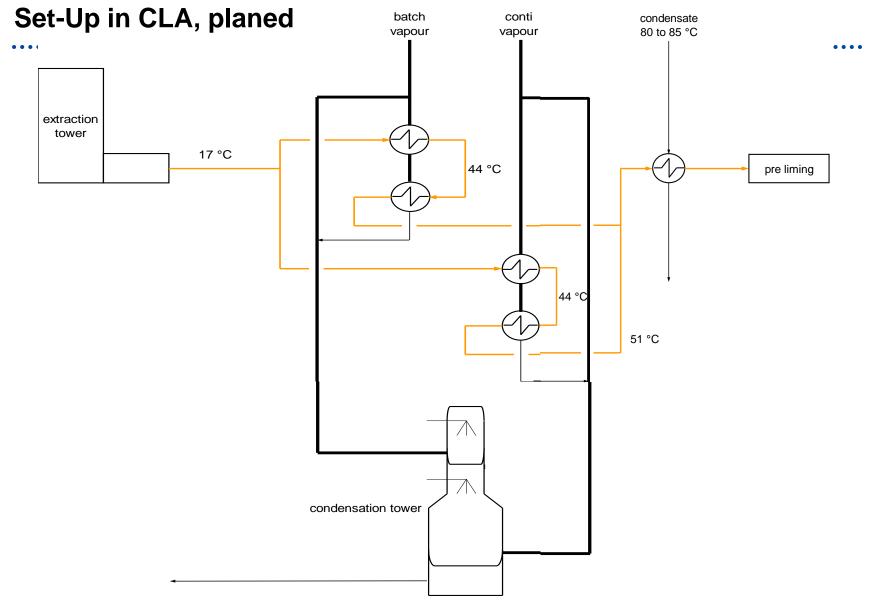


#### **New Vapour Heated Exchanger for Raw Juice**

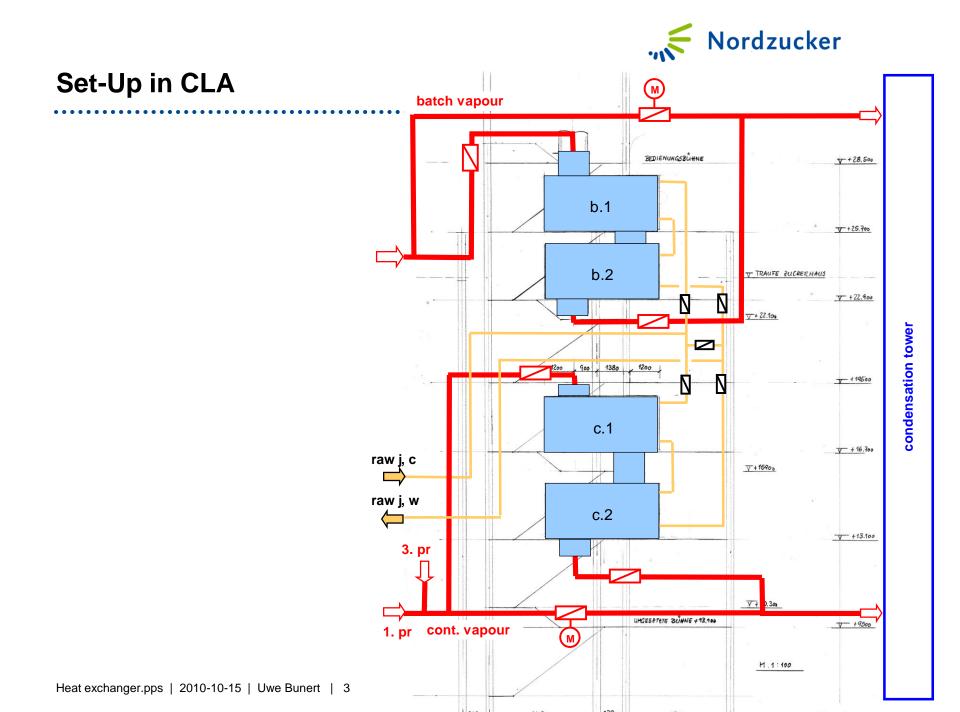
Nordzucker AG, Clauen plant

File name: Heat exchanger.pps Responsible: Uwe Bunert Created by: Uwe Bunert Version: 2010-10-15 Animation: no Language: english





Heat exchanger.pps | 2010-10-15 | Uwe Bunert | 2



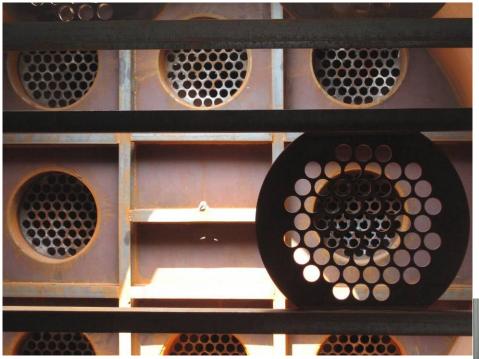
## Delivery from the new raw juice-heat exchangers by Techinservice 29.06.2010





# Delivery from the new raw juice-heat exchanger by Techinservice 29.06.2010





#### Inside of the heaters – without the pipes





The new pipes

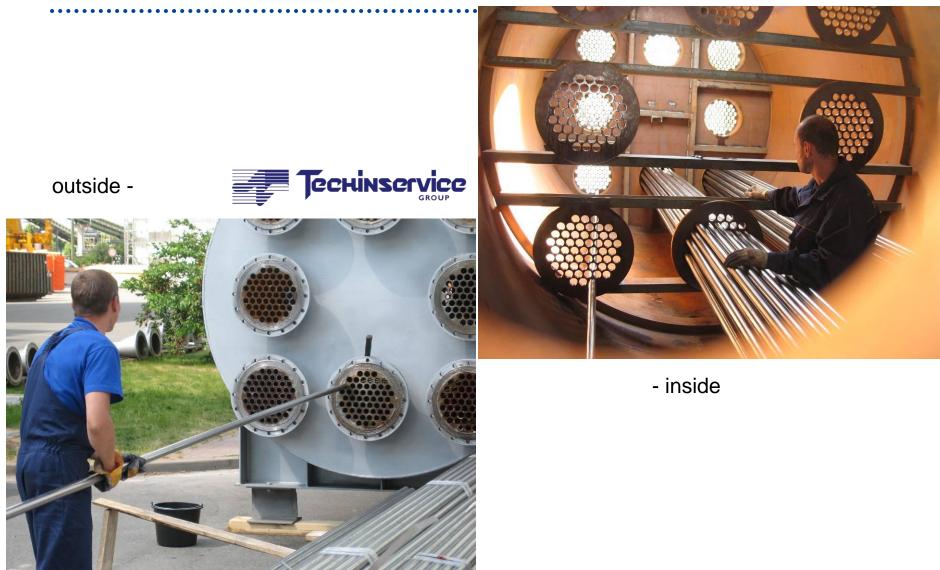


#### **Piping of the new heaters 05. – 12.07.2010**





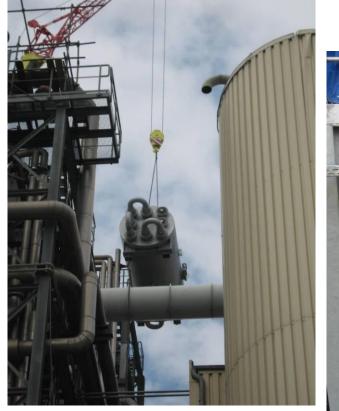
### Piping of the new heaters by Techinservice 05. – 12.07.2010



Heat exchanger.pps | 2010-10-15 | Uwe Bunert | 7



#### Fitting of the first new heater by Techinservice (22.07.2010)









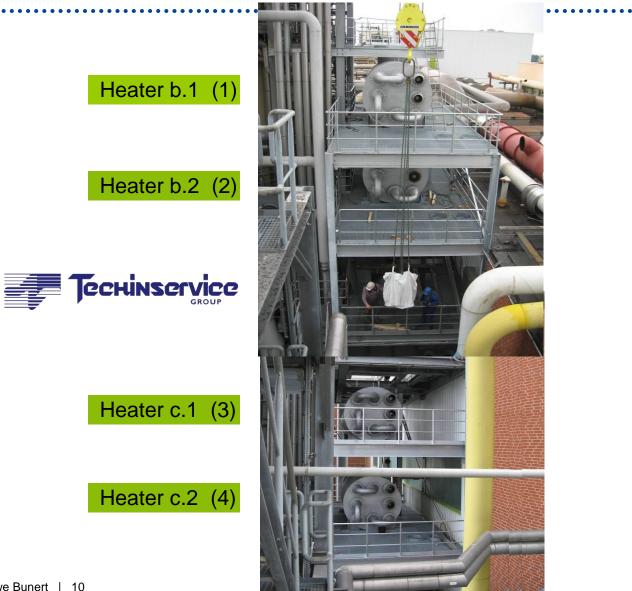


#### Both upper heaters by Techinservice (29.07.2010)





### All four heaters are installed (29.07.2010)



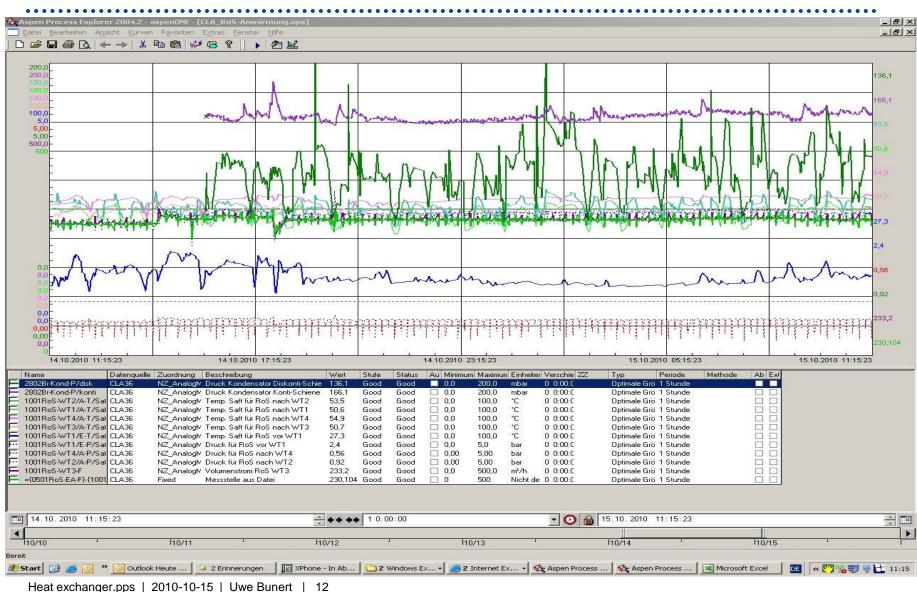


### Isolation of the upperst heater (12.10.2010)



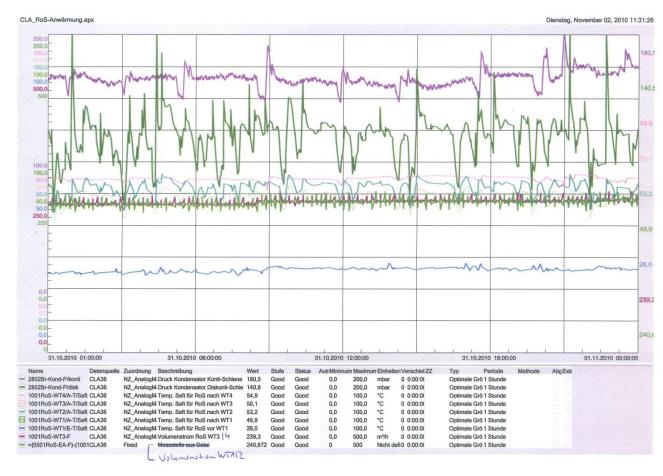


#### Technical results (14./15.10.2010)





### Technical results (31.10/1.11.2010) (T in = 26°C, Tout=54,9°C)



•Pressure in the continuous vapour condensation tower

•Pressure in the batch vapour condensation tower

•Temperature after the second heater in the continuous line (c1.2)

•Temperature after the first heater in the continuous line (c1.1)

•Temperature after the second heater in the batch line (b1.2)

•Temperature after the first heater in the batch line (b1.1)

- •Temperature of the cold raw juice
- •Juice flow in the continuous line
- •Juice flow in the batch line