

Renewal and modernisation of a starch factory in Algeria



*Project meeting
in Braunschweig*

The “Maiserie de la Tafna” starch factory in Maghnia, Algeria was turnkey-built and successfully commissioned from 1978 to 1980 by **BMA** | STARCOSA and its consortium partners Klöckner INA and Beton- und Monierbau, with a milling rate of 200 t of maize per day. The factory was state-owned at that time.

Some years ago, the factory was privatised and today belongs to the Groupe Metidji, which is active in various areas of the Algerian food industry. It operates, for instance, corn mills, pasta factories and the country’s largest silo plants for a range of basic foodstuffs.

The technology for starch production from maize and the condition of the mechanical equipment have drastically changed during the past 30 years, so the new owner immediately decided to modernise the factory. This had become necessary, as in particular, insufficient yields, high water consumption and a correspondingly high wastewater load from the old factory were no longer state-of-the-art and these investments were therefore required.

In addition to the repair of machinery, modernisation will comprise, among other items,

maize conveying from the silo to maize steeping by a flume system, maize degermination and maize fibre washing. The old separators for starch refining will be replaced by new ones with a multi-cyclone system. For starch dewatering, the peeler centrifugal, the gluten dryer and all pneumatic conveying systems will be newly installed. Furthermore, the contract includes the supervision of mechanical and electrical assembly as well as test and performance runs.

With a processing rate of 200 t/day of maize, the following products are obtained:

63.4 t	Commercial starch with 12 % moisture
154 t	Starch milk for glucose with a dry substance content of 38 %
39.1 t	Feed maize with 10 % moisture
10 t	Gluten with 10 % moisture
12.4 t	Maize germs with 4 % moisture

The delivery of the equipment items started at the beginning of January 2011, so assembly could start rapidly. Commissioning is scheduled for mid-2011.

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