

LATEST RESEARCH RESULTS:

LM-DuraGradeMAX

- Unbeatable supersteel!

Once again LM-Instruments has proved that with a constant and comprehensive product development the LM blade steel alloy is unbeatable. Through improved thermo-mechanical heat treatments, controlled gas atmosphere and cryogenic processing we have managed to receive exceptional results in wear resistance. An independent research centre conducted a detailed and relevant study (Research report VTT-R-08967-06) on the Gracey curettes from four different manufacturers.



Competitive LM-DuraGradeMAX features

	Product specifications	Benefits for clinicians
Steel quality	<ul style="list-style-type: none"> ■ unique DuraGradeMAX heat treatment ■ DuraGradeMAX added wear resistance 	<ul style="list-style-type: none"> ■ stays sharp longer than any other instrument (see Figure 1.) ■ no need to sharpen to maintain high quality clinical performance
Sharpening	<ul style="list-style-type: none"> ■ the highest quality steel blade throughout the tip ■ finely-honed hand-finishing 	<ul style="list-style-type: none"> ■ enables reshaping for constantly perfect cutting edge ■ perfect sharpness provided by the factory
Silicone handle	<ul style="list-style-type: none"> ■ optimal ergonomics through medical silicone rubber ■ 2 optional handle designs (shape, colour, size) to choose from 	<ul style="list-style-type: none"> ■ less fatigue minimizes risk for carpal tunnel syndrome (CTS) ■ comfortable grip enables more efficient and productive working

Figure 1. Summarizing:

- 1) LM-DuraGradeMAX supersteel
- 2) American-made hand instrument
- 3) American-made hand instrument with special coating*
- 4) Korean-made hand instrument

*American-made hand instruments with special coating cannot be sharpened. Sharpening would destroy the coating immediately.

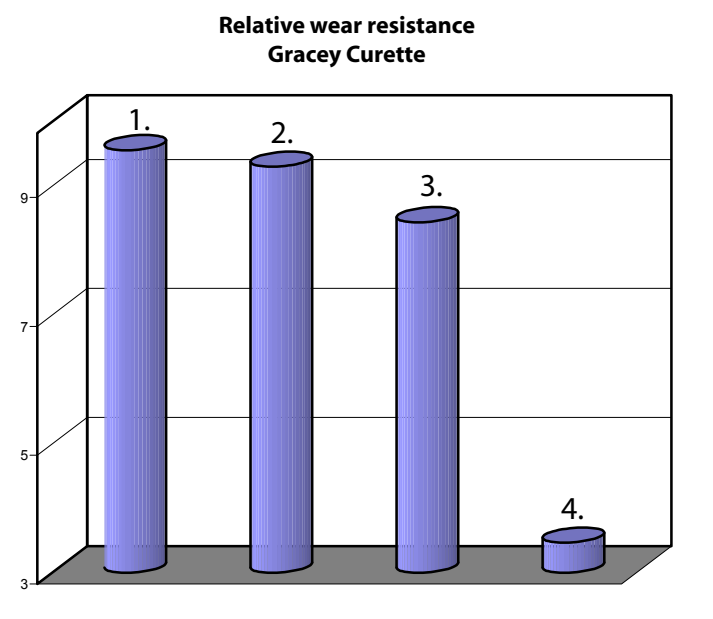


Figure 1. The bars represent the average wear resistance of the samples examined in the studies.

Relevant test method

Reliable test results demand a relevant laboratory research method. Results presented by different hand instrument manufacturers have often been criticized for lack of accuracy. The test method used in this study is said to be the most relevant one in comparing the wear resistance of different instruments. The tests were carried out using a method that simulates wear caused by removal of calculus in the most accurate way.

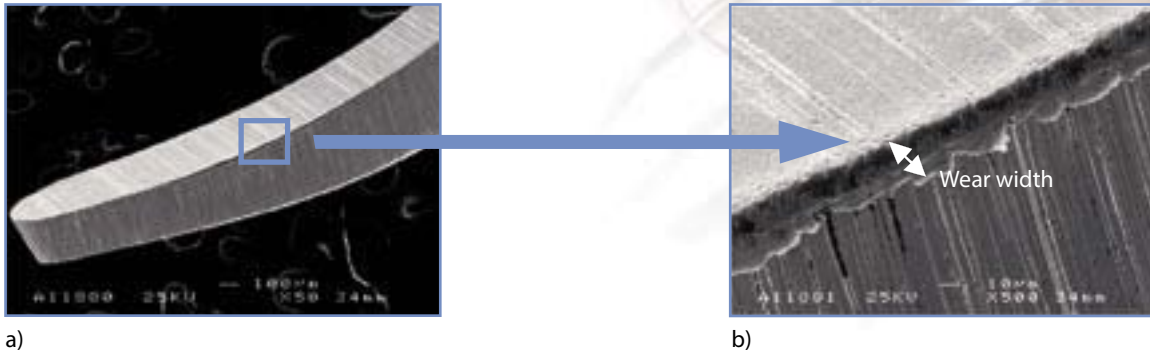


Figure 2. Scanning Electro Microscopy (SEM) image of the cutting edge of LM-curette after wear testing. a) full view; b) detail of a cutting edge, at which the width of the wear was measured.

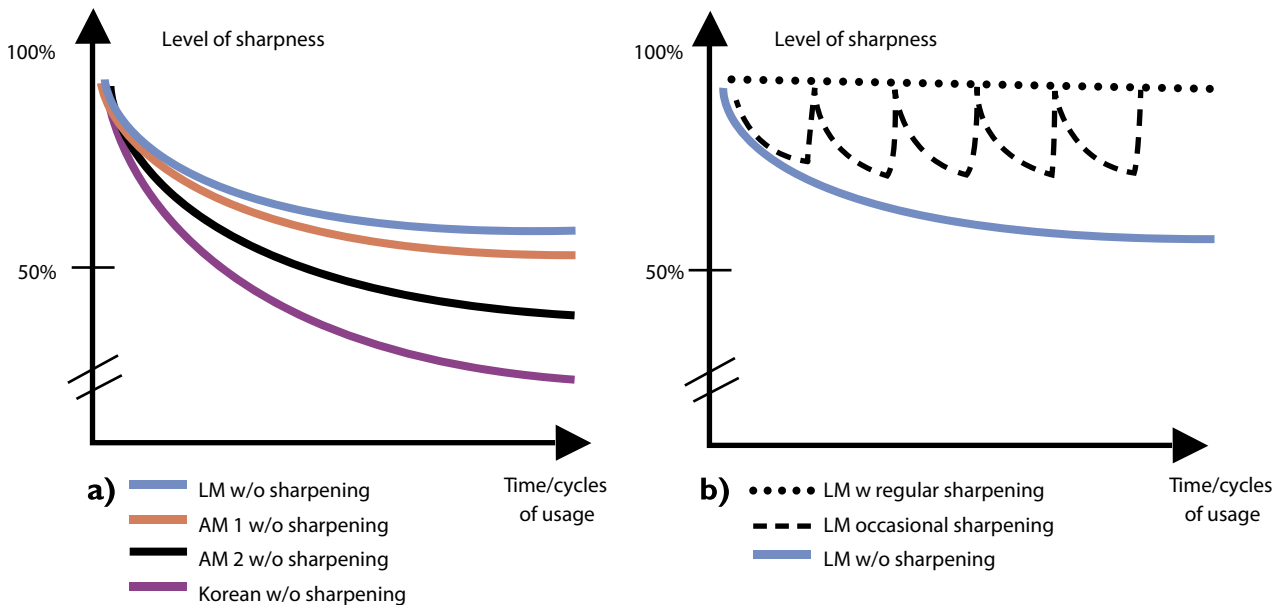


Figure 3 a) Principal comparison on sharpness over time without (w/o) sharpening. b) A regular sharpening keeps LM-instrument always at factory sharpness level. Even with occasional sharpening LM-DuraGradeMAX instruments stay sharp longer.

The choice is yours!

To sharpen or not to sharpen, regularly or only occasionally. LM-DuraGradeMAX steel stays sharp longer than any curette on the market.