

## Refinery Projects

### 2006: ENGINEERING DESIGN: THS SUGAR REFINERY

PGBI was appointed to review the proposed refurbishment of Tongaat Hulett Centre Refinery in Durban. The review resulted in PGBI being asked to undertake an engineering design for expansion and refurbishment of the refinery whilst maintaining full operation.

### 2005:SAVOLA REFINERY: SAUDI ARABIA

A new flash tank was recently commissioned on evaporated liquid and has increased the brix by 2-3 units. Each unit of brix increase at USC is equivalent to an evaporation of 3.5 tonnes of water.

Commissioning this flash tank allowed Savola to commission the vapour melter at 0.5 bar and both of these "commissionings" have contributed significantly to its energy usage.

### 2004/5: FELIXTON SUGAR MILL: RSA

Design, procurement and project management of a R50 million WSM slipstream plant at Felixton Sugar Mill to produce white sugar directly at a rate of 8 tons/hour.

### 2004: STE ENGINEERING: CAMEROON & CHAD

Design of two phosphotation clarifiers for STE Engineering to be installed in sugar mills in the Cameroon and Chad.

### 2002: MALELANE SUGAR MILL: RSA

Process design specification for the expansion of Malelane Sugar Mill to a crush of 2.2 million tons of cane in 38 weeks. High level studies for the requirements for a further increase to 2.4 million tons and for a refinery expansion to 400 000 tpa were also carried out.

### 2002: MHLUME SUGAR MILL: SWAZILAND

Design of a triple effect Robert evaporator set (3 x 270m<sup>2</sup>) for the refinery at Mhlume Sugar Mill.

### 2001: MHLUME SUGAR MILL: SWAZILAND

Design of 3 vacuum pan stirrers and entrainment separators for retro-fitting into existing white sugar pans at Mhlume Mill in Swaziland.

### 1997/98: TONGAAT HULETT SUGAR: REFINERY: RSA

Design and installation of 25kg and 50kg packing lines at THS Refinery.

### OTHER REFINERY PROJECTS

- 1997: Tongaat Hulett Sugar Refinery: RSA, Upgrade
- 1997: US Sugar Clewiston Mill, Florida, USA
- 1996/7: Al Khaleej Sugar Refinery Upgrade UAR
- 1996: US Sugar Clewiston Mill, Florida, USA
- 1991: Zuenoula, Ivory Coast
- 1990: Malelane Sugar Mill, South Africa
- 1987: Tongaat Hulett Sugar Refinery, South Africa

- 1985: Tongaat Hulett Sugar Refinery, South Africa