**Sungri's CCM plant in North Korea which has an exclusive supply contract with Quintermina.** All pictures courtesy Quintermina.

# New dawn breaks for Korean magnesia

## Quintermina's plans for the export of magnesia products from North Korea to world markets

FURTHER TO **IM'S** earlier report on Quintermina AG and its activities in bringing North Korean magnesite onto the world market (*see IM February '09, p.8*), we can now reveal more details of this new venture.

Quintermina AG was one of the first European enterprises to start exporting significant amounts of dead burned magnesia (DBM) from North Korea back in the 1970s. This export business collapsed in the early 1990s when Russia ceased to supply oil to North Korea for production, and enabled China to substantially increase its exports of DBM.

About seven years ago, Steinbock AG, located in Switzerland, resumed exports and in July 2008 transferred the business operations to Quintermina, headquartered in Chur, Switzerland. Quintermina is owned by RHI AG, Vienna (51%; the world's leading DBM and refractories producer), and Goldenboat Holding AG, Zurich (49%), with David Coplet as the managing director.

### Exports revived

The deposits of magnesite in North Korea are extensive and are in a similar geological environment to those found at Haicheng, Liaoning province, China, in being part of the same basement complex of the North China - Korean Platform (Proterozoic rocks of ~ 1,500-2000 Ma).

It is estimated that the resources of sparry magnesite in North Korea are 3,000m. tonnes, second only to China globally. In the past, over 2.5m. tpa of magnesite ore was mined by Korea Magnesia Clinker Industry Group (KMCIG) from one opencast and two underground mines (Daehung, Pyong Yang and Paek Bai), with 74 shaft kilns and two rotary kilns with a combined DBM capacity of 1.2m. tpa.

With the demise of North Korean production, China became a more significant supplier of magnesia for refractories.

Only in the last 3-4 years has it again been possible to secure the export of DBM as well as caustic calcined magnesia (CCM) from North Korea. "The energy problem has been solved by Quintermina, and its partners in North Korea, and a reliable supply of CCM and DBM is now possible." said David Coplet.

### Development plans

Quintermina's development plans will be in partnership with the two largest and most well established local companies, KMCIG (Korea Magnesia Clinker Industry Group) and Sungri:

KMCIG is a producer of fused magnesia (FM), DBM, and CCM and is a major supplier for Quintermina and close collaboration is planned. Sungri is a CCM producer, and Quintermina has an exclusive supply contract

In the next few months, the main focus will be on the export of DBM90/92 and CCM90/92 with applications including refractories, construction, agricultural, animal feed and chemical industries. David Coplet commented: "Medium-term our target is to offer all MgO grades up to MgO 97 and we have the resources and the know-how to do so".

### Going global

In the last four years the main objective has been to supply

**Korea Magnesia Clinker Industry Group's extensive plant at Danchon, North Korea. The group has in total 74 shaft kilns and two rotary kilns with a combined DBM capacity of 1.2m. tpa.**


**Only in the last 3-4 years has it again been possible to secure the export of DBM as well as CCM, pictured here in big bag, from North Korea.**

**Korea Magnesia Clinker Industry Group's opencast mine at Daehung, North Korea. The group has the capacity to mine some 2.5m. tpa magnesite ore.**

large quantities of CCM and DBM to important European customers. In partnership with Yasheya Ltd - the Hong Kong-based logistics company Coplet established in the 1990s – Quintermina is able to offer a logistics concept for global supply. For example, North Korean DBM was recently shipped to Chile in containers.

Exports in 2008 were 30,000 tonnes, and plans are in place to increase this to >80,000 tpa. Quintermina is strengthening its position in the Asian markets (excluding China) and is also concentrating on the Americas where a clear potential for growth is seen. David Coplet told **IM**: "Medium-term, 200,000 tonnes are a realistic target".

## Factors for growth

Quintermina has identified two main factors that it anticipates will help strengthen its position within the market: Chinese magnesia export restrictions, and competitive pricing.

With the current restriction of magnesia exports from China, an alternative source of supply from North Korea has become particularly significant. It is anticipated that following the export of 1.3m. tonnes of Chinese magnesia in 2008, approximately only 700,000 tonnes worth of licences for magnesia export will be allocated by the Chinese government in 2009.

The export levels for 2010 are unclear, since the Chinese government has increasingly reduced the export amounts in recent years.

The other factor is pricing. David Coplet commented: "We will convince existing customers and potential new customers with our quality, reliable supply, and prices". Quintermina expects competitive pricing to facilitate sustainable sales growth.