



## GEBEDUR® NEEDLES – REVOLUTION IN GOLD.



New materials and material combinations can create sewing problems. This often requires extreme machine adjustments which invariably increases the amount and number of contacts between the needle and the machine.

This puts highest demands on the needle. These persistent contacts result in wear and tear of the needle, especially on needle point. The desire for needles with a longer functional lifetime comes to the fore, more and more.

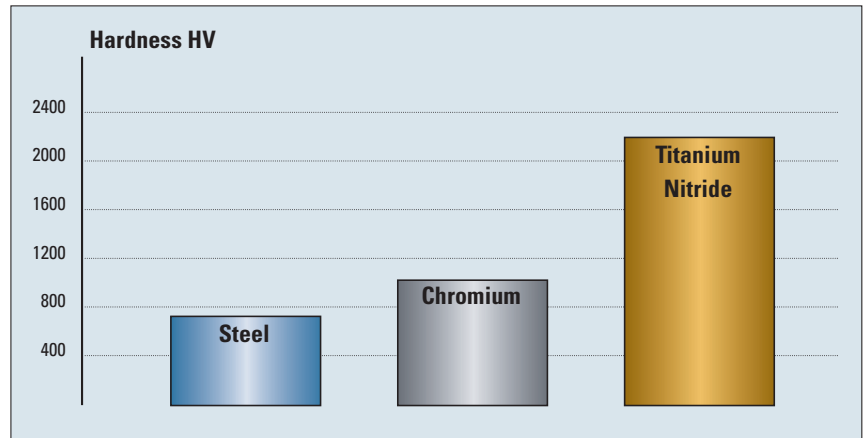
A special hardening- and coating procedure gives the GEBEDUR® needle significant advantages over the standard needle.

## GEBEDUR® - LONGER IN SHAPE AND BETTER IN FUNKTION

**GEBEDUR® stands for Groz-Beckert needles with titanium nitride coating.**

The titanium nitride coating on the surface is extremely hard so the needle is extremely well protected against damage and wear, especially at the point of the needle.

Titanium nitride is twice as hard as chrome and 2,5 times harder than hardened steel. (See diagram.)



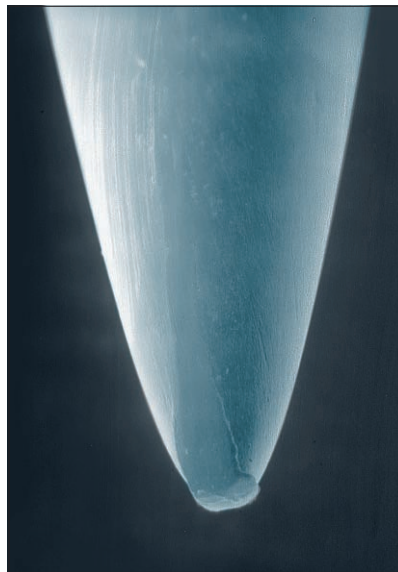
### Wear and tear of the point

One of the most important features of a needle is the point. The slightest and barely visible damages on the point result in considerable functional problems.

The consequences in particular are material damages along with higher needle deflections.

Due to the titanium nitride coating the needle point becomes extremely resistant against wear and tear.

The reality of the factory floor is supported by numerous laboratory tests, clearly showing that wear and tear of needle points is a frequent occurrence. Whilst a standard needle either should or could no longer work due to a worn out point. GEBEDUR® needles can still be used a lot longer without problems (see pictures).



**Standard Needle**

These results were confirmed in various applications in the market.



**GEBEDUR® Needle**

**Advantages of the GEBEDUR® needle:**

- Higher processing security
- Less material damage
- Less needle deflection, resulting in less skipped stitches, thread breaking and needle breakage
- Higher productivity due to less downtime of the machine