

Deal provides SA maize farmers with innovative grain storage solution

Come harvest time, South African maize farmers are set to have their hands full after planting almost a third more hectares this season. This according to [a report](#) by the government's Crop Estimates Committee (ed: January 26), which indicates that 2.549 million hectares had been allocated to maize, marking a 31% increase on the 1.947 million planted during the previous, drought-ridden year.

More and better grain storage required

While the anticipated size of the harvest could have a stabilising effect on food price inflation, an increasingly competitive global market continues to pressure South African producers to find new ways of cutting costs on grain and silage storage.

One such method is the use of massive grain bags on sites around the country, which is the result of a new deal between South African agricultural specialists Rhino Plastics – part of the sustainable solutions group of companies, Rhino Group – and one of the top global producers of master-batches and agricultural films, Greece's Plastika Kritis.



“This deal not only has significance for the local market in terms of better value, it also offers the industry a far superior product,” said Brian van Niekerk, MD of Rhino Group.

The technology enabled improved quality and the ability to engineer and improve costs on the end product, impacting on

South Africa's ability to remain globally competitive, he said. "The bags boast a trademarked, seven-layered barrier film, dramatically increasing the strength of the bags, while more importantly reducing the oxygen permeability of the film," said Van Niekerk.

Since introducing the product, demand from around the country has surged, he said. "Customers range from farmers to agricultural organisations stretching into Southern Africa."

Storage solution

According to Brendan Kelly, of Rhino Plastics, the bags are a solution for storing grains such as wheat, barley, maize, sorghum, soybean, rice, rye, and legumes, which are increasingly in demand globally.

"The grain can be loaded in the bags directly from the harvester or from a truck and be stored safely for up to two years," said Kelly. "Additional benefits included lower initial investment, on-site storage, flexibility and savings on freight."



"The grain bags supplied by Rhino Plastics were used extensively by our clients during the 2016 intake season to store wheat, barley, and oats – among other grains and silage. The bags handled very well on bagging machinery and had excellent stretching and durability properties."

The Hitec grain and silage bags create a hermetic environment, which promotes oxygen depletion and simultaneous carbon dioxide production. This is as a result of the respiratory process of the biotic components inside the bag, Kelly added.

"The new atmosphere in the bag, rich in CO₂ and poor in O₂, suppresses, deactivates, or reduces not only the reproduction or development capacity of insects and fungi but also the grain's own activity, in turn facilitating its preservation," said Kelly. "Users report that the Hitec bag packs five to 10% more grain than other bags of the same size."

The seven-layered Hitec grain bag is one of many agricultural products supplied by Rhino Plastics. Other products include silage films, bale wrap film, green house films, LDPE irrigation pipe, mulch films, and dam liners among other related products.