

Project completions

Next follows a round-up of the major completed orders for new plants, expansion projects and major equipment installations during 2015, together with project completions to look out for in 2016.

Africa

Burkina Faso

Construction of *HeidelbergCement's* new 0.8Mta cement grinding plant near Burkina Faso's capital of Ouagadougou was completed in the 4Q14. The facility was officially opened on 5 March 2015.

Cameroon

Sinoma International Engineering commissioned the 1.5Mta Douala plant for *Dangote Cement* in August 2015.

Ciments de l'Afrique (CIMA) opened a 0.5Mta cement works in the Bonaberi area of Douala in October 2015.

Côte d'Ivoire

Abidjan-based *Holcim-Socimat* received a new Cemengal cement grinding station consisting of a feed bin house, a complete 4500kW ball mill circuit with a high-efficiency classifier and a bag filter rated at 200,000m³/h. The scope of supply included infrastructure to convey cement from the grinding circuit to the existing silos, plus a new dispatching unit for bagged cement.

Egypt

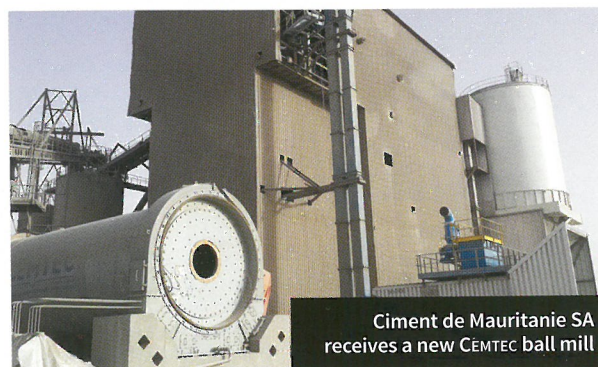
FLSmidth is to deliver an ATOX vertical coal mill and an OK vertical cement mill to *Qena Cement Co*, aimed at improving the plant's production stability and ensuring high energy efficiency. The order comprises an Atox® 25 vertical coal mill, OK™ 42/4 cement mill, Pfister® weighing and dosing systems, MAAG® gear reducers and Airtech filters.

Cimentos da Beira, Mozambique, finalised the construction and commissioning of its grinding and packing plant in the port of Beira in October 2015



The plant is located in the Valley Sondos, approximately 45km from Luxor. FLSmidth supplied the equipment for Qena Cement's original 1.4Mta cement plant in 1999. By 2014 the plant had an actual production of 1.8Mta of clinker, without any modifications to the line.

Commenting on the selection of FLSmidth as equipment supplier, Alaa Abdel Hamed, Qena Cement plant manager, said: "We asked FLSmidth to specify a set of production levels for the equipment we required and as they were able to do that, it confirmed for us their reliability in delivering to our needs. Besides, our existing line, which is based on FLSmidth equipment, has performed above expectations. Therefore, we trust FLSmidth equipment and are convinced the new equipment is the best choice for our operations."



Ciment de Mauritanie SA receives a new CEMTEC ball mill

Ethiopia

As part of its major pan-African expansion drive, in June 2015 *Dangote Cement* inaugurated its 2.5Mta greenfield Ethiopian cement plant in the presence of Prime Minister Hailemariam Desalegn Boshe. Power for the works, situated in Muger, Oromia region, is supplied by Ethiopian Electric. Some 40MW has been allocated for the cement factory following construction of a 57km power line from Sululta to the plant site. Bosnia's Energo Invest built the transmission line while ABB erected the substation.

Ghana

With the commissioning of a new 0.8Mta cement mill at the Takoradi plant in the 2Q15, *HeidelbergCement's* total cement grinding capacity in Ghana rose to 4.4Mta.

Kenya

ARM Cement is building a new works about 180km east of the capital Nairobi. Following the start of production in 2017, the 2.5Mta Kitui factory will supply the company's Kenyan plants in Kaloleni and Athi River as well as its Dar es Salaam cement plant in Tanzania.

Meanwhile, Ndovu Cement has purchased a 0.09Mta Cemengal

Plug&Grind® cement grinding plant to be situated in Athi River. The unit includes a $\phi 2.2 \times 9.5$ m, 500kW ball mill, 25,000m³/h bag filter, two steel silos for bulk loading, dispatching and packing facilities.

Malawi

Shayona Cement Co completed the US\$65m expansion at its Kasungu factory in May 2015. The upgrade sees cement capacity increase to 1200tpd.

Mauritania

Compagnie de Ciments National in Nouakchott has received a 0.22Mta Plug&Grind cement grinding plant from Cemengal. The unit consists of a 1100kW, $\phi 3.0 \times 9.5$ m ball mill and bag filter with a 50,000m³/h capacity. The scope of supply also includes four steel silos for bulk dispatching and packing facilities with an upgraded capacity.

A further Cemengal Plug&Grind cement grinding facility with a capacity of 0.1Mta was installed in *Nouadibhou*, Mauritania. This unit included a 500kW ball mill ($\phi 2.2 \times 9.5$ m), plus a 50,000m³/h bag filter.

After more than 10 years of the successful operation of the CEMTEC mill line No 2, Ciment de Mauritanie SA and CEMTEC Cement and Mining Technology GmbH again signed a contract in 2014 for the supply of a new grinding line, which will be the third at the plant located in Nouakchott. The project comprises a CEMTEC ball mill ($\phi 3.6 \times 10$ m) with a 2000kW motor, operated in closed-circuit with a latest generation CTC-090 separator. The 50tph capacity mill will produce CEM II A/L 42.5R at 420cm²/g according to Blaine. It is the first phase of an extension project for 100tph. CEMTEC is also responsible for the



Misr Cement Company has been modernising its Qena plant with FLSmidth equipment, Egypt

upgrade of the raw materials feed system for grinding lines 1 and 2. The project is now in the erection phase and is scheduled to commence operation in the 2Q16.

Morocco

A Plug&Grind modular grinding plant from Cemengal with a capacity of 0.09Mta was erected in *Dakhla*, southern Morocco.

Mozambique

Cimentos da Beira (Ambrian Plc group) commissioned its 0.8Mta clinker grinding and packaging plant in the port of Beira in October 2015.



Plug&Grind erection works for Kampala Cement, Uganda

Niger

Dangote Cement is expected to be nearing completion of its US\$420m Keita cement factory. Construction of the 1Mta facility started in April 2014 and was expected to continue for 18 months.

Nigeria

BUA Group has invested US\$500m in a 3Mta greenfield plant at Okpella, Edo state, Nigeria. The Obu cement plant was supplied by FLSmidth and began operations in February 2015. It is situated 5km from BUA subsidiary Edo Cement Co, which is currently being rehabilitated and expected to offtake some Obu clinker in the early stage of its operation.

BUA Group has since contracted Sinoma CBMI for a project that will double capacity at the Obu works. This signing follows an earlier project to install an additional 1.5Mta of capacity at Sokoto Cement – another BUA Cement subsidiary – which is expected to be commissioned in 2016, according to Tong Laigou, Board chairman of Sinoma CBMI.

Rwanda

CIMERWA (part of the PPC Group) expanded its cement plant in Bugarama, Rusizi district, from 0.1Mta to 0.6Mta involving a US\$170m project to install dry-process technology (see *ICR* September 2015 p122).

Table 1: Top 10 completed African cement plant projects in 2015

Country	Cement producer	Plant	Cement capacity (Mta)
Nigeria	BUA	Okpella	3.0
Ethiopia	Dangote Cement	Mugher	2.5
Togo	HeidelbergCement	Tabligbo	1.5 (clinker only)
Cameroon	Dangote Cement	Douala	1.5
Senegal	Dangote Cement	Pout	1.5
Tanzania	Dangote Cement	Kaduna	1.5
Tanzania	ARM Cement	Tanga	1.5
Zambia	Dangote Cement	Masasiti	1.5
Niger	Dangote Cement	Keita	1.0
Ghana	HeidelbergCement	Takoradi	0.8