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MENZERIA PERFECTION IN POLISHING

This newsletter appears several times a year, informing commercial partners in the industrial sector with interesting news from Menzerna.

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Contact

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Perfection in Polishing. Made in Germany. Since 1888.

Menzerna develops and produces polishes for industry and trades, automobile clear coats and gel coat surfaces of premium quality.

The "fingerprint process": a revolution in the determination of polishing performance

The latest measuring technology makes the polishing process entirely transparent

Solid paste, or better an emulsion? Which buffing wheel? How high is the temperature allowed to get – at the maximum cut? What process produces the best surface quality, and takes the least time? These are just some of the questions considered by the persons in charge of processes who are pursuing technical and economic optimisation.

Menzerna supplies answers: The "fingerprint process" supports the measurement of all relevant parameters inline during polishing. This makes it possible for the first time to precisely determine differences in performance between various grinding and polishing agents, and to precisely establish and optimise different process configurations.

Isolated analysis of individual parameters as a process development tool

The material, type and quantity of the polishing agent, polishing time, contact pressure and type of polishing tool have a significant influence on the polishing results. With the "fingerprint process", the effect of each of these parameters can be examined in isolation. This makes the complexity of automatic polishing processes manageable for the first time, allowing the processes to be optimised systematically. With the "fingerprint process" from Menzerna, it is for example possible to precisely determine the cut, temperature development, process speed and surface quality. Within the scope of process development for our customers, various polishing processes can therefore be compared and evaluated.

The latest measuring technology directly in the robot cell

A special gripper has been developed for the purpose, to be used with the robot system in the Menzerna technical centre. It is able to determine the removal rate directly in the robot cell on any material sample by precisely measuring the weight. The surface quality can be determined by means of contactless scattered light measurement. Measuring the workpiece temperature "inline" is possible as well. The simple geometry of the planar sample panels, which are put through a standardised grinding process in advance, makes measurements possible with an accuracy that exceeds all previous possibilities. This test setup makes it possible to analyse numerous parameter combinations quickly, precisely and reproducibly. Individual parameters can be analysed according to the customer's wishes, while all others are kept constant at the same time. Effects on the polishing result become directly measurable this way.

Comparison of measurement data reveals potential for improvement

The "fingerprint process" makes it possible for Menzerna customers to compare various polishing processes through the targeted variation of the process parameters. Application engineers at Menzerna are able to develop customer-specific polishing processes as a result, optimising them in regards to gloss, cycle time and consumption values. Menzerna is thereby establishing the conditions required for the development and optimisation of customer-specific polishing processes on the basis of data collection for the first time.

Menzerna keeps you up to date and will report about the first project examples and results of the "fingerprint process" in the near future.

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