SPECIAL APPLICATION NEEDLE SAN® 6
DEVELOPED FOR SEWING APPLICATIONS
IN THE PROCESSING OF JEANS CLOTHING

High productivity combined with protective handling of the fabric stands for the SAN® 6.

Feedback from industry confirms the progress of the SAN® 6 GEBEDUR®. The SAN® 6 GEBEDUR® catches on especially when sewing jeans. Needle breakage, skip stitches and thread breakage are avoided.

GEBEDUR®
The titanium nitride coated needle of Groz-Beckert
THE SAN® 6 GEBEDUR® NEEDLE AND ITS ADVANTAGES

Needle stability

Skip stitches and needle breakage mostly arise by a strong needle deflection at sewing cross seams. High sewing speeds and heavy materials lead to needle deflection, especially at cross seams. The weaker the needle, the stronger the needle deflection. To counteract this, increased demands on the needle stability are required.

Scarf cross section

The special shape of the scarf cross section gives the SAN® 6 needle a higher stability in the scarf area. Almost all SAN® 6 needles have a lateral looper chamfer at the scarf. This protects the looper point from damages.

Blade profile

The conical blade and the newly designed scarf cross-section give the Groz-Beckert SAN® 6 a higher bending resistance of 20 - 40% in comparison to the standard needle.

Scarf and blade profile prevent needle breakage, skip stitches and thread breakage. The looper point is protected.
Improved loop formation

The guiding of the thread in the eye and scarf area causes a significant improvement of the thread protection and pick up of the thread by the looper. Even with an extremely poor loop formation the looper has the possibility to pick up the needle thread.

Needle breakages and skip stitches are removed to a large extent.

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Measuring of the penetration force - example: UY 128

50 penetrations each in comparison:
The medium penetration force at the UY128 SAN® 6, Nm 125/049 is by 21% lower, at Nm 140 by 19.5%.

This means – the needle load is less and produces a lower temperature. The machine runs quieter and has more security in function. The sewing material, the needle and the sewing machine are protected.
The specific features of the RG-ball point

**RG-point – optimised point shape**

The especially slim shaped point style and small ball-point tip guarantee remarkable protection of the fabric during the sewing process.

The special shape of the Groz-Beckert RG-point and the extremely hard titanium nitride surface coating protect the fabric from damages.

The penetration work of the needle is reduced, the lifetime of the point is extended.

**Use on chain stitch machines**

The sensitive, sharp R-point is already damaged after a short sewing time by contact with the backside of the hardened looper.

Due to the light ball point and the special shape of the point, which is adapted to the backside of the looper, the RG-Point has an increased working time without any damage.

**Advantages:**
- Less material damages, reduced penetration forces
- Less needle deflection (skip stitches, needle breakage, thread breakage)
- High process security

**Gentle fabric processing with SAN® 6**

With the slim and rounded RG-point and the special blade shape the Groz-Beckert SAN® 6 stands for:

- High seam quality
- Less material damage
- Less skip stitches
- Straight seams
THE GROZ-BECKERT SAN® 6 – THAT SUBTLE DIFFERENCE

**GEBEDUR®**

The titanium nitride coated needle of Groz-Beckert.

The titanium nitride coating provides the SAN® 6 needle with better protection from wear and tear as well as damages.

Feedback from industry confirms the progress of the SAN® 6 GEBEDUR®. Especially when sewing Jeans the Groz-Beckert SAN® 6 GEBEDUR® achieves a longer working time.

The results are:
- High seam quality
- High productivity
- Long lifetime

### The main problems in the jeans production

High productivity combined with protective handling of the fabric stands for the SAN® 6.

The following problems in production are substantially reduced:

- **Skip stitches**
  - They mostly appear at seam cross sections and on thick material parts.

- **Needle breakage**
  - Frequent causes are high penetration forces and strong needle deflection.

- **Thread breakage**
  - Caused by poor loop formation and insufficient space between thread and needle for picking up by the looper.

- **Point damages**
  - As a rule, the cause is the contact with the hardened looper.
THE SAN® 6 PRODUCT RANGE:

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The program will be extended when required ● available

The advantages of the Groz-Beckert SAN® 6 GEBEDUR®:

- High productivity due to less machine downtime
- Reduced production costs
- High security against skip stitches
- Gentle fabric processing
- Extremely tight adjustment to the looper is possible
- Less needle consumption
- Reduced machine load
- High protection against wear by GEBEDUR®
- Optimal protection of the hook and loop point