

TECHNICAL INFORMATION SEWING 28

# **GROZ-BECKERT®**

## MR AND LoopControl® NEEDLES FOR LONG ARM QUILTING MACHINES



For sewing processes with long arm quilting machines with multidirectional feeding system

Long arm quilters work with a variety of different fabrics, threads and battings to create quilts that often resemble nothing more than works of art. Free motion or computerized quilting, commercial or private quilting, the requirements are the same: flawless, perfect seams and maximum reliability. The seams of a quilt are one of the most important aspects, as they connect all parts holding the quilt together. Skipped stitches, breaking needles, spliced or breaking threads are typical problems caused by standard sewing needles.

The answer to all these problems are the Groz-Beckert LoopControl<sup>®</sup> and MR needles.

## LoopControl®

#### Benefits

- Fewer skipped stitches
- Less needle breakage
- Less thread breakage
- Less thread splicing
- Optimum fabric protection
- Reduced machine downtime
- High seam quality and productivity

## THE MR AND LoopControl® NEEDLES FOR LONG ARM QUILTING

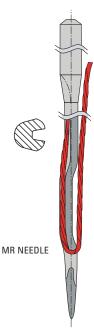
### MR needle

The MR (or Multi Range) needle's unique geometry is what makes the sewing work perfect using it in multidirectional sewing. With its special blade and scarf geometry, it offers outstanding bending resistance, thus extreme stability.

Additionally, the scarf is unusually deep and long, it gives a bigger loop space for the looper and therefore a higher loop pick-up security. The deep thread groove, which extends into the eye area, guarantees an optimum protection of the thread.



## Multidirectional Sewing

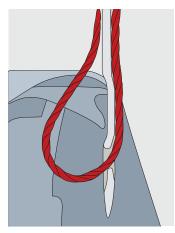


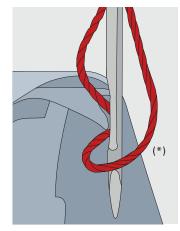
Sewing machines with frequent changes of sewing direction at a constant sewing speed is what is known as multidirectional sewing.

When changing the sewing direction, the sewing thread is pulled out of the needle eye in different directions. During its downward stroke, the needle slides along the tensioned sewing thread.

This can change the thread twist, and lead to instable loop formation.

The special shaped thread sliding area inside the eye of the Groz-Beckert MR needle guarantees stable loop formation even under unfavorable sewing conditions.





MR NEEDLE

STANDARD

This eliminates the possibility of negative loop formation (\*).

MR Product Range				Common needle sizes used in long arm quilting machines in light green								
		SNF		2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0	
GB designation	Point	Cat. No	SNF point	65-70	75-80	85-90	95-100	105-110	120	125-130	140-160	
134 MR	R	1955-01-	SET	•	٠	٠	•	•	•	•		
134 MR FFG	FFG	1955-06-	L Ball	•	٠	٠	•	•	•	•	•	
134 MR GEBEDUR®	FFG	1955-06-	L Ball	•	٠	٠	•	•	•	•		

**GEBEDUR**<sup>®</sup> is Groz-Beckert's name for titanium nitride coated needles. It provides the Groz-Beckert **MR GEBEDUR**<sup>®</sup>, as well as the **LoopControl**<sup>®</sup> **GEBEDUR**<sup>®</sup> needles with high protection from wear and tear, as well as damage, achieving a longer working time.

### LoopControl<sup>®</sup>

Timing

The geometry of our LoopControl<sup>®</sup> needles is designed to improve the loop formation and assure perfect stitches, when used in correctly adjusted machines.

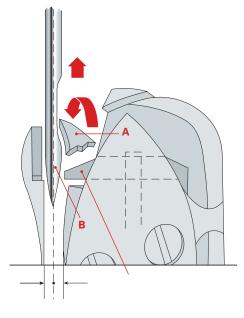
Difficult sewing operations can result in the thread unwinding during loop formation. Single yarns or filaments can be picked up or torn off by the looper/hook point. The risk of unwinding is reduced by the special thread guiding area of the Groz-Beckert LoopControl<sup>®</sup> and MR needles.





STANDARD





Timing is important for a perfect machine performance! Remove the bobbin case, then the throat plate. Turn the thumb wheel clockwise till the needle bar is at its lowest position. You will see the marks on the needle bar. Determine which mark lines up with the needle bar. Turn again the thumbwheel clockwise until the next mark lines up in its position. This is the loop pick up position.

The hook point (A) should be adjusted in the scarf area right above the eye and should be as close as possible to the scarf, but not touching the needle.

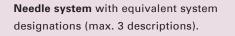
The needle, no matter if LoopControl® or MR must be in the middle of the free space in the bobbin case **(B)** and should not be deflected by the surface of the needle guard.

The titanium coating of needles does not affect the machine timing, a machine set up to work with a chromium needle will work with a titanium coated needle as well.

LoopControl <sup>®</sup> Product Range				Common needle sizes used in long arm quilting machines in light green								
GB designation	Point	SNF Cat. No	SNF point	80	90	100	110	120	130	140	160	
134	R	1955-01-	SET	•	•	•	•	•	•	•	•	
134 FFG	FFG	1955-06-	L Ball	•	•	•	•	٠	•	•	•	
134 R GEBEDUR®	R	1955-01-	SET	•	•	•	•	•	•	•	•	
134 FFG GEBEDUR®	FFG	1955-06-	L Ball	•	•	•	•	•				

## Quality begins with the packaging

Groz-Beckert constantly works to replace good things with better ones. As the Sewing Industries changed, the demands for a userfriendly needle packaging did, too. Therefore, we conceived a packaging that meets these demands. A packaging that protects the needle for long transportation and provides all necessary information. A packaging that avoids confusion and allows us to trace the needle back to the original wire. A packaging easy to handle and easy to recycle.



#### Point style

Most needle systems can be supplied in different point styles, suitable for sewing any material from finest cloth to heaviest leather.

#### **Production number**

Allows an internal backtracking of all production steps of the needle. In addition, this number is required for the manual entry into the label scanner.

## Groz-Beckert Cloth Points

All textiles whether woven, warped, felted or knitted are sewn with a specific needle point shape to suit their structure.

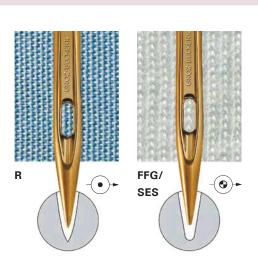
The right choice of point has a significant effect on the finished sewing results. The right needle tip will give you the results you want. Below are the most common point styles in quilting.

The Groz-Beckert MR and LoopControl<sup>®</sup> needles work with long arm quilting machines by





GROZ-BECKERT KG PO Box 10 02 49 72423 Albstadt, Germany Phone +49 7431 10-0 Fax +49 7431 10-3200 contact-sewing@groz-beckert.com www.groz-beckert.com



Ouilter

**GROZ-BECKERT®** 

10 Nm 110/18

776362

R AAC29C AC

134 MR

DP X 5 MR 1955 MR

## Needle size in Nm and other current size descriptions

#### Data Matrix code

(The myGrozBeckert app contains a Data Matrix code reader)

#### R Point – Regular Round Point:

Most common for all kinds of lockstitch applications, particularly for woven fabrics, artificial leather, coated fabrics. Example: Most of the quilts, shirts, trousers, woven garments

#### FFG/SES – Light Ball Point:

For knitted fabrics and for wovens. Example: T-Shirts, underwear, fine sweaters, quilts made with knitted fabric





The depictions provided of our products are not to scale and are intended for illustrative purposes only. Consequently they make no claim to be an accurate representation of the original.

In the sequence of the Groz-Beckert company group.
In the publication is copyrighted. All rights reserved, in particular the right of duplication, distribution and translation. This publication or any parts thereof may not be reproduced or stored, processed, duplicated or distributed using electronic systems in any form or by any means whatsoever without the express written consent of Groz-Beckert.

Z