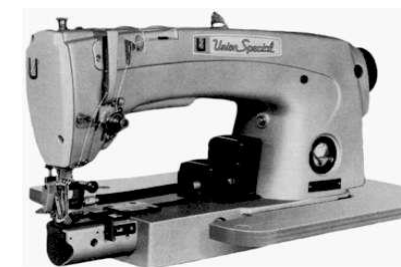


The world of sewing

**The needle
by SCHMETZ**

jreyes@schmetzus.com



SCHMETZ
Canu: 20:05 1
NM: 160 *SIZE:* 23
 134 (R)
 135x5
 DBx1
 DPx5
 Made in Germany

spesa

Advancements in Manufacturing Technology


SCHMETZ
 NEEDLES SINCE 1851

Needle Systems and Machines



DDL-8700B-7

16x231

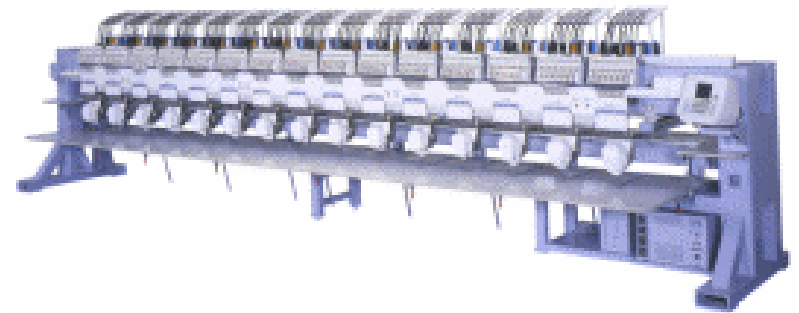
DBX1



134

135x5

DBXK5



134-35

or

135x17



Needle Systems and Machines



B-27

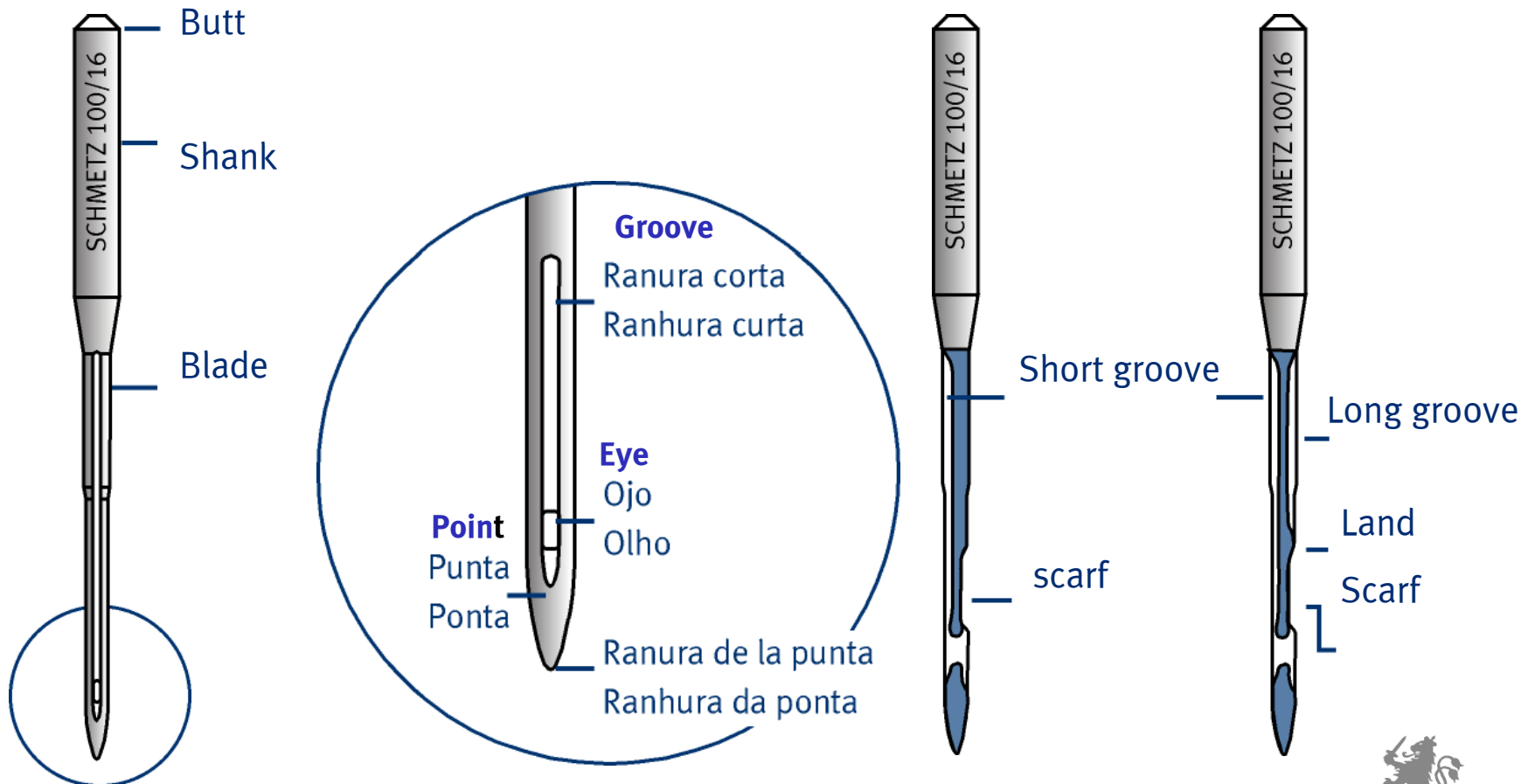
UY154 GAS



**501 SC
or
503 SC**

UY 128 GAS SES

Descriptions of sewing machine needles



Module Packaging

CANU = SCHMETZ Catalogue Number
NM = Blade Diameter- Number Metric
SIZE = Old Singer designation/Asia
134 = Needle System/needle designation in Europe
other needle designations
ex: DPx 5 used throughout Asia

135 x 5 o 135 x 7 designacion Singer-USA

(R) = Point Designation
Here: Regular point or normal point



CANU

Needle point code

- 03:36 MA

- 20:05 _

- 14:25 EB

- 38:00 FB

- 20:05 PB

MA = SPI (Acute round Point)

NO letter = (R) (Round Point)

EB = SES (Light Ball Point)

FB = SUK (Medium Ball Point)

PB = SKF (Heavy Ball Point)

Plating & Coating

- 03:36 MA **1** ← **1 = CHROMIUM PLATING**
- 22:15 EB **2** ← **2 = NICKEL PLATING**
- 38:00 FB **3** ← **3 = BLUKOLD or PTFE**
- 44:36 **8** ← **8 = NICKEL TEFLON**
- 37:20 **9** ← **9 = TITANIUM**

SPECIAL APPLICATION

- 03:36 MA 1_ ← Original Design
- 20:05 EB 17 ← SERV 7
- 37:20 12 ← SERV 2
- 44:36 18 ← SERV 8

Module Packaging

CANU = SCHMETZ Catalogue Number
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other needle designations
ex: DPx 5 used throughout Asia

135 x 5 o 135 x 7 designation Singer-USA

(R) = Point Designation
Here: Regular point or normal point



Selecting the Needle

MACHINE



Needle System
134
135x5
DPX5



SIZE

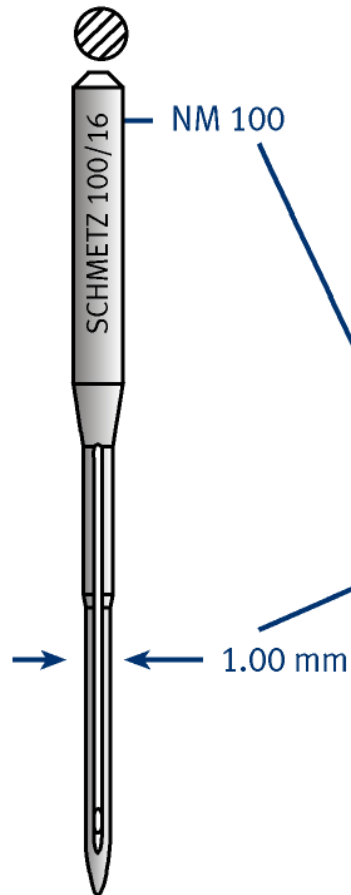


Fabric



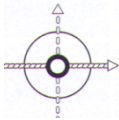
POINT

NEEDLE SIZE

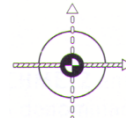


NM	SINGER/ Asia	Union Special	System 292	System 459 R	Schiffli Needles	Hook Needles	US Blind. short 251	long 251 lg	Lewis curved	straight	Merrow
35	2		23	22							
40	3		22	21							
45	4		21	20							
50	5		20	19							
55	6	022	18	18							3/0
60	8		16	17		2/0			2		2/0
65	9	025	14	16			0				0
70	10	027	13	15	2/0	1	1 1/2	05	2 1/2	10	1
75	11	029	12	14			1	10			
80	12	032	11	13	0	2	1 1/2	15	3	12	2
85	13		10				2	20			
90	14	036	9	12	1	3	2 1/2	25	3 1/2	14	3
95	15		8				3	30			
100	16	040	7	11	2	4	3 1/2	35	4	16	4
105	17							40			
110	18	044	6	10	3	5	4	45	4 1/2	18	5
120	19	048	4	9		6	4 1/2	55	5	19	6
125	20	049								20	
130	21		3	8	4	7	5				7
140	22	054	2	7	5	8	5 1/2		5 1/2		
150		060	1	6			6		6		8
160	23		0		6						
180	24	073							7		
200	25	080									

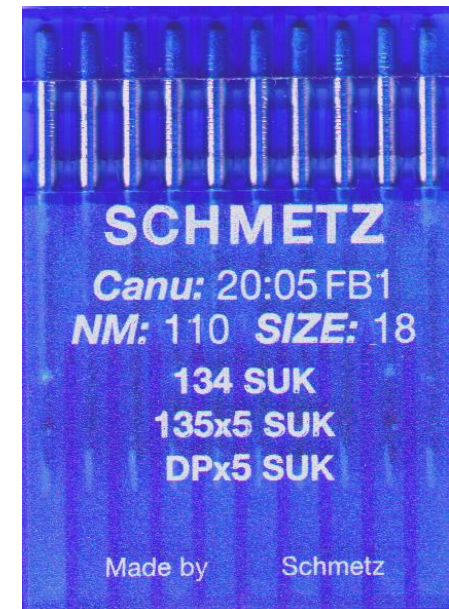
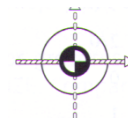
**(R)
Reg. Point**



SES- Light Ball Point



SUK- Medium Ball Point





R



SPI



SES



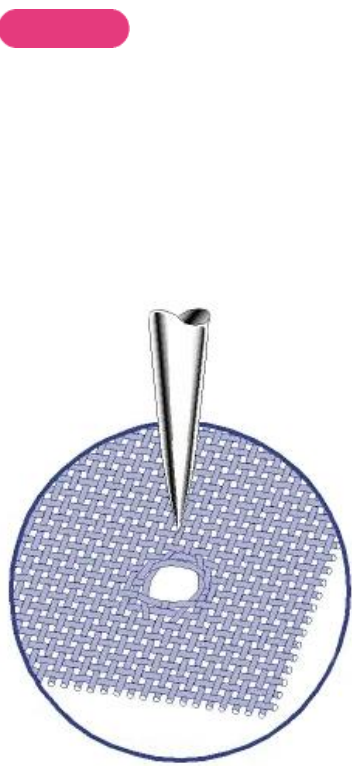
SUK



SKF



SKL



»SPI«



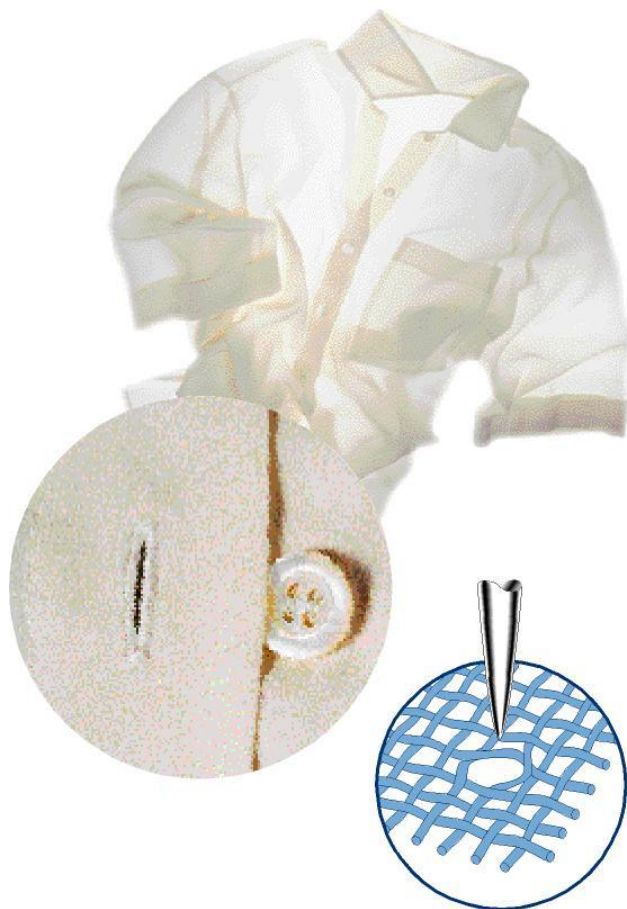
SPI

Acute Point

- Very dense woven materials
- Silk
- Microfabrics
- Heavy woven



(R)



(R)

Round Point

- Woven Fabrics
- Light Woven
- Laminated materials
- Fur
- Leather/Textile combinations

SES

Light Ball Point

- Fine to Medium Knitwear
- Denim Materials
- Laminated Materials Textile/Textile



SES



»SUK«

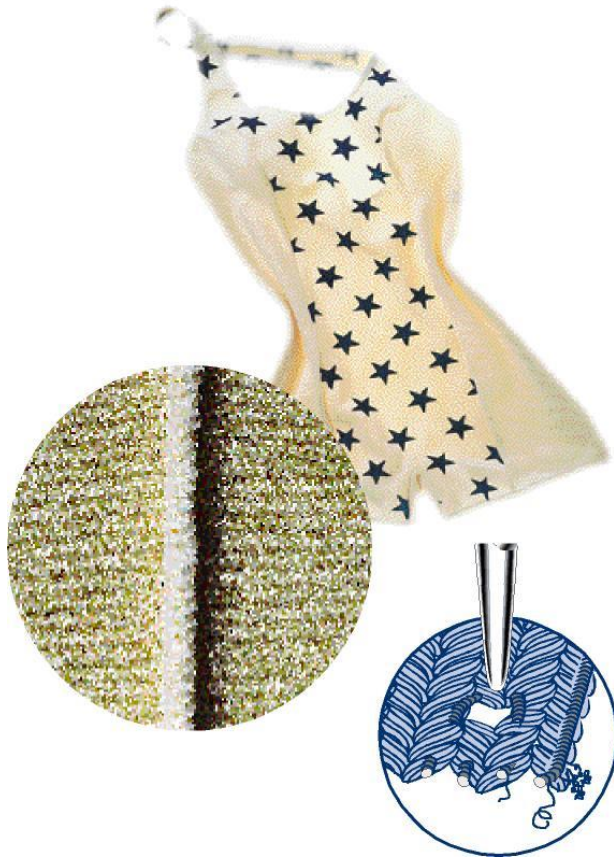


SUK

Medium Ball Point

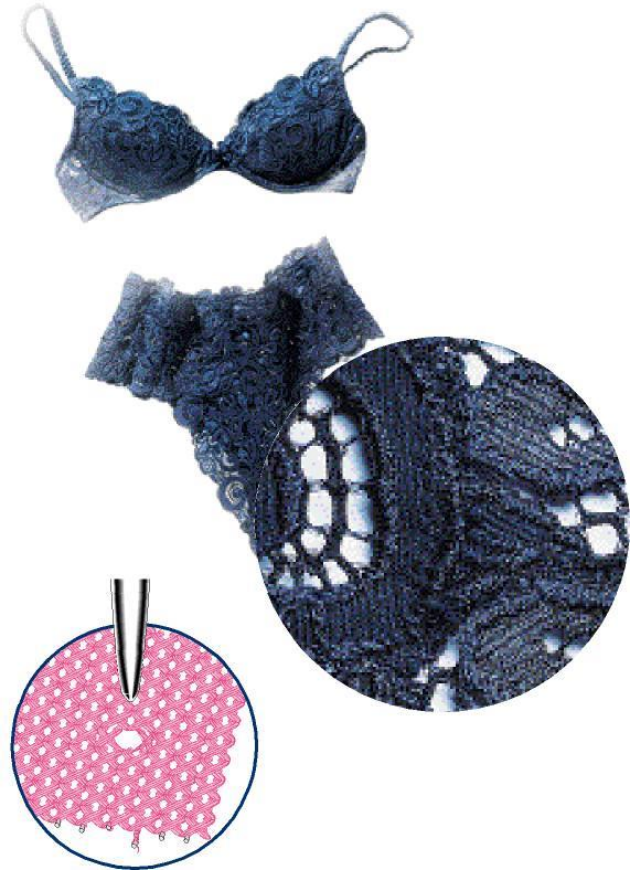
- Knit wear-Medium to Heavy
- Denim
- Corsetry

Elastic materials with covered elastomeric threads



»SKF«

»SKL«



SPECIAL APPLICATIONS



System 253 S/C



System 1032 B 1/36



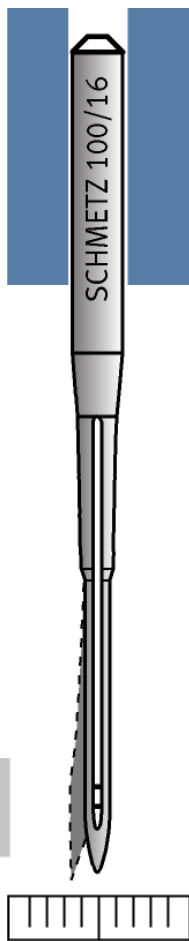
Advancements in Manufacturing Technology



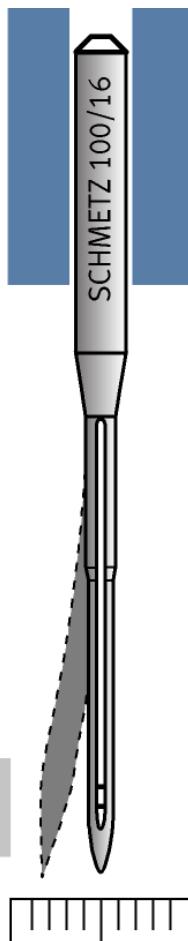
SCHMETZ
NEEDLES SINCE 1851

SCHMETZ SERV 7

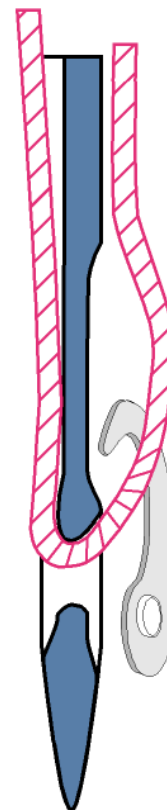




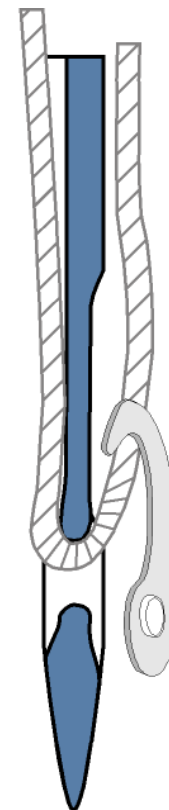
SERV 7



Standard



SCHMETZ SERV 7



Standard

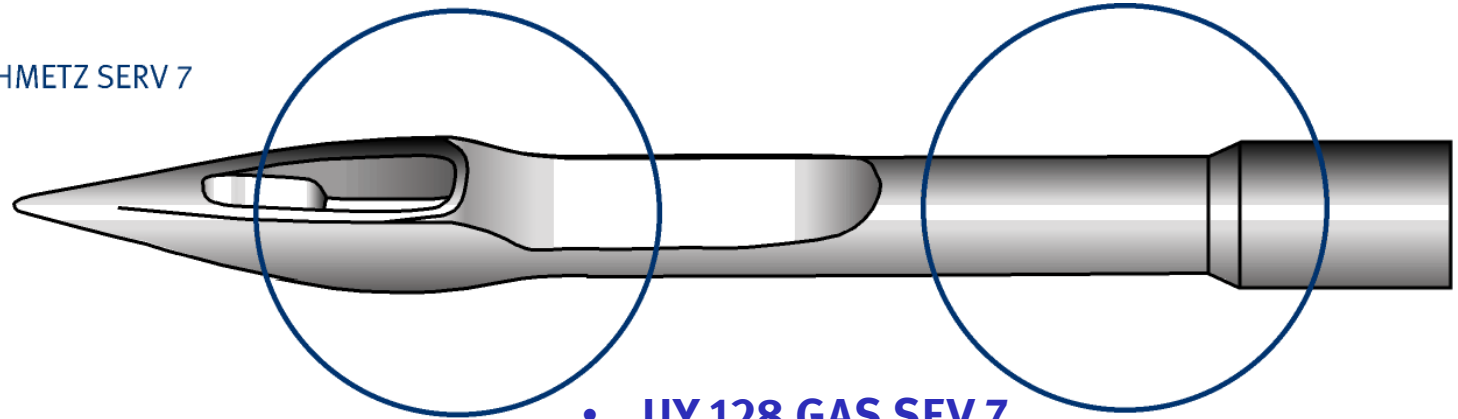
Heavy Sewing SCHMETZ SERV 7- Reinforced Blade



SCHMETZ SERV 7

Available SES & SUK Points

SCHMETZ SERV 7



- UY 128 GAS SEV 7
- 135x17 SERV 7
- 134-35 SERV 7

Standard



- 134 (R)
- 135X5
- DPX5

Special Coating NIT

Features

- Anti-adhesive surface with excellent abrasion resistance
- Abrasion Resistance
- Corrosion resistance

Advantages

- Use of very thick sewing threads possible
- Dry Running
- Better gliding properties



The advertisement features a large central image of a Schmetz needle. Surrounding it are images of various materials: a dark jacket, a blue helmet, a firefighter's jacket, and a pair of jeans. A dashed red line connects these materials to the needle. Below the needle, three smaller needles are shown with labels: 'NIT', 'Cromo', and 'Blanco'. Each has a corresponding label: 'Protección contra corrosión', 'Protección al desgaste', and 'Anti-adherencia'. A bar chart titled 'Capacidad de deslice' compares the 'Cromo' and 'NIT' needles. The 'NIT' needle shows a significantly higher capacity, reaching approximately 110% compared to the 'Cromo' needle's 100%.

Material	Capacidad de deslice (%)
Cromo	100%
NIT	~110%

NIT

SCHMETZ
NEEDLES SINCE 1851

FED. SCHMETZ GMBH Bismarckstraße 53-55, D-32134 Herzingen (Germany)
Tel. +49 (0)2406/95-0, FAX +49 (0)2406/95-222, Internet: <http://www.schmetz.com>, E-Mail: info@schmetz.com

Application:



Nickel-PTFE

- Material with a low softening/melting point
- Man-made Materials
- Materials with high man-made fibre content
- Material with special finishing
- Heavy and Hard materials
- Coated materials
- Minimize smearing on eye & blade of needle



Advancements in Manufacturing Technology



Special Coating NIT & SERV 7





SPECIAL COATING SERV 100 – (TN) Titanium Nitride

Advantages:

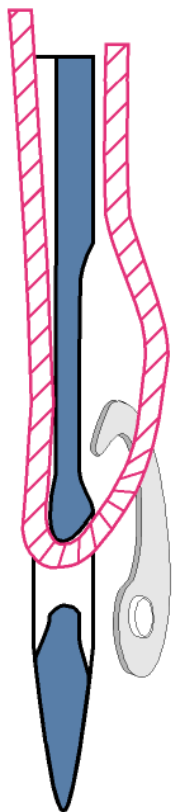
- Excellent Wear Resistance
- Long lasting Needle Tip
- Less Needle Breakage

Features:

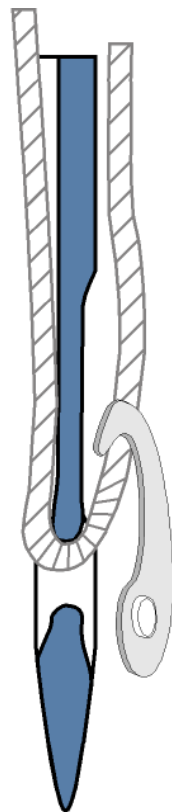
- Ultra Hard Titanium Nitride Coating
- Very Hard Needle Surface
- Anti-adhesive Surface



Better Loop formation- SCHMETZ SERV 7-



SCHMETZ SERV 7

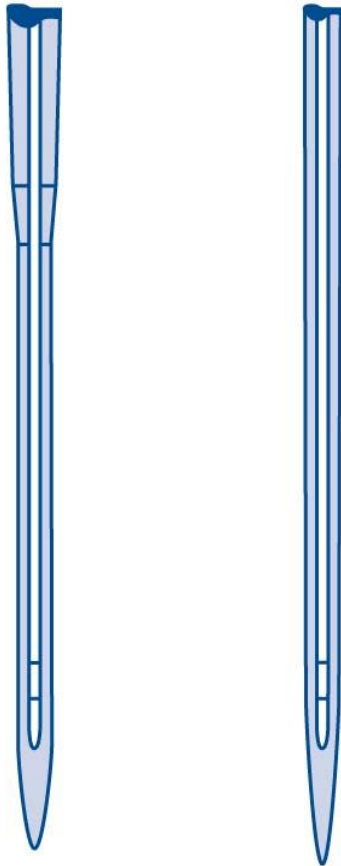


Standard



SPECIAL GEOMETRY

KN



Standard SCHMETZ KN

Features

- Slim, continuous cylindrical blade without any reinforcement
- SUK Point
- Reduced cross-section of eye area

Advantages

- ✓ Smaller stitch holes than with standard needles
- ✓ Minimises knitwear damage due to the slim shape
- ✓ **Smaller stitch holes than with standard needles**
- ✓ **Minimises knitwear damage due to the slim shape**

SPECIAL GEOMETRY

SF



EXTRA SLIM POINT

KN = Very Fine Knitwear

SF = Extremely Fine Knitwear (40 to 42 gauge)

Features:

- Very slim shape from eye to point
- Ball point- SUK-
- Cylindrical blade without any reinforcement

SCHMETZ KN SCHMETZ SF

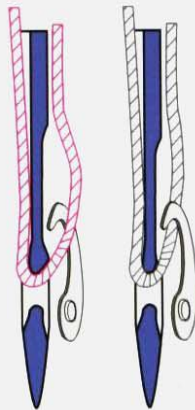
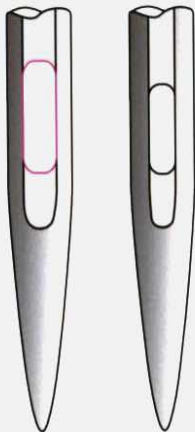
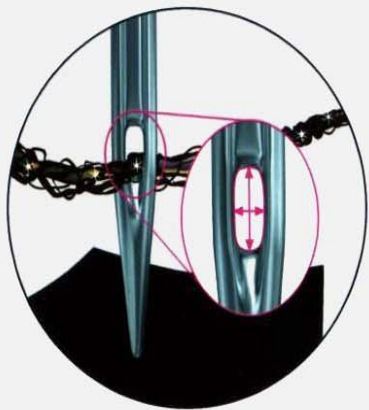


Advancements in Manufacturing Technology



EMBROIDERY

SCHMETZ DBXK5 – DBXK5 KK – 1738 ES



Advancements in Manufacturing Technology



NEW

Special Application

Systems

134 GO RRT

135 X 17 GO RRT

Features:

- Eye Enlarged
- Enlarged Groove
- Round Point –Slightly Rounded Tip

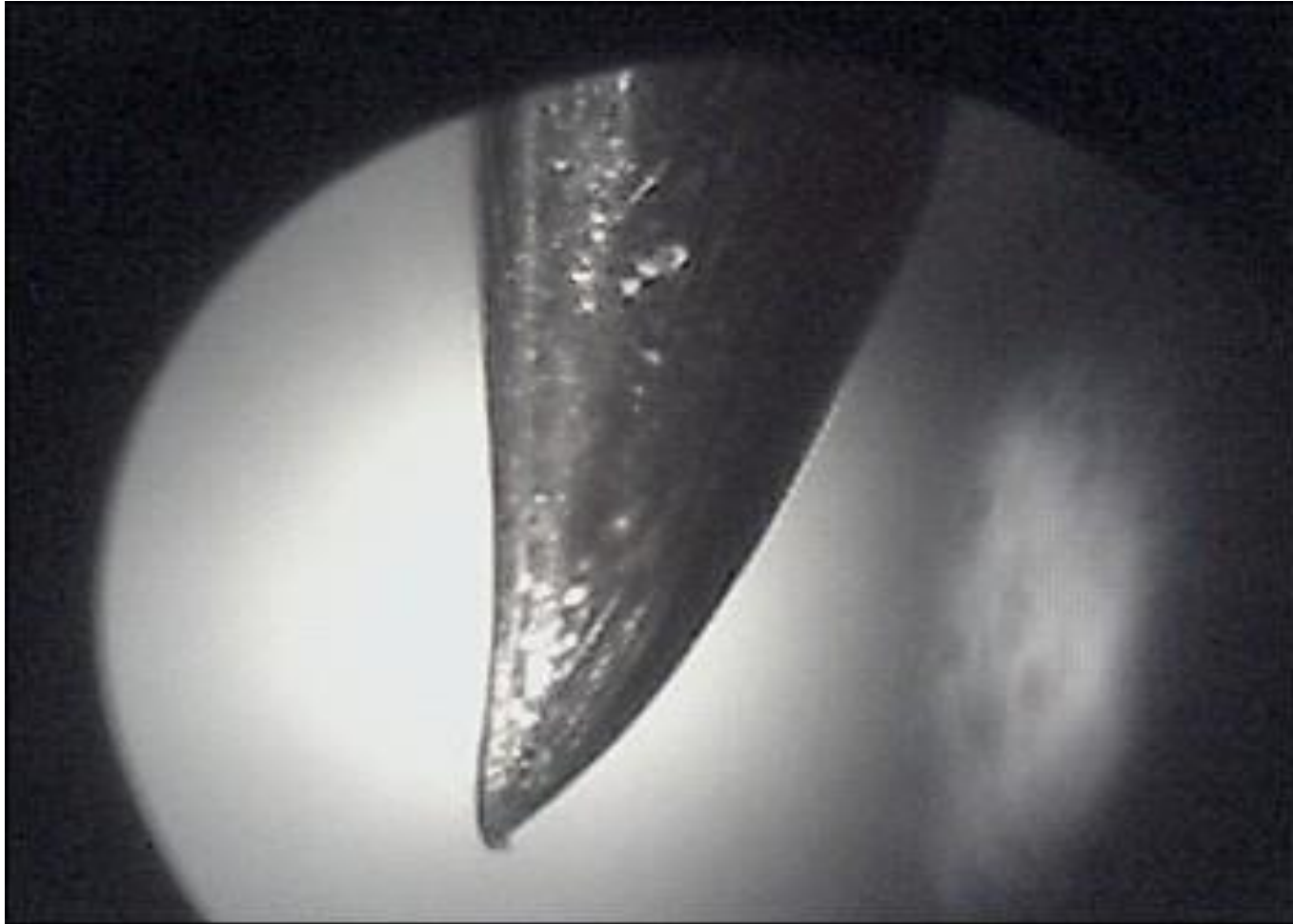


NEW

Special Application



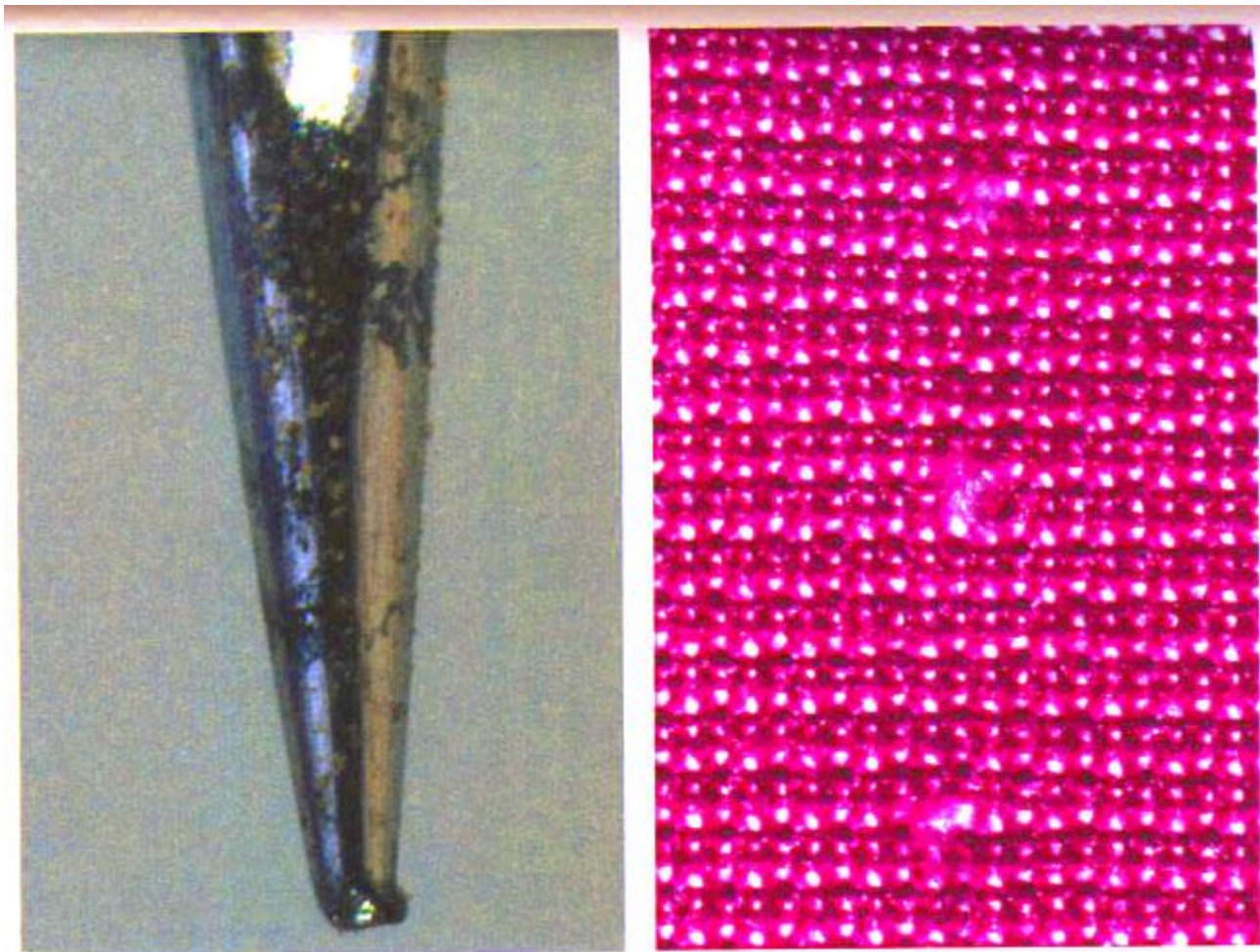
SEWING PROBLEMS



Advancements in Manufacturing Technology



SCHMETZ
NEEDLES SINCE 1851

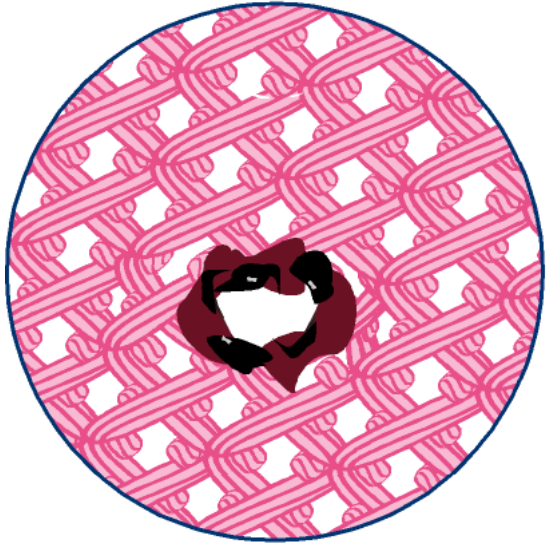


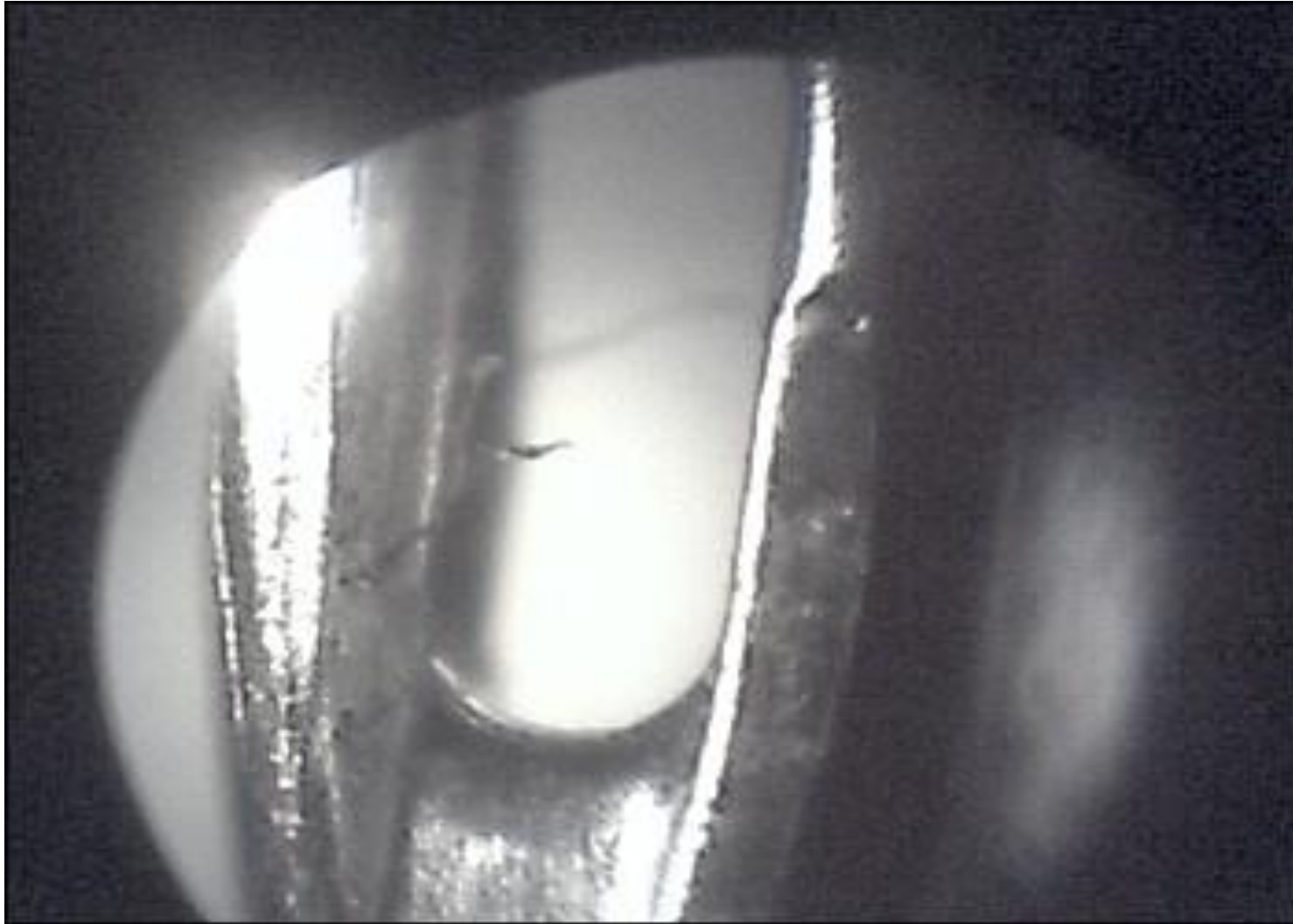


Temperature profile during the sewing process(without thread)



Thermal Damage



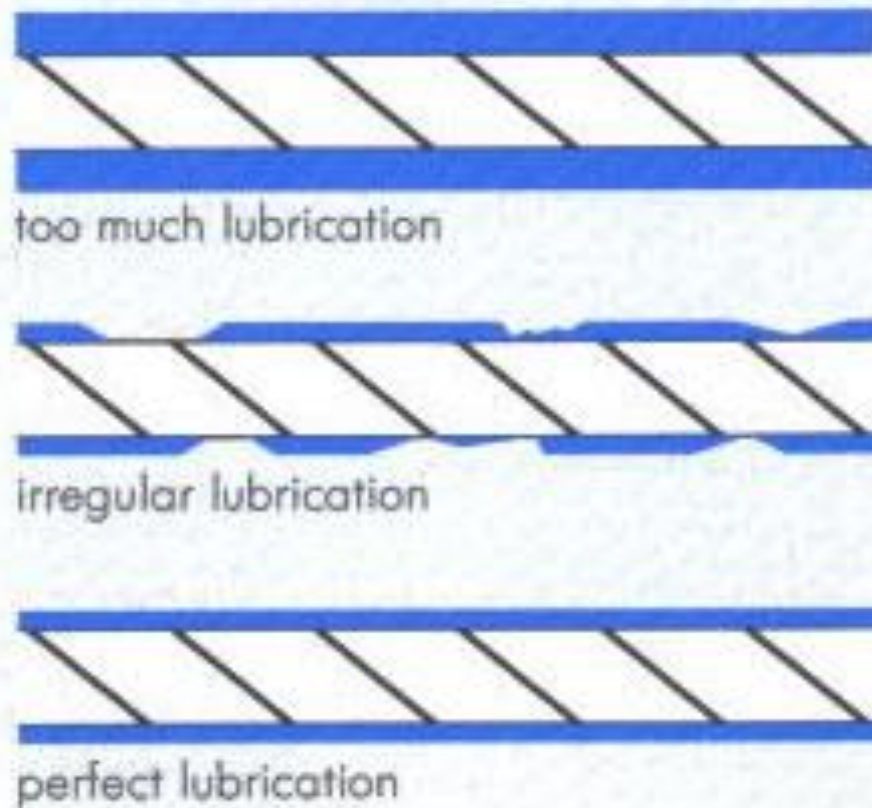


Advancements in Manufacturing Technology



SCHMETZ
NEEDLES SINCE 1851

Lubrication of thread

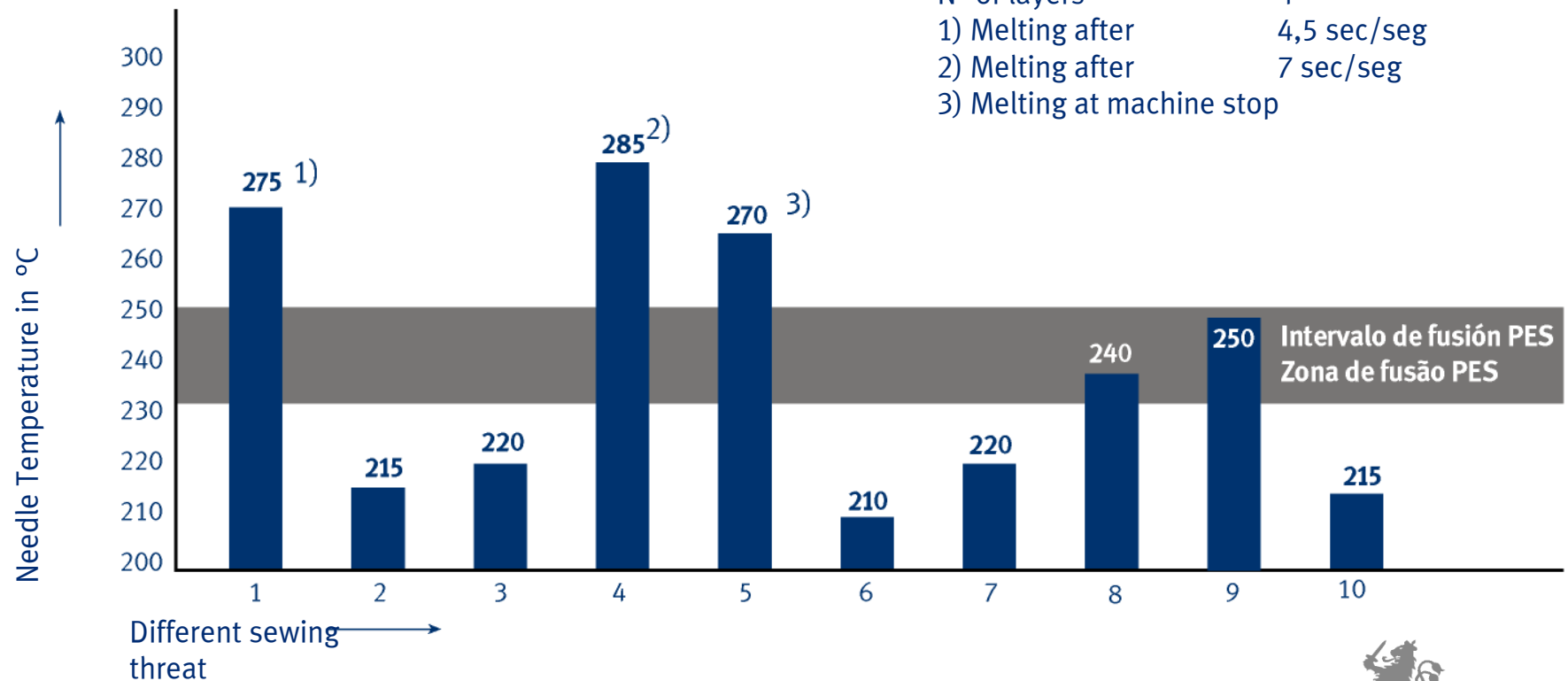


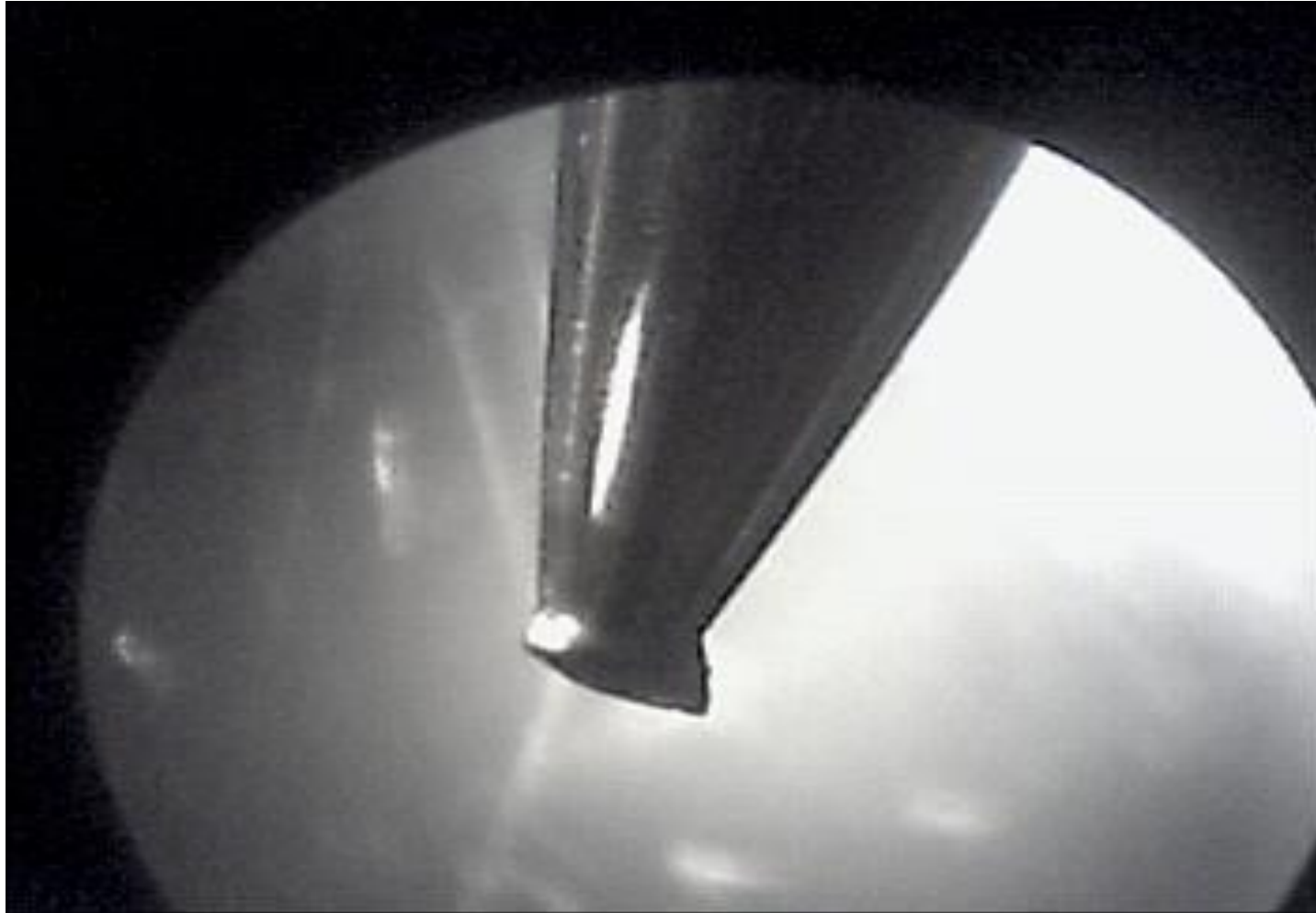
Needle Temperature

Influence of different qualities of sewing thread

Test Parameter:

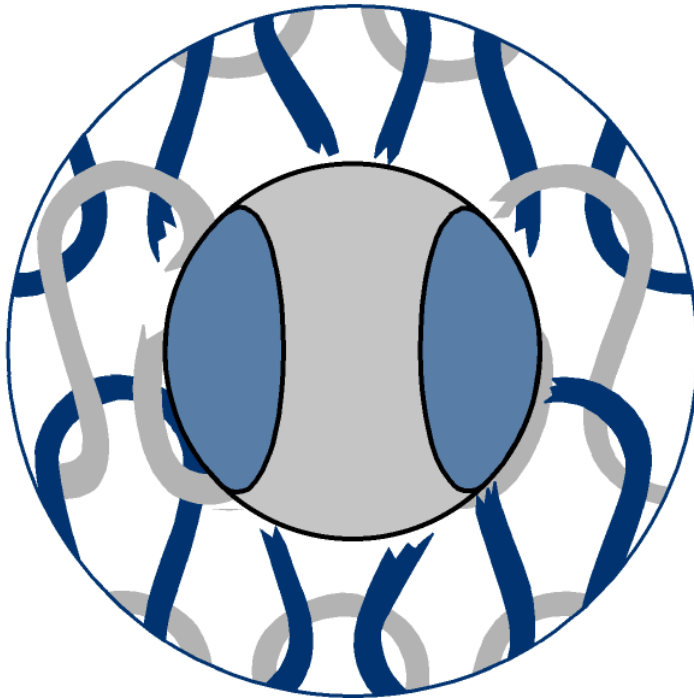
Machine	lockstitch (Type 301)
$\text{mín}^{-1} / \text{min}^{-1}$	4.000
Needle system	134/DPX5
Size	90/14
Material	Denim (Jeans) 14 oz.
Nº of layers	4
1) Melting after	4,5 sec/seg
2) Melting after	7 sec/seg
3) Melting at machine stop	



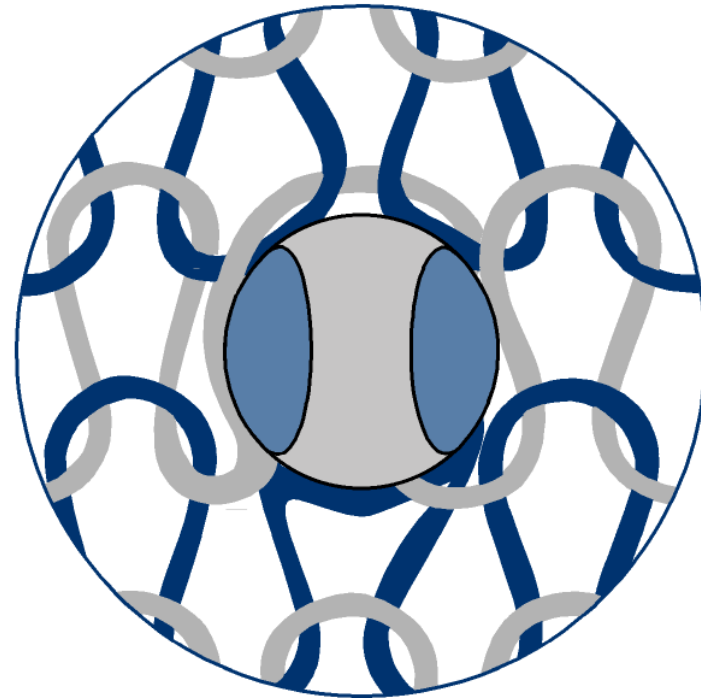


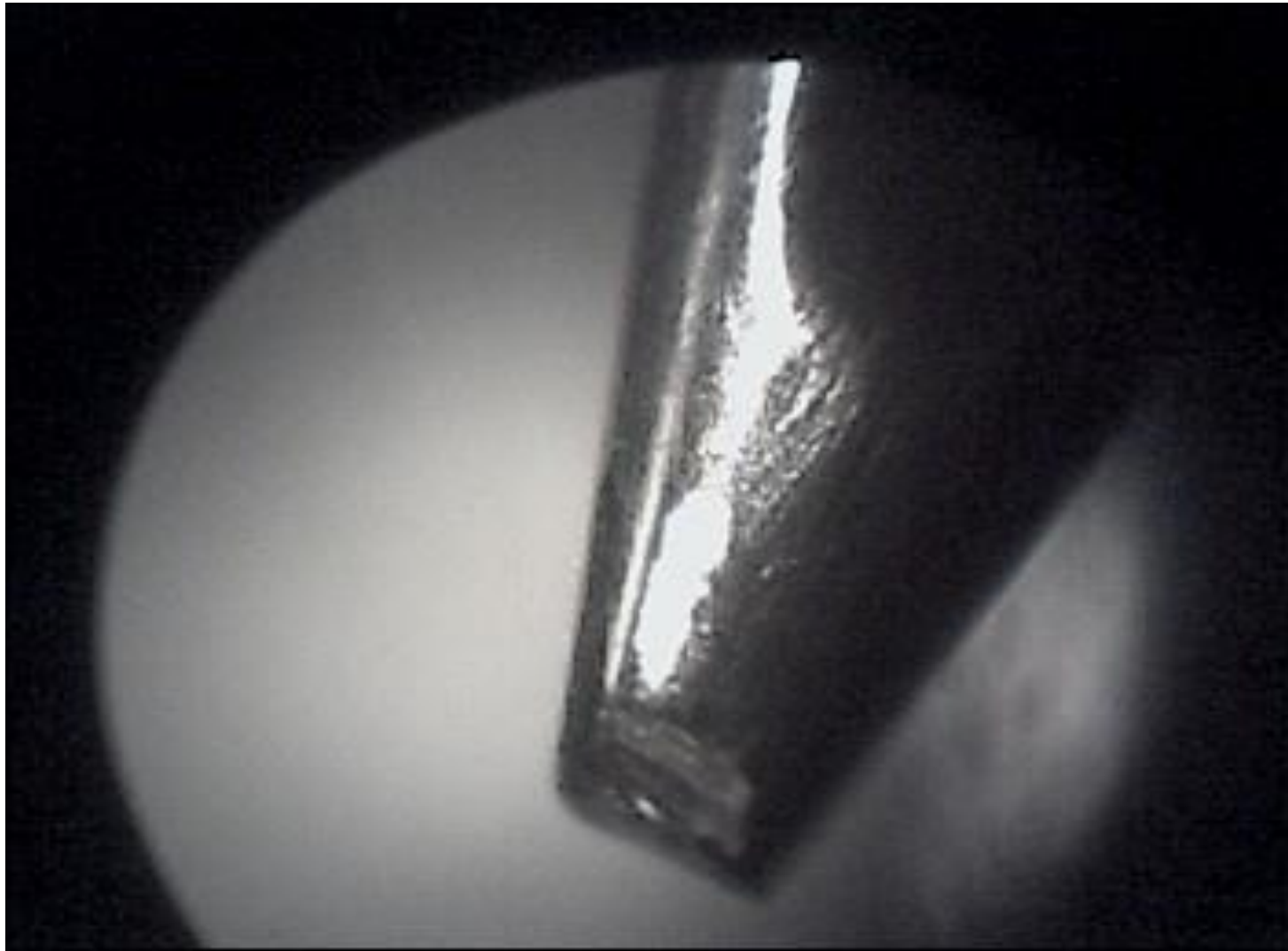
Mesh Damage caused by oversize needles

NM 90
SIZE 14



NM 70
SIZE 10





Advancements in Manufacturing Technology



SCHMETZ
NEEDLES SINCE 1851



NM 80



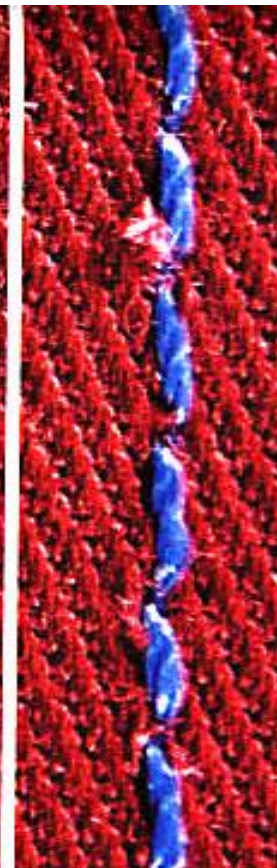
NM 90



NM 100



NM 80



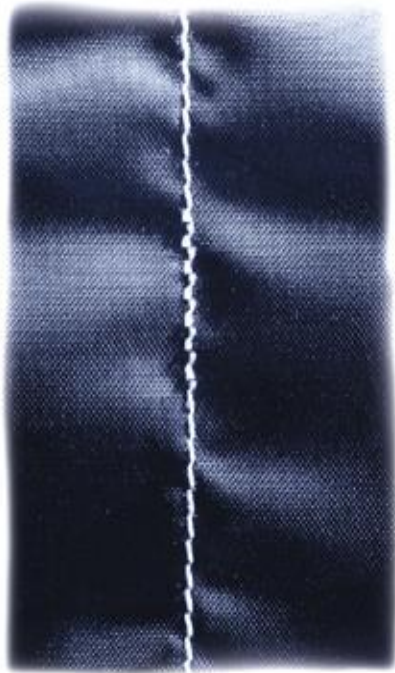
NM 90



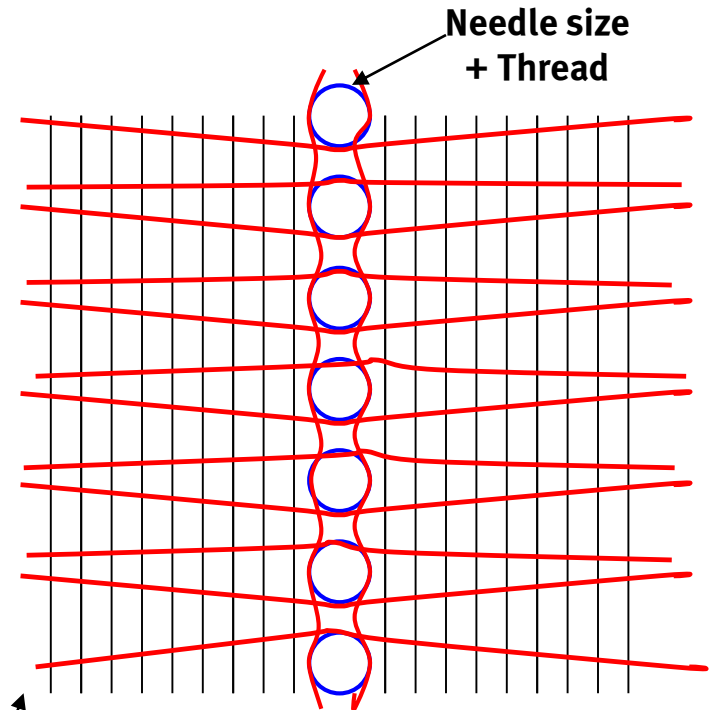
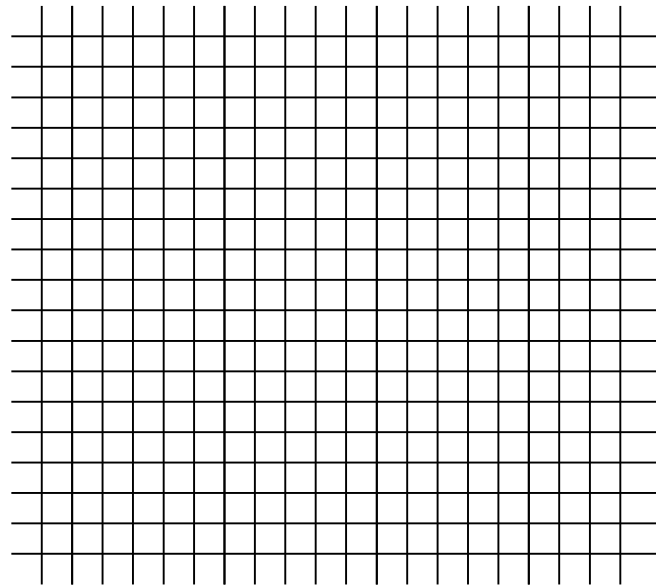
NM 100

Displacement Puckering

-Thread size-



Displacement Puckering-Needle Size-

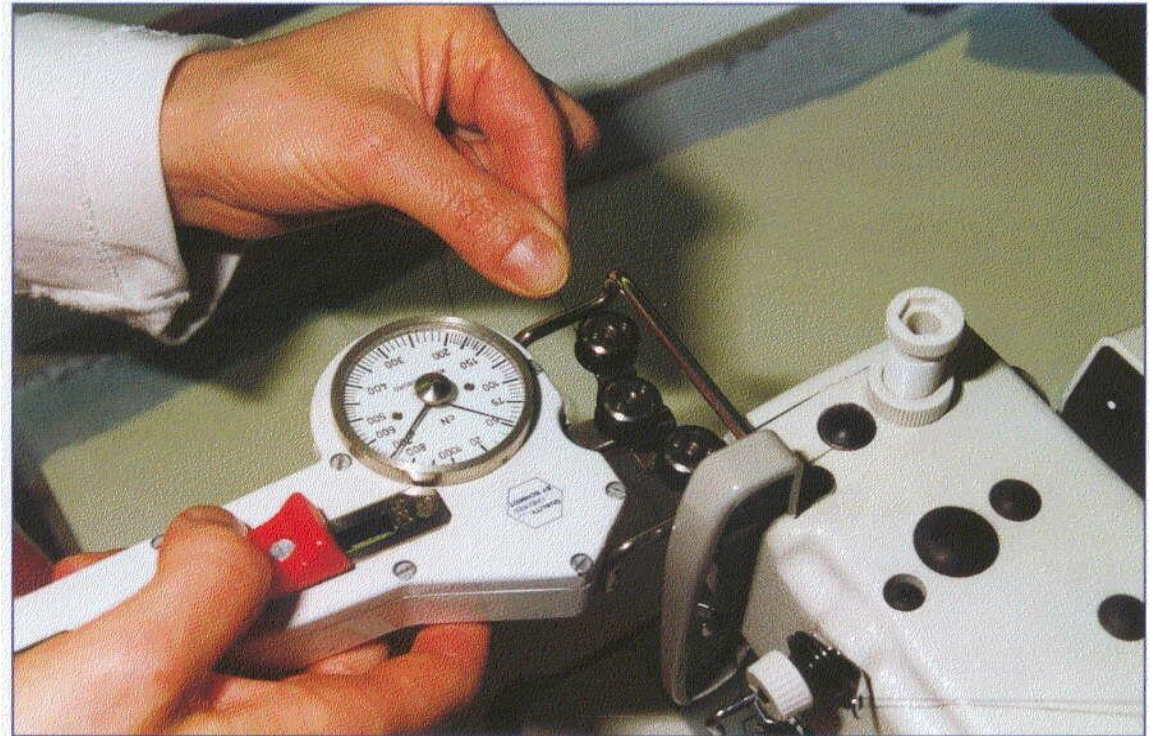
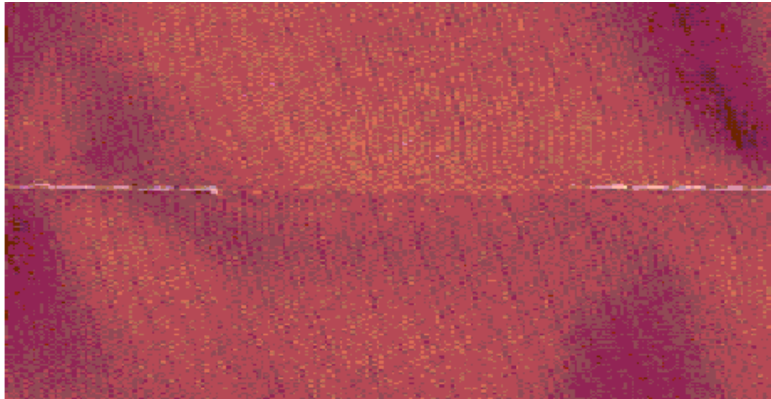


Fabric displacement of the fibers

Displacement Puckering

SERVICEHOUSE

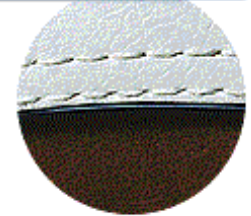
- ✓ Thread Tensions
- ✓ Stitch Density



Cutting Point Needles



Seam appearance:



Seam appearance:



LR VR S DI P PCL PCR D DH SD1 LL LLCR



Advancements in Manufacturing Technology



SCHMETZ
NEEDLES SINCE 1851

Thank you very much for being interested

jreyes@schmetzus.com

Herzlichen Dank für Ihr Interesse

Merci beaucoup pour votre intérêt

Muchas gracias por su interés

Muito obrigado pelo seu interesse

Grazie mille per il Suo interesse

御清聴有り難うございました

Сердечно благодарим Вас за Ваш интерес.

欢迎垂询！

