

# Welcome to Sulzer Metco in Shanghai

Sulzer Metco Surface Technology Shanghai offers thermal-spray and thin-film services and equipment locally for the automotive, aerospace, power generation, and other specialized industries.



Metco has left the Sulzer Group and is now part of the Oerlikon Group.

**oerlikon**  
metco



Sulzer employee supervising a state-of-the-art PVD process in Shanghai.

Over one hundred years ago, Sulzer started to do business in China. Among the first products Sulzer brought to China were steam engines to produce electricity and, soon afterwards, diesel engines to do the same or to drive irrigation pumps.

Sulzer opened its first representative office in Shanghai in 1929. Today, Sulzer is present with Sulzer Pumps in Dalian, Suzhou, and Shanghai as well as Sulzer Chemtech (distillation and separation technology) and Sulzer Metco in Shanghai.

Sulzer Metco, in particular the Thermal Spray business unit, has been active in China for many years. In 2004, Sulzer Metco started producing coated synchronizer rings in Shanghai.

Sulzer Metco provides its excellence in thermal-spray, heat treatment, PVD, and friction systems technology to industrial markets such as automotive, aerospace, power generation, mechanical engineering, tooling, and others. With the opera-

tion of the PVD production line, Sulzer Metco is now able to provide a broad array of PVD coating solutions (to protect surfaces against wear and chemical interaction), in addition to thermal-spray coatings, heat treatment, and synchronizer ring friction coatings.

For plastic processing, injection molding, and sheet metal forming, coatings like TiN, CrN, and CrNmod protect the parts against wear, prevent catalytic decomposition, and reduce cold welding and sticking. The high-performance nano-structured AlTiN-Saturn coating is the "all-rounder" for a wide range of innovative cutting applications. AlTiNmod has been specially developed for hard machining (HRC>60) and for specific applications such as the machining of Cu composite materials. Its improved hardness is significant for this PVD coating. The combined use of plasma nitriding and PVD coating with hard materials is an effective means of

controlling abrasion, cold welding, corrosion, and deposits when processing plastic and elastomeric materials.

The highest quality thermal-spray coatings are now also available in Shanghai with a recently installed plasma- and HVOF- (gas and liquid fuel) coating facility. The benefits of the thermal-spray coatings include improved surface properties and reduced costs through increased lifetime of the components. Surface enhancements include resistance to abrasion, erosion, and corrosion; electrical insulation/conductivity; and thermal protection.

Sulzer Metco offers its expertise and its global leadership in surface solutions. It also provides a comprehensive manufacturing, distribution, and service network, catering to aerospace, power generation, automotive, and other strategic growth industries on site.

Anthony Herbert



PVD-coated parts to extend life and improve performance.