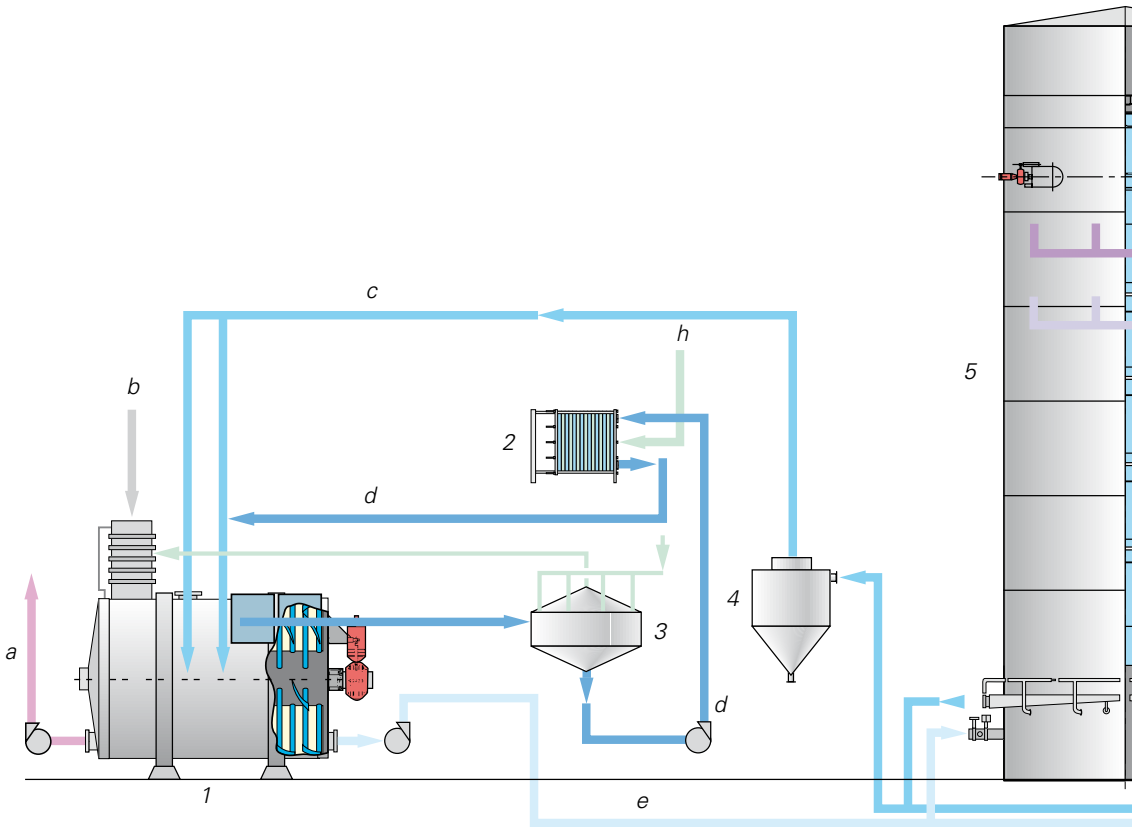


New extraction plant for Delta Sugar, Egypt



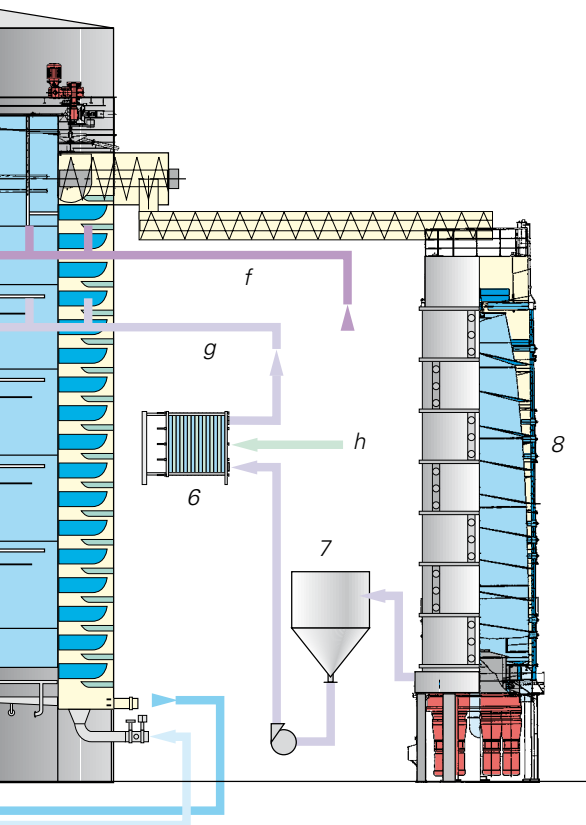
In 2007, Delta Sugar Company followed the trend of the Egyptian sugar market and installed a BMA-made countercurrent cossette mixer (CCC mixer) upstream of the existing RT4 drum extraction plant. The process-related tasks of the CCC mixer are thermal cell digestion, heat exchange between the incoming cossettes and the outgoing juice, and defoaming.

In 2009, Delta Sugar Company placed an order with BMA for the supply of a modern 2000-type extraction tower with a 9.6 m diameter and 22.73 m extraction length, in order to replace the technically outdated RT4 drum extraction plant.

The process taking place in the extraction tower is the solid-liquid extraction of sucrose from the cossette cells by applying the countercurrent principle. Together with the CCC mixer, the extraction tower ensures efficient and state-of-the-art

operation. Moreover, BMAs beet extraction plants are unparalleled in efficiency in terms of process technology and heat economy. The two components, i.e. the CCC mixer and the extraction tower, are connected via pipelines and special pumps and will work as one unit in the future. This has been an effective solution for saving steam and optimising performance.

In order to reduce the investment costs, standard sections such as the tower shell and the tubular shaft were manufactured locally in Egypt. Thanks to quality supervision at the local manufacturers, which was performed by experienced BMA engineers, the customer's quality requirements could be fulfilled and manufacture completed on schedule. Function-critical equipment parts were manufactured at BMA in Braunschweig and delivered in time.



- a Raw juice
- b Fresh cossettes
- c Tower juice
- d Defoamed juice
- e Cossette-juice mixture
- f Fresh water
- g Press water
- h Steam

- 1 Countercurrent cossette mixer
- 2 Heater for defoamed juice
- 3 Defoaming tank
- 4 Sand separator
- 5 Extraction tower
- 6 Heater for press water
- 7 Press water tank
- 8 Pulp press HP 4000

In addition to the supervision of manufacture, BMA coordinated and monitored assembly work in order to safeguard the quality of installation and adherence to the tight time schedule.

Thanks to the very good collaboration between all participants, the project is nearing completion, with the plant handover still scheduled for 2011.

Carsten Klemp

Benefits

- Low energy consumption
- Low sugar loss
- Reduced infections
- Small footprint
- Simple wet pulp conveyance