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**Dry deep drawing heralds new era in classic sheet metal forming**

***Let's Talk Science* shows how companies can save up to 20 percent in energy and resources**

***Frankfurt am Main, 23 November 2022.*** *– A new era is dawning in classic sheet metal forming. Deep drawing processes, especially for smaller components, will be able to function without lubricants in the future. "This saves up to 20 percent in energy and resources. And it is much more environmentally friendly, if only because there is no longer any need for lubricants containing mineral oil," sums up Prof. Hinnerk Hagenah from the Institute of Manufacturing Technology at Friedrich-Alexander-Universität Erlangen-Nürnberg, and presenter of the next Let's Talk Science session at 08:30 on November 30, 2022. "What is more, the process time is also reduced by 10 percent."*

Lubricant systems containing mineral oil are usually used during the forming of semi-finished sheet metal products in order to minimize friction and wear during the forming process. However, the desire for efficient and sustainable use of resources, and political requirements regarding environmental protection are providing an incentive to avoid the use of lubricants completely. The novel process known as dry deep drawing eliminates the need for calibration and cleaning. Companies can save themselves the need for (in some cases) huge washing facilities used for removing the lubricant film after forming. It is not necessary to retool the line for dry deep drawing; the solution lies in innovative tool modifications.

The presentation will explain how lubricant-free forming processes are made possible by custom-made changes to the tool surface. Different surface technologies will be presented and compared with regard to their operational behavior, their potential and fields of application. Interested companies, especially those working with 0.5 to 2 mm thick sheets, can discuss their own process conditions with the researchers.

Find out now all about this environmentally friendly and cost-effective process. Listen to the talk and discuss your specific circumstances with the speakers at ***Let's Talk Science*,** the monthly online seminar in the run-up to EMO Hannover 2023**,** at 8:30 am on November 30, 2022.

**Presenters**

**Prof. Hinnerk Hagenah**, Deputy Head of the Institute of Manufacturing Technology (LFT) at Friedrich-Alexander-Universität Erlangen-Nürnberg

**Stephan Schirdewahn,** Research Associate and Head of the Sheet Metal Forming Research Group at LFT

**Photos**

**Image 1: Dry deep drawing at LFT Erlangen,** source: LFT, FAU Erlangen-Nürnberg  **Image 2: Prof. Hinnerk Hagenah**, Deputy Head of the Institute of Manufacturing Technology (LFT) at Friedrich-Alexander Universität Erlangen-Nürnberg.Source: LFT, FAU Erlangen-Nürnberg

**Image 3:** **Stephan Schirdewahn**, Head of the Sheet Metal Forming Research Group at LFT, source: LFT, FAU Erlangen-Nürnberg

*Author:**Gerda Kneifel, VDW*

**Registration**

<https://emo-hannover.de/lets-talk-science>

**Previous webinars**

26.10.2022 Rethinking products – with 3-dimensional electronics

<https://emo-hannover.de/event/produkte-neu-denken-dank-dreidimensionaler-elektronik>

28.09.2022 Guide: Implementing AI models sustainably

<https://emo-hannover.de/event/ki-modelle-nachhaltig-implementieren>

31.08.2022 Finally! Making AI widely usable
[https://emo-hannover.de/event/künstliche-intelligenz-in-breite-nutzbar-machen](https://emo-hannover.de/event/k%C3%BCnstliche-intelligenz-in-breite-nutzbar-machen)

27.07.2022 Turning SMEs into sovereign data holders
<https://emo-hannover.de/event/euprogigant-kmu-datenhaltern>

29.06.2022 Matrix production – New possibilities for technological integration

<https://emo-hannover.de/event/matrixproduktion-integration-technologien>

25.05.2022 Open source machine tools: The path to production sovereignty and a circular economy

<https://emo-hannover.de/event/open-source-werkzeugmaschinen>

All presentations are available online at https://emo-hannover.de/lets-talk-science, during the event and afterwards.

This press release can also be obtained directly from

<https://vdw.de/presse-oeffentlichkeit/pressemitteilungen/>

<https://www.ifw.uni-hannover.de/>

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