Durban food acids plant in new R40 million expansion venture

DURBAN-based Isegen South Africa, a world-renowned manufacturer of food acidulants, has due to increased local and export demand, embarked on a R40 million expansion programme to increase production facilities at its maleic anhydride (MA) plant.

A reactor imported from Europe, will produce an initial additional 7 000 tons of MA annually from butane and after a second phase expansion, this will be increased to 14 000 tons. After the start-up of this reactor, the use of benzene, which is also used to make maleic anhydride, will be phased out on the Isipingo site.

According to Isegen's managing director, Robert Fowlds, this will have long-term environmental benefits for the site and for the South Durban Basin. The butane is sourced through a pipeline from the Sapref refinery adjacent to the Isegen plant, and has led to considerable synergy and cost savings.

MA is the raw material used in-house in the manufacture of all the food acidulants. Most of these are unique or have unique characteristics. Acidulants are used mainly to provide the sour taste or tartness in foods such as beverages, confectionary and condiments.

All the technology used in the food acids manufacturing process has been developed in-house in South Africa, and all major raw materials are of South African origin.

Way back in 1974, before establishing Isegen, Fowlds developed the technology and became South Africa's first food acidulant manufacturer. At that time, he was one of only four global manufacturers producing malic acid, and was the first in the world to commercialise the manufacture of synthesised tartaric acid.

Over 65% of the production is exported to 43 countries worldwide. Once the current expansion is operational, exports will rise to 85% of production, earning the country valuable foreign exchange.

Most of the design and process development is carried out by in-house engineers. Outside contractors such as Innovative Industries were used on the foods acids plant, and SHM Engineering and LHL Engineering were used on the maleic anhydride expansion.

All the expansions were managed on-site by a team of highly experienced specialists under Paul Tack, the operations director, who together with Dumi Mkhize, the plant and production leader for MA and PA, have had many years experience in the chemical industry.

Fowlds attributes the success of Isegen to the knowledgeable and experienced people involved in all aspects of the business.

Pictured in front of the new imported reactor at Isegen are, from left, the company's three shareholders: Robert Fowlds, managing director; Mark Holtes, marketing director; and Paul Tack, operations director.