

## New twist to tap drills

High-quality equipment, a motivated and well-trained team, as well as an international focus are the pivotal cornerstones of the growth strategy of Fabryka Narzedzi FANAR S.A. in the production of their tap drills. When the tool manufacturer wanted to incorporate coating technology into its production, it found the right solution with CemeCon's sputter technology.



Fanar TN coating – a droplet-free sputter layer – offers users new possibilities in tapping. (Photo: FANAR)

The threading is particularly important as the last machining step because a flaw here can ruin all the previous work. Therefore, a stable, reliable process is crucial. "The most important element for this is high-quality tap drills with a coating that has low friction and good tribological properties," said Dariusz Ptaszkiewicz, Chief Technology Officer (CTO) at FANAR. "The smooth, droplet-free sputter coatings from CemeCon are therefore our first choice for our tap drills."

FANAR and CemeCon worked closely together to develop a premium coating that was designed precisely to the tap drill requirements. The prerequisite was higher wear resistance and longer tool life as compared with a conventional TiN coating. However, TiN's tribological properties and shiny golden appearance should be retained.

Based on TINALOX®, experts designed the FANAR TN coating, which was precisely tailored to the specific requirements of threading. For better wear resistance, a TiAlN layer was combined with a TiN top layer. The coating is absolutely smooth, because no droplets are produced during the sputtering process. The low friction of the sputter coating promote excellent chip evacuation and allows tapping with low and stable torque. This gives users a brand new experience in thread tapping.

„The key to a successful incorporation of coating technology into the workflow is training. In Würselen we operate one of the world's largest coating centers for cutting tools. More than 30 years of expertise and experience are concentrated here. This makes it the perfect place to provide our customers with the necessary knowledge.“

— Christoph Schiffers, Sales Manager  
Technology at CemeCon



FANAR now uses a CemeCon coating system at its own plant.

Materials for aerospace and the energy sector, such as titanium and Inconel®, are now the focus of high-performance machining tools. With sputter coatings, FANAR can shift the performance limits of thread tapping higher and higher. FANAR's coating expert, Arkadiusz Urbanowicz, emphasizes the flexibility of the process and the CemeCon technology: "Together with Prof. Witold Gulbinski and his team from the Koszalin University of Technology, we use the almost unlimited possibilities to develop our own coating solutions, such as WC/C. We found that the CC800® is an ideal platform for creating our own recipes."

"The FANAR TN sputter coating gives a new twist to our threading tools," said Marcin Kolodziej, President of FANAR. "We are looking forward to extending our collaboration with CemeCon with our growing product family of carbide end mills."

## FANAR S.A. in detail

**Fabryka Narzedzi FANAR S.A.** is a leading manufacturer of machining tools for metal processing, based in Ciechanów, Poland. State-of-the-art technology, qualified people and many years of experience make it possible for FANAR to offer a wide range of tools of the highest quality. Innovative solutions and continuous development are central priorities in the company's philosophy. Its global customers include companies from the automotive industry, aerospace, medical technology and other industries. FANAR tools are sold in more than 40 countries.

[www.fanar.eu](http://www.fanar.eu)

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