# Frequently Asked Questions about Sharpen Free LM Sharp Diamond Instruments What makes Sharp Diamond instruments different from regular tips?

The Sharp Diamond tip is made from an exceptionally durable special metal alloy, and its wear resistance is enhanced by a protective micro membrane coating. The combination of optimized base material and the micro membrane coating reduces wear of the tip by 82%.

What makes Sharp Diamond instruments different from other coated sharpen free instruments? The Sharp Diamond tip is made from an exceptionally durable special metal alloy and is the hardest tip on the market. Sharp Diamond 63 HRC American Eagle XP 62 HRC The ultra-modern PVD (Physical Vapour Deposition) coating process does not dull the cutting edge like the conventional coating process does. The Sharp Diamond tip retains its factory sharpness even during the coating process.

## Does the Sharp Diamond coating contain nickel?

Sharp Diamond is nickel free.

## How is the tip made so sharp?

LM has over 40 years of experience in sharpening tips. All of our tips are checked visually. We use an automated robot cell for finishing of the cutting edge. Tip sharpness is monitored using an automatic camera. The micro membrane coating, made using modern Physical Vapor Deposition (PVD) technology, follows exactly the geometry of the instrument tip. Due to this advanced technology the tip is after coating process as sharp as it was when leaving the final grinding in the factory.

## Is the Sharp Diamond coating safe, and does it come off with use?

The Sharp Diamond coating material is biocompatible and thus completely safe for clinicians and patients. The coating does not come off with normal use.

#### How are Sharp Diamond instruments used?

Do I need to learn new work techniques? Sharp Diamond instruments can be used in the same way as conventional instruments. The instrument is suitable for all kinds of scaling. With this sharp instrument, calculus is removed in a controlled but effective way. Therefore, it may be that you can use a lighter grip.

### For whom is this instrument intended?

The Sharp Diamond instrument is especially suited for professionals who use a lot of hand instruments and who wish to minimize the amount of time spent maintaining instruments as well as to avoid the use of unnecessary compressive force, thanks to the proven ergonomic ErgoSense handle.

Does the Sharp Diamond tip have as good a feel as a conventional instrument? The sharpness of the Sharp Diamond tip guarantees a better tactile sensitivity, which reduces the need for force and especially compression, thanks to the proven ergonomic ErgoSense handle.

#### Why does the Sharp Diamond line only offer mini curettes, Mini Syntette and fine sickles?

The sharpen free feature is most significant for instruments that have a small and narrow working end. The effect of sharpening is relatively higher for these instruments, and without sharpening and with Sharp Diamond coating, they retain their design characteristics completely and exactly.

#### **Can I sharpen Sharp Diamond instruments?**

No, Sharp Diamond instruments cannot be sharpened. The tip's resistance to wear is based on an extremely durable metal alloy and the micro membrane coating that protects it. Sharpening removes the protective coating and weakens the tip, and thus, the functionality of the instrument is weakened.

When is it time to replace the instrument? When the instrument feels dull. How long does the sharpen free instrument last under use? The lifetime of the sharpen free instrument depends on how it is used, just as sharpening needs vary for instruments that can be sharpened. The lifetimes of the LM Sharp Diamond Mini Gracey, Mini Syntette, Micro Sickle and Mini Sickle are as long as those of conventional sharpenable instruments when properly cared for and sharpened. Sharp Diamond instruments, however, retain their size and structural characteristics for the whole period of use. Isn't an instrument that cannot be sharpened more damaging to the environment? Not at all. LM instruments are made of recyclable materials. Instruments that are recycled can be reclaimed almost 100% as new materials or energy.