



Best strategy in milling based on frequency response

21 June 2021, 02:00

Samuel Milton

Tom Jacobs

Cutting parameters used in machining operations are usually selected based on tool manufacturers' catalogue recommendations or by operator's experience. This is not optimised to the application at hand. At Sirris, we can help you identify tool behaviour and tap the optimal performances in your machining processes with a simple but proven dynamics test.

Did you know every tool and tool holder can have different performances in different machines and processes? This is because each combination has its own unique frequency response for different loads. A tool performs best and without self-excited vibrations only on certain conditions pertaining to its frequency response domain. How do you identify these frequency responses for each tool?

At Sirris, we can help you identify these responses and tap the optimal performances in your machining processes with a simple but proven dynamics test. The machining dynamics test or tap-test is a fast, proven and reliable method that can help you improve productivity, process stability and performance.

Many machine shops have adopted this strategy and who knows, your competitors might be using this already and have already optimised their machining processes! Now this test can be performed

at your location anywhere in the Belgium by our Sirris experts: simple operator-friendly dashboards showing the good and bad conditions can be created for your applications.

Can you imagine the **benefits** that can be achieved with this testing approach? Here is a list:

- Maximise productivity with current set-ups
- Avoidance of chatter
- Better tool life
- Decrease in cycle times
- Decrease in number of scrap parts
- Better cost estimation for quotation

This test only takes a few minutes to perform, so you can request for a quick test on some of your operations before making it a shopfloor standard. Contact [us](#) to learn more about this and implement it in your workshop!

Authors



Samuel Milton



Tom Jacobs