Installation of a dry slag granulation pilot plant at blast furnace A of voestalpine

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Blast furnace slag with its tapping temperature of around 1,500°C and a approximately 400 million tons yearly worldwide production is a huge largely unused energy potential. Current state-of-the-art practice is to granulate blast furnace slag in wet-granulation plants without utilization of the thermal energy. However new dry slag granulation technologies are in development to cool the molten slag with air and recover the thermal energy for applications like steam production or electricity generation.

PRIMETALS and its partners with their gained experience with dry slag granulation test facilities and research programs are taking the next step. A pilot plant for granulation blast furnace slag directly connected to the cast house floor of blast furnace A of voestalpine is under construction. Close to industrial scale slag granulation capacity, the pilot plants aim is to granulate slag with rotating cup technology to a valuable product under dry conditions - cooled by air. The high temperature off gas of the plant will have potential for doing highly efficient heat recovery. Extensive tests with this pilot plant should give the last technical expertise that is needed before going forward with commercialization of the process. An insight in plant arrangement, progress of erection and expectations of the pilot plant operation process will be given.

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