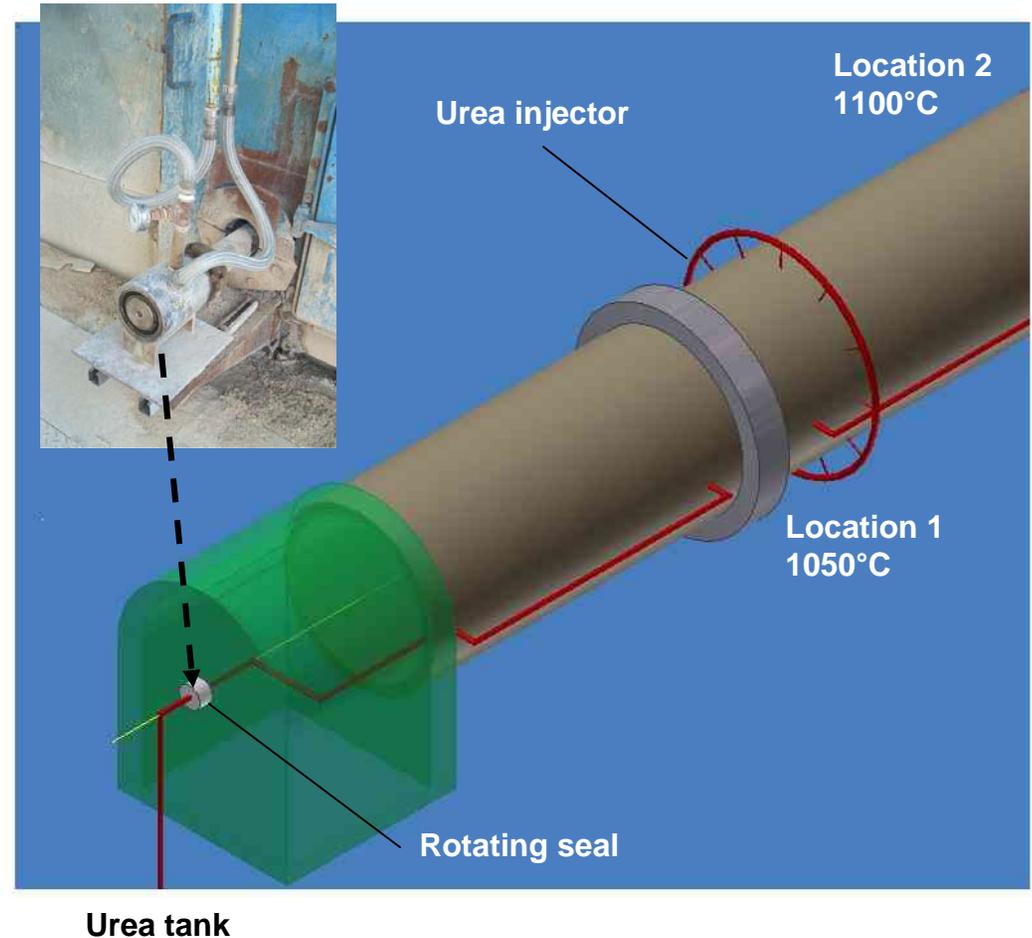


SNCR in Wet Kilns

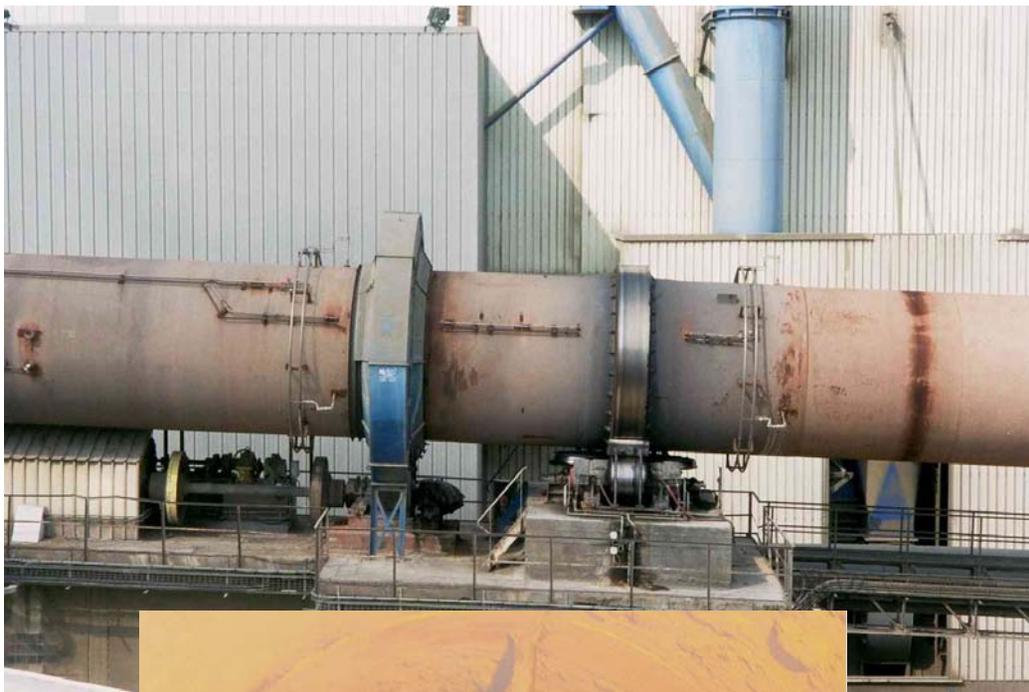
- Installation in Lumbres France
- Long wet kiln; 800 [t/d]
- NO_x without SNCR: 1000–1300 [mg/m³] (dry, 11 [%] oxygen, daily averages)
- 3 atomizers for each input place



SNCR in Lumbres



SNCR in Lumbres



Actual Situation

- Solution for the reduction: Urea (43.5 [%] and / or 33 [%])
- Reduction: From 1200 [mg/m³] below 800 [mg/m³]
- Ammonia emission < 30 [mg/m³]
- In operation since 2004 without greater problems
 - ▶ Damage and blockage of atomizers
 - ▶ Escape of urea
 - ▶ Water hardness
- Better efficiency on the «cold» injection point (1050 [°C])
- Mass flow control in function of the NO concentration at the stack (emission measurement)