

Development of robot-based coating process for large-scale production and automated coating services for small series

For many years now, SuSoS has modified and analyzed the surfaces of different products, with the aim of enhancing them to best meet our customers' individual needs. In order to keep up with the increasing demand for industrial large-scale production, we have expanded our robot-based coatings service. This service comprises both the development of automated coating processes that are suited to large-scale industrial production, and an in-house coating service for small series (up to 100'000 parts p.a.)

We guarantee a speedy industrialization process with a high level of flexibility, and define schedules, processes and quality control mechanisms that are ideally tuned to the coating process in question. We deploy a four-axis robot system to functionalize the surfaces of small batch series rapidly and smoothly, and accurately Individual and flexible coding enable us to precisely hone the surfaces of practically any type of product.

In addition to our standard services, such as jetting and printing, dosing, suction, drying, blowing and vacuum suction, the system is now also equipped with a spraying device. The functionalization of large areas has thus now become even easier than previously, as has the coating of spherical

substrates, such as catheters, syringe pistons or injection needles.



One example in application is the fully automatized non-fouling coating of cell-culture plates, as used by the Kugelmeiers AG (www.kugelmeiers.com) company in their stem cell research. These plates, which have a special microstructure, are initially—and very precisely— injection molded, then delivered to SuSoS AG for coating. In the ensuing multiple-stage process, an adhesion promoter is added to the surface and blow dried. Subsequently, the plates are functionalized with the non-fouling coating; every step is fully automated and subject to constant quality controls. Finally, the plates are

dispatched for sterilization and packaging to ready them for sale.

The use of the coating robot enables us to manufacture high-quality prototypes during the research and development phase, and to deploy appropriate processes fit for industry right from the start.

Many of our customers have already benefited from our coating service. We invite you to contact us, and hope you will take advantage both of our expertise and of our automatized coating service!

