## Workshop »Coatings for Tools & Components«

## SMART SURFACE CONTROL® "The revolution of blasting process with abrasive media"

Thomas Müller

BMF GmbH, 09224 Chemnitz (Grüna)

## thomas.mueller@bmfgmbh.de

Often, it is the final step in a process that determines whether a component meets all requirements (quality, functionality, etc.) and becomes usable. Manual blasting processes with abrasive media, in particular, pose a high risk in terms of reproducibility and quality assurance. Abrasive-blasting plays a pivotal role as a crucial step in the pre-treatment of surfaces before the coating process. Its significance lies in its ability to determine whether the subsequent coating process remains consistently reproducible and stable. By subjecting the surfaces to the abrasive action of abrasive-blasting, any impurities, contaminants, or irregularities are effectively removed, creating a clean and textured surface that enhances the adhesion and longevity of the coating. This preparatory step ensures that the coating adheres uniformly and firmly to the substrate, minimizing the risk of defects and ensuring the overall quality and durability of the coated product. As a result, abrasive-blasting acts as an indispensable process that directly influences the success and reliability of the subsequent coating application.

The innovative and unique SSC technology establishes a verifiable connection between the surface blasting process and quality assurance. In conjunction with the automatic blasting systems TWISTER and TORNADO, as well as the new TWIP Consigno measurement system, it is now possible for the first time to validate surfaces, monitor processes, and exert targeted influence.