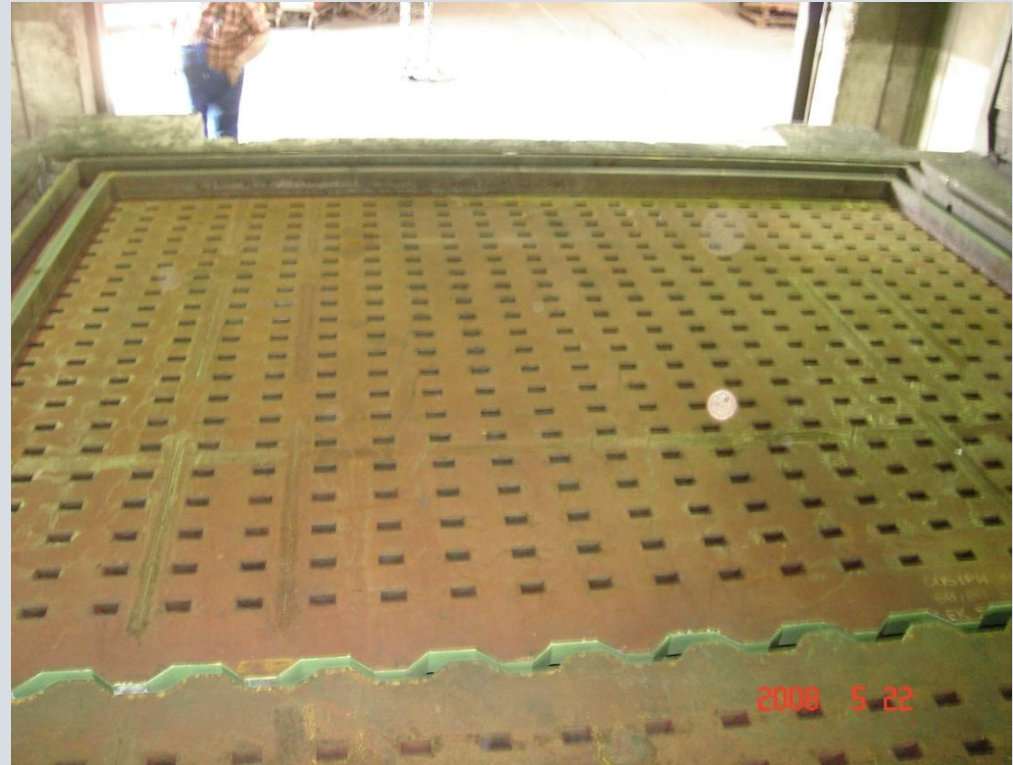


## Plant lay out

1. Shake out grid
2. Noise and dust protection cabin
3. Hopper with vibratory feeder
4. Magnet belt separator
5. Vibratory lump breaker
6. Airlift
7. Receiving hopper
8. Vibratory sieve
9. Magnet drum
10. Sifter
11. Shaft cooler
12. Pneumatic conveying







Shake out station: 2 x 3100 x 4200mm, load 15 / 20 t,  
Gusswerk Waltenhofen, Germany, 2007.



**Shake out station: DAF 2000x2000 mm,  
load 2 t,  
Georg Fischer - Garching, Germany,  
2011**







**Shake out grid size:  
2 x 3500mm x 6000mm,  
Shake out grid load:  
each 45t,  
special equipment :  
oil cooling**

**Anselmi Italy**







**Sand hopper and sand hopper support build as shakeout counter mass, 2 x 30t**





**Metall separation**



**Lump separation**

**Product line**

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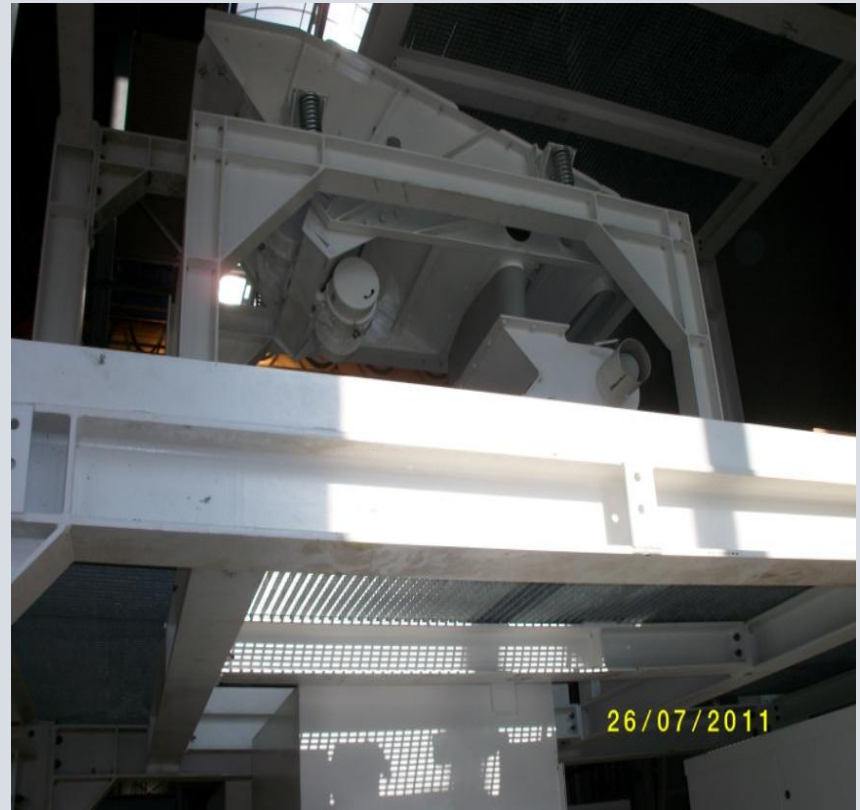


### Technical features of the air-lift:

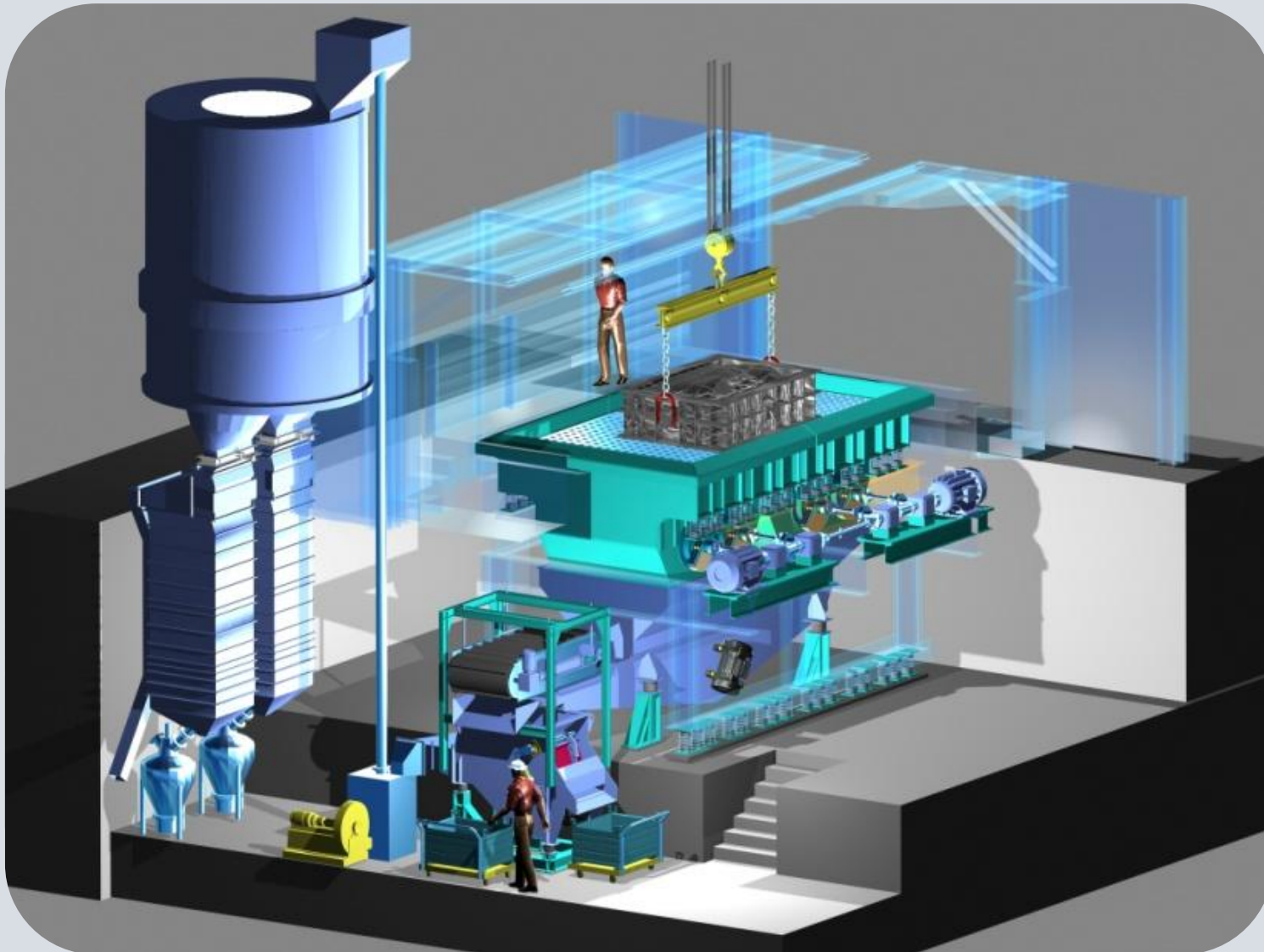
- The technical advantage in contrast with pneumatic conveyors:
- The ability to convey sand with temperature from more than 300°C up to 700°C
- Works without compressed air
- Virtually no water out into the feed-pipes



## ➤ Reduction of dust in the product sand









**Thank you for your kind attention!**



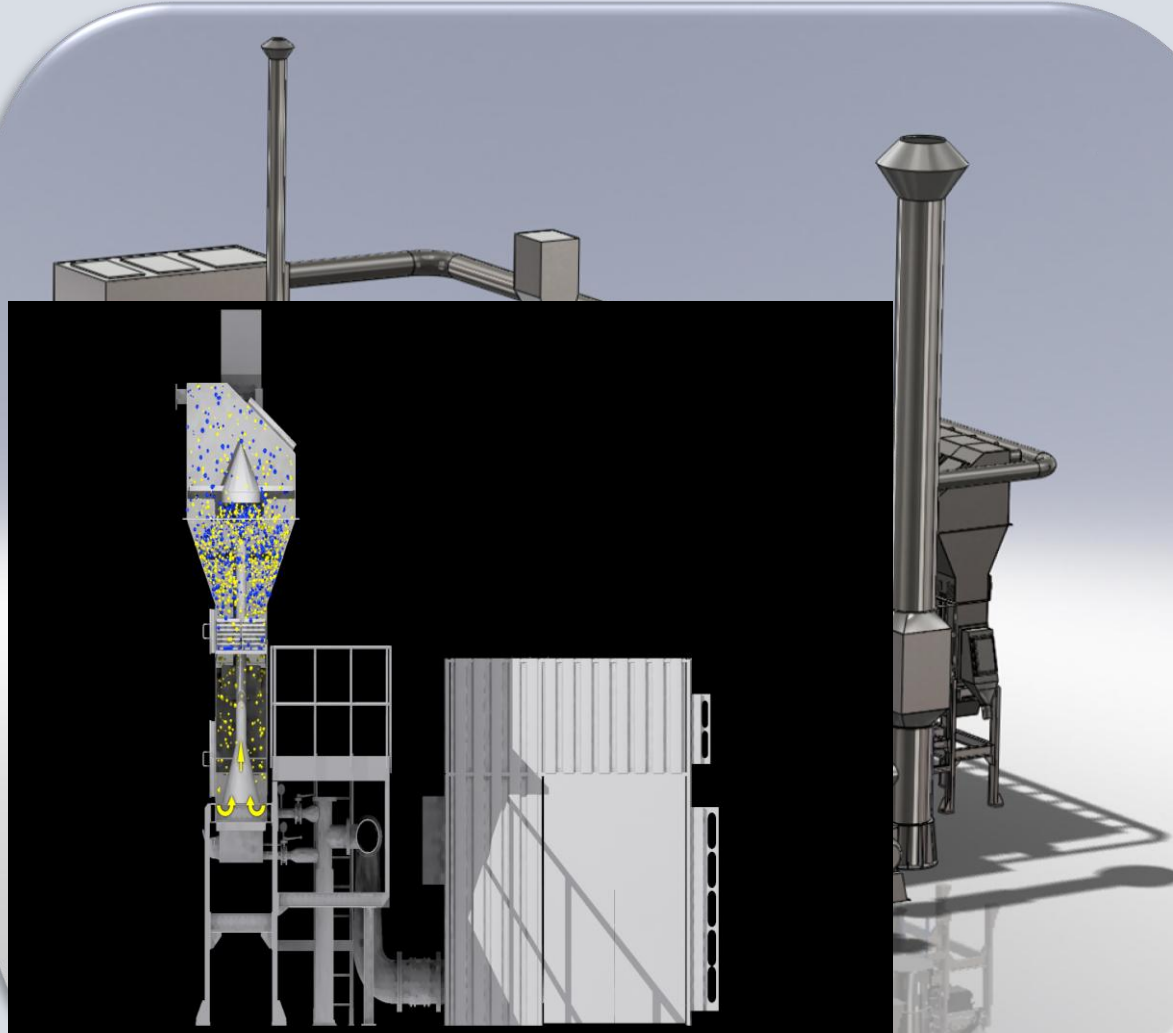
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Ab hier Backup Folien





## Modulare mehrstufige Sandregenerierung von Mischrestsand

- 1. Modul:**  
Mechanische Reinigung zur Zerstörung und Beseitigung des wesentlichen Teils Binder-hüllen aus den einzelnen Sandkörnern
- 2. Modul:**  
Thermische Reinigung zur Verbrennung der restlichen Binderhüllen und Inaktivierung der Feinstäube aus Bentonit und Glanzkohlenstoffträgern.
- 3. Modul:**  
Mechanische Nachreinigung zur Beseitigung der Binder-reste und zum Abschleifen der Sandkornoberfläche, mit abschließender Sichtung, Kühlung und Siebung.