

## SCHMETZ needles with special coating

SCHMETZ NIT and SERV 100

For decades, industrial sewing machine needles have been coated with hard chrome in order to protect them against corrosion. In addition, this coating reduces the friction during sewing because it provides a better glideability. For standard requirements this conventional coating is more than sufficient.

Challenging sewing processes sometimes require the use of needles with a special coating, for instance in the processing of abrasive materials or fabrics with a high man-made fibre content. For extraordinary uses, SCHMETZ offers a range of needles with special coating including the SCHMETZ SERV 100 and NIT coating.

### Solutions for:

- Materials with a low softening/ melting point
- Man-made materials
- Materials with a high man-made fibre content
- Materials with special finishing
- Coated materials
- Abrasive materials
- Thick, heavy, hard and strong materials
- Technical textiles



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## Special anti-adhesive coating with excellent gliding properties

### Advantages:

- Independent research showed a nearly 20% better glideability of the thread through the eye of a NIT coated needle compared to a standard chrome plated needle. This means:
  - Easy sliding of sewing thread through needle eye
  - Use of very thick sewing threads possible
- Easy penetration of hard materials due to outstanding low-friction properties of the surface
- Optimum thread protection
- Prevents the adhesion of melted residues on the needle even when sewing critical materials
- Needle stays clean for longer
- Avoids thread breakage
- Less skip stitches
- More continuity in the sewing process due to reduced downtime

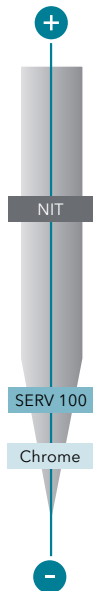
### Features:

- Anti-adhesive surface with NIT (Nickel-Phosphor-PTFE)
- Excellent abrasion resistance
- Especially smooth, low-friction surface
- Very resistant to corrosion
- Even coating thickness over the entire needle surface

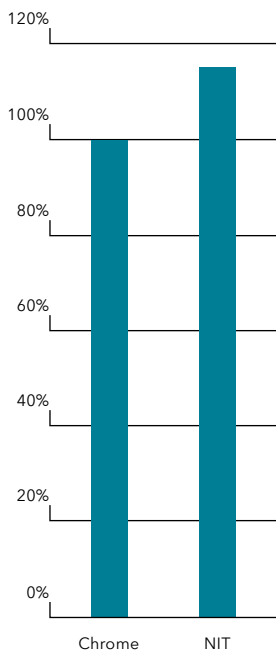
### Application:

- Materials with a low softening/melting point
- Man-made materials
- Materials with a high man-made fibre content
- Materials with special finishing, e.g. flame retardant, color, modifications of textile threads or surfaces as regards wear and care properties
- Heavy and hard materials
- Coated materials
- In case of needle and eye smearing when using standard chrome plated needles

### Anti-adhesion:



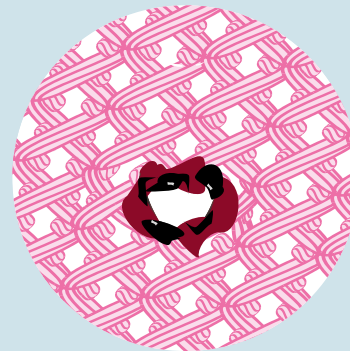
### Glideability:



Needle size: NM 90/14;  
sewing thread: polyester  
core spun No 25  
(dtex 420\*3)



SCHMETZ NIT



Melted stitch hole



Standard chrome plated

SCHMETZ NIT

## Titanium Nitride hard coating for increased needle life and reliable seams

### Advantages:

- Excellent wear resistance of needle
- Long lasting needle tip avoids fabric damage
- Precise stitches and therefore neat seam appearance
- Less needle breakage
- Low needle consumption
- Minimized clogging of needle eye and long groove when sewing materials like synthetics, foam, etc.
- Less thread breakage and skipped stitches
- High productivity
- Reduced costs

### Features:

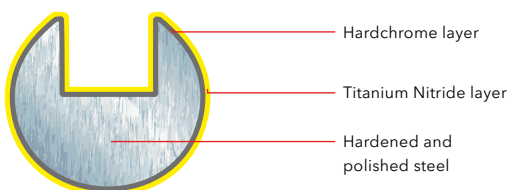
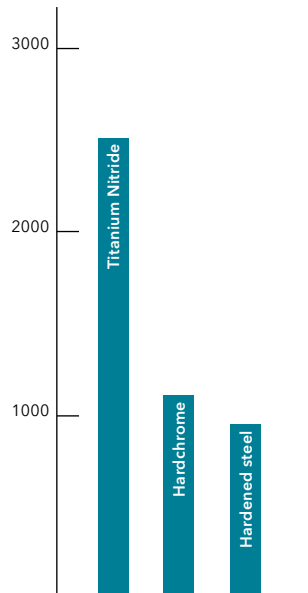
- Ultra hard Titanium Nitride coating on top of a protective hard chrome layer
- Needle surface more than twice as hard as standard chrome plating
- Slightly anti-adhesive needle surface
- Super hard needle tip
- Full corrosion protection of the needle surface
- System designation supplement "TN" (Titanium Nitride)



### Wear protection:



### Hardness HV:



### Application:

- Abrasive materials
- Thick, hard and strong materials, e.g. denim, leather
- Technical textiles
- Sports shoes
- Synthetics



SCHMETZ SERV 100



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