

# Farewell to the coal tar plant

The FFS coal tar centrifuging and filtration plant within Sasol's Secunda operation has been sold to Sasol Synfuels.

FFS designed and built this centrifuge plant in 1986 to remove solids from Sasol's gasification run down tar. At the time much of the material was dumped. The plant consisted of FFS designed "dump bins", which were scraped bottom static separators, low speed horizontal spindle decanter centrifuges and high speed vertical spindle centrifuges. The solids content was reduced from about 10% to below 0,3% by mass. The success of this plant lay in the redesign of the workhorse decanter centrifuges where

tungsten accelerators, nozzles and ports were fitted, extending the wear life from three weeks to nine months.

Then in 1990 FFS won the contract on international tender to reduce the solids content to below 0,02% to meet the quality requirement in the pitch fraction of the tar so that Sasol could enter the anode coke market. The plant was reconfigured with the high-speed centrifuges being replaced with filters. The decanter centrifuges were de-tuned to condition the solids particle size distribution for optimum filtration to form a cake that filtered out the solids to sub-micron size. The key to this plant was designing in an

integrated high pressure sluicing system to keep the filter leaves clean, and engineering out the weaknesses to achieve a more robust and longer life filter.

Sasol considered the plant as a strategic operation because it was an integral part of the Synfuels tar value chain. So in May 2004 the plant was handed over as a going concern with all staff. Thus ended a chapter in FFS' life, one filled with a sense of great achievement and pride. The company salutes all the committed and dedicated employees who worked so hard processing the 48 000 tons a month of tar on a 24/7 basis 365 days a year. •