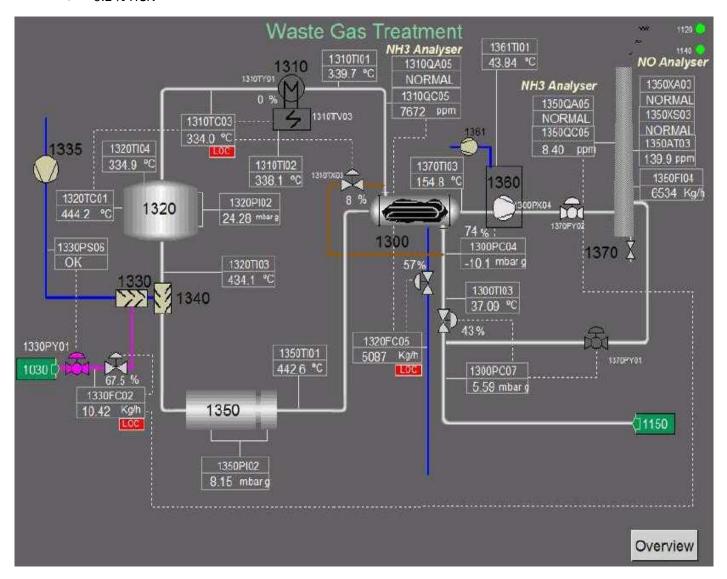


## Reference Lonza Guangzhou, China (start-up 1997)

Off gas from 1150

- 4 % O2
- 1 % NH3
- 4 % CO2
- 0.2 % C6H7N
- 0.2 % HCN



1310→Start-up heater

1320→oxi catalyst BASF catalyst RO-25/15, bulk filling 650 kg (see picture below)

1350→DeNOx catalyst BASF catalyst O4-85 (honeycomb) – 2 m<sup>3</sup>

1300→Gas/Gas HE



## 1330/1340→Static mixers Normal condition:

- Air into HE 1300 about 5100 kg/h
- NH3 from 1030 about 10 kg/h
- Waste gas from 1150 about 1400 kg/h (see w% in list above)
- Total flow to stack about 6500kg/h



View into Oxi reactor 1320 through manhole Catalyst last changed in 2002 (mist and droplets from process caused deposits and increased pressure drop, that was the reason catalyst had to be changed)