

Media Release

Liechtenstein company introduces wear protection for large forming parts in two new Asian markets

Oerlikon Balzers is increasing the environmental friendliness of the automobile industry in China and Japan

Balzers, Liechtenstein, January 14, 2014 – Since January 2014, Oerlikon Balzers from Liechtenstein, the market and technology leader in the high-quality, hard-material coating sector, is also offering its wear-protection solutions for large forming tools in China and Japan. The Pulsed-Plasma Diffusion (PPD) process developed in Balzers is an efficient and clean replacement for the hard chrome plating typically used in the automobile industry. The tools for skin parts only require a single treatment which uses no harmful chemicals. Consequently, this technology from Liechtenstein makes a significant contribution to promoting environmentally-friendly production processes in the global automobile industry.

Since January 2014, the market and technology leader Oerlikon Balzers is also offering Pulsed Plasma Diffusion (PPD) technology for the treatment of large forming tools in China and Japan. This method offers effective protection against wear for tools used by automobile manufacturers to press car body parts such as doors from flat sheets. This reduces downtimes and thus increases the productivity of the tools. "The demand for surface-treatment approaches that are both economical and environmentally-friendly is on the rise. PPD offers these advantages. This is why it is important for us to be in a position to offer this future-oriented technology in the two key markets of China and Japan as well," explains Dr. Hans Brändle, CEO of Oerlikon Balzers. China and Japan are among the largest automobile producers in the world.

Environmentally-friendly and efficient treatment of large forming tools

Oerlikon Balzers has developed PPD based on its 40 years of experience in the industrialization of plasma-technology processes as well as in close cooperation with stamping plants in the automobile industry. This technology is a vivid example of how advanced technology "made in Liechtenstein" is contributing to the promotion of environmentally-friendly and efficient production processes in emerging countries like China. Until now, hard chrome plating has been the most widely used method for wear protection of large forming tools. However, this relies on the use of harmful chemicals such as chromium. PPD-technology is a clean and efficient alternative. Thanks to a combination of hydrogen, nitrogen and electricity, it uses no harmful chemicals. Moreover, the tools used for the manufacture of skin parts only need to be treated one single time over their entire service life, while with chrome plating, up to five coating treatments are required. This offers a cost advantage of up to 65%. After the most recent expansion, Oerlikon Balzers now offers this technology not only in Europe, but also in the USA, Korea, China, and Japan. This represents a major contribution by the enterprise in Liechtenstein towards a cleaner automobile industry.



The PPD-team in China



The PPD-team in Japan



The PPD coating system in China



View into a system during the process

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About Oerlikon Balzers

Oerlikon Balzers is the global leader among providers of coatings which significantly improve the performance and service life of precision components as well as of tools for metal and plastic processing. These coatings, developed by Oerlikon Balzers and marketed under the brand names BALINIT and BALIQ are extremely thin and exceptionally hard. They significantly reduce friction and wear. Oerlikon Balzers also develops processes, manufactures and sells systems and production facilities, and offers contract coating services through a dynamically growing network of 93 coating centres in 34 countries throughout Europe, the Americas and Asia. Moreover, the company develops an integrated approach for the low-emission metallisation of plastic parts under the technology brand ePD. The enterprise is based in Liechtenstein and has 3,200 employees worldwide, over 700 of which work at the company headquarters in Balzers, Liechtenstein (including apprentices). Oerlikon Balzers is a Business Unit of the Switzerland-based Oerlikon Group (SIX: OERL).