

Product article: How to trace the DNA of a coil with coilDNA

## From Internet of Things to Internet of Metals

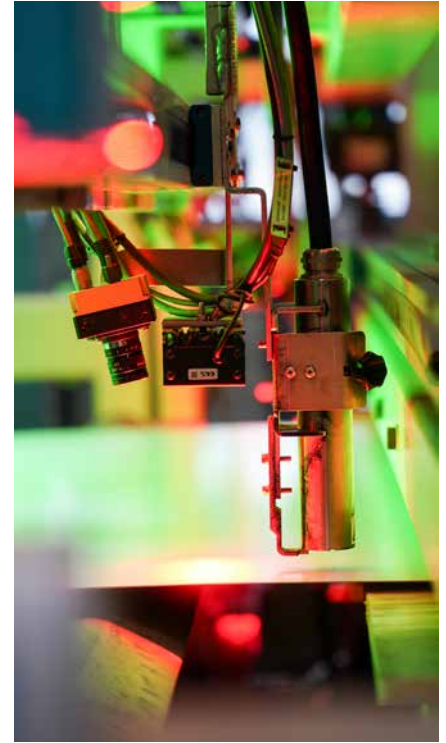
When people think of DNA analysis they often think about shows like CSI, which portray DNA samples coming into a lab and pulling up a picture of the suspect within a short period of time. Indeed, it is fascinating how only a single DNA fragment can be used to draw conclusions about a person! This concept can also be transferred to the metals industry.

Inspired by the human DNA, the company coilDNA has developed a revolutionary technology that gives individual pieces of metal an identity, tracks its history and turns them into an intelligent product. “The idea of coilDNA was born by the vision to bring IoT into the world of our products. Quality is crucial for the competitiveness of our customers,” said Dr. Werner Aumayr, CEO of coilDNA. The start-up has partnered with PSI Metals to integrate CoilDNA technology into the MES systems of manufacturers and processors. The integration process is standard-


ized via the future-proof PSImetals Service Platform so that this new technology is available to all PSI customers “out-of-the-box”.

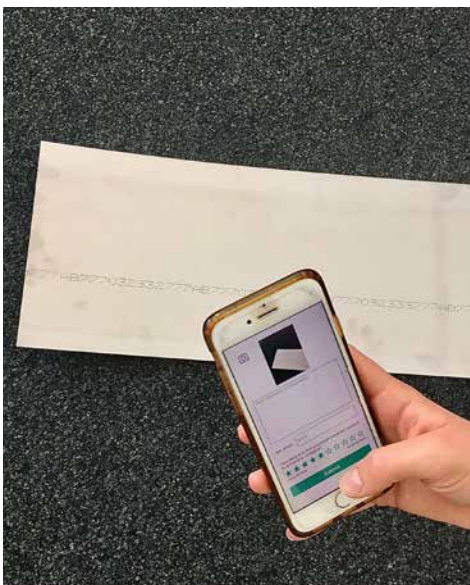
### Human DNA as inspiration

Every single cell of the human body contains all genetic information like the hair color, height, blood group, etc. CoilDNA works similarly to the DNA sequencing principle which enables the reconstruction of all DNA information from a single DNA molecule. “The process we have now patented manages to preserve the entire quality data with 14 characters!” Mr. Aumayr points out. During production, a unique and consistent information code is continuously printed by laser or ink jet onto the surface of a parent product, e.g. a coil, a tube or a profile. This code makes all the information stored for the respective product clearly identifiable and thereby retrievable via an app regardless of how often the parent product is cut in subsequent production steps. “We work with PSI to integrate these services into production management systems,” says Mr. Aumayr. Consequently, PSI acts as data or cycle generator that takes care of the generation of the coilDNA code, the application of the code to the material and the provision of all material-relevant data during ongoing production.



The coilDNA information code is printed on the surface of the material by laser or inkjet.

This turns an unknown piece of metal into an intelligent “smart product”. From Internet of Things to Internet of Metals! 



The code makes all information stored for the respective product uniquely identifiable and retrievable via an app.

Do you want to know more? Then request the link to the recording of the webinar “CoilDNA or better call the Internet-of-Metals” as part of our PSImetals Quality campaign by scanning the QR code!



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