

No. 034 **The meaning of the Synchronized Taps**

How to use

【Question】

When I search for products, I find taps that are accompanied by an icon "Synchronized" and those without such an icon. How do distinguish one from the other?



【Answer】

Products labeled with the icon "Synchronized" are exclusively designed Taps that should be installed in fully synchronous feed type of machinery. On this type of machine, the cutting performance is superior because the machine runs at high speeds with higher accuracy of feed per revolution. The taps design has high relief angles that need to be accurately machine fed with a synchronous feed machine. Without a synchronous feed, these taps will cut oversize because they tend to cut their own path in the hole. Problems may occur during the tapping process, if the tap is being installed on a non-synchronous machine.



【Question】

Is it possible to use taps without the "Synchronized" icon in a fully synchronous machinery?

【Answer】

Yes, it's possible!

But be sure to check and confirm the recommended tapping conditions before using the tap.

Example: Check the tapping speed, workpiece material, etc.

【Guide】

With "Fully synchronous" (or "Rigid feed" , "Synchro feed") machinery, a rigid tapping cycle synchronizes the machine spindle rotation and feed to match one thread pitch in terms of a single start thread in tapping.

This is an ideal tapping method by which you may not encounter any problems during the process.

【Advice】

To assure fully synchronous feeding , make sure the tap is correctly installed in a holder with high accuracy and rigidity and that the machine is equipped with a fully synchronous feed function. Installation of taps in tension/compression holders or unstable holders may cause a pitch enlargement problem in internal threads due to incorrect feed per revolution.