

## Press Release

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## **Glass Coating at Grenzebach**

Worldwide energy legislations and their enforcements as well as challenging architectural demands are more and more driving window and facade manufacturers to use glass which has been processed in a smart way to cover the requested performance data accordingly. As a result of that the majority of today's architectural glass being used for commercial and residential buildings needs to be coated with thin film layers which finally control the energy flow through the finished window or facade element. Such thin film coatings are applied onto the raw glass surface between the float process and other successive processes (e.g. tempering, laminating, IG-unit assembly etc.). In our days offline coatings (also known as soft coatings) with regard to their outstanding performance characteristics are replacing the traditional online coatings (pyrolytic coatings) which are limited regarding the above mentioned criteria.

Grenzebach, the market leader of cold end equipment for the flat glass industry, decided to add the PVD glass coating equipment to its well-known product offering. Such completion of the overall portfolio enables the glass industry to purchase a complete coating system out of one hand - from loading of the raw substrates towards unloading of the coated glass. System interfaces and spare part inventories are cut down to a minimum. A common HMI surface for the complete coating plant is not only rising the comfort level but also helps to optimize operation cost and minimization of downtimes.

The PVD coater as offered is ready to produce thin film layer stacks according to latest energy conservation standards and is ready to be adapted for upcoming challenges. In-house made deposition sources like Grenzebach's planar and rotary sputtering cathodes in combination with latest state of the art process control and auxiliary equipment guarantee for highest accuracy during the needed materials are disposed on the glass surface. The capacity of a typical coating system may reach up to 15 Mio m<sup>2</sup> per annum depending on individual product mix figures and layout of the overall system.

In order to underline the PVD coating activities at Grenzebach a lab coating system started operation in January 2014. This coater, located at the headquarters in Hamlar, is ready to coat glass with sizes up to 2,600mm x 2,200mm and is currently equipped with 5 coating tools (sputter cathodes). The machine is designated for in-house layer stack development as well as for individual client demands, training purposes and qualification of new hardware components.

The inclusion of the coating Technology team into Grenzebach's portfolio and the industrial size test coater system underlines Grenzebach dedication to flat glass industry.

In addition to its well know product offering in flat glass handling the Coating Technology Group of Grenzebach further offers:

- Fully automated coating equipment to produce Low-E and Solar Control layer stacks for architectural glass applications
- Spare parts, retrofit and upgrade services for existing coating lines
- Technology and process services for the entire worldwide installed PVD coater base

### **Picture Captions:**

**PVD Coating at Grenzebach.jpg:** This full scale lab coating machine at the Grenzebach headquarters in Hamlar, Germany is ready for sizes up to 2,600 mm x 2,200 mm and is currently equipped with 5 coating tools (sputter cathodes).

**Coated Glass.jpg:** Grenzebach decided to add the PVD glass coating equipment to its well-known product offering. Such completion of the overall portfolio enables the glass industry to purchase a complete coating system out of one hand - from loading of the raw substrates towards unloading of the coated glass.



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