



ASK CTE



CONTRIBUTORS



ASK CTE
CONTRIBUTORS

Boosting Threading Efficiency: Five Tips to Avoid Tap Breakage

A **CUTTING TOOL
ENGINEERING**  webinar



ASK CTE
CONTRIBUTORS

FEATURED ARTICLE

CUTTING TOOL ENGINEERING

March 2024 | Vol. 76 | Issue 3

FOR THE MASSES

Meet your finishing needs with honing and superfinishing

Also in this issue

- > Combat the challenges of threading nickel-based alloys
- > Machine more efficiently with these workholding tips
- > Partnership enlightens students about industrial technology

BOOST THREADING EFFICIENCY

Utilize the knowledge of application specialists to increase thread quality, productivity and profitability.

By EMUGE-FRANKEN USA

One of the last critical processes when manufacturing parts, threading a hole necessitates careful tool selection and the right machining setup to prevent reworking and possibly scrapping a part. Manufacturers increasingly need to machine challenging, costly materials such as nickel-based alloys, heat-resistant super alloys and exotic materials that make the stakes even higher. These demanding materials have unique properties and application requirements that need to be factored in when selecting a tool.

Whether working with more common steels or newer, difficult-to-machine materials, manufacturers have a range of threading tool options that include application-specific and multi-purpose taps and thread mills. Traditionally used by shops as their threading go-to choice, taps can produce threaded holes with short cycle times and uniform quality while providing long tool life. Gaining popularity for good reason, thread milling maximizes process security and is flexible in terms of feed rates, thread size, programming approaches and, especially, the ability to control fit. The machinist can adjust thread size using different cutting strategies, which is advantageous on tight-tolerance threads.

The benefit of working closely with the cutting tool supplier or manufacturer for application advice cannot be overstated. In addition to selecting the best tool for the threading requirements, cutting tool experts can help dial into the optimal machining speeds and feeds. Advice on emulsions,



EMUGE THREADS-ALL™/ AERO thread mills increase tool life up to 10x longer than conventional tools.



INTRODUCTIONS

Presenter



Thomas Kowalski
Regional Manager – Northeast
EMUGE-FRANKEN USA
thomas.kowalski@emuge.com
(610) 299-2431

Moderator & Host



Dennis Spaeth
Owner/Publisher/Editor
Cutting Tool Engineering
dspaeth@ctemedia.com
(847) 714-0176

Precision Tools and Quality Service.
For over 100 years.
Made in Germany..... and in the USA.





ASK CTE
CONTRIBUTORS

QUESTIONS

Questions Submitted In Advance

- What is the best choice of cutting fluid for tapping SS316?
- Can you explain the dynamics of rigid tapping without using any type of special holder?
- When thread forming, how do you determine the best tap drill size/ percentage of thread to achieve the best resulting thread form at the peak of the thread?

Live Q&A



Audience can submit questions in the Q&A section, which is next to the chat box.

Didn't get your question answered?

[Click here to ask the expert a question, and receive a free drill size pocket card](#)



ASK CTE
CONTRIBUTORS

QUESTIONS



Didn't get your question answered? Scan the QR code, or go to qr.ctemag.com/1rbul to ask a question, and receive a free drill size pocket card!



Live Q&A

Audience can submit questions in the Q&A section, which is next to the chat box.



Contact Information

Presenter



Thomas Kowalski
Regional Manager – Northeast
EMUGE-FRANKEN USA
thomas.kowalski@emuge.com
(610) 299-2431



Email : technical@emuge.com

Phone: [800-323-3013](tel:800-323-3013)

Website: www.emuge.com

Moderator & Host



Dennis Spaeth
Owner/Publisher/Editor
Cutting Tool Engineering
dspaeth@ctemedia.com
(847) 714-0176

Thank you for watching!

Register now for

Ask CTE Contributors: Core Competencies

for the Aerospace Market

June 26th, Noon Central Time