

**FELTING NEEDLES WITH  
CONICAL WORKING PART**  
IDEAL FOR THE NEEDLING OF  
RECYCLING MATERIAL



**The even needling effect produced using a conical working part brings about a marked reduction in the incidence of needle breakage.**

Groz-Beckert felting needles with a tapered working part guarantee substantially greater stability than their standard counterparts. Manufacturing processes

which expose the needles to particularly high levels of flexibility are the ideal field of application for needles with a tapered working part.

Needle breakage is reduced to an absolute minimum, meaning less machine downtime and guaranteeing the manufacturer trouble-free, economical production.

## ADVANTAGES OF THE FELTING NEEDLE WITH CONICAL WORKING PART

### Working part

The benefits of Groz-Beckert felting needles with a conical working part lie primarily in their enhanced stability.

The long, slimline point style helps reduce initial penetration force to a minimum, and the extended transition between the working part and the intermediate section plays a decisive role in improving needle life.

### Examples

#### 609451

15 x 19 x 3 1/2 M332 G 53012

#### 609461

15 x 20 x 3 1/2 M332 G 53017

#### 609401

15 x 16 x 32 x 3 1/2 R332 G 53017

#### 609871

15 x 16 x 36 x 3 R222 G 53017

#### 609821

15 x 16 x 40 x 3 1/2 R222 G 53017

### Working Part and barb style



### Barb style

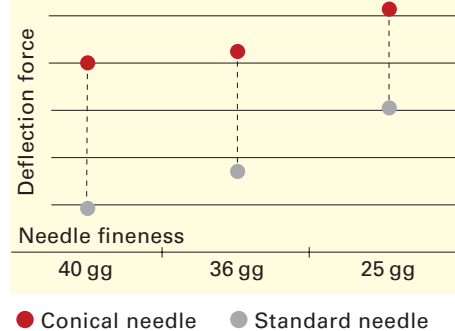
Minimal damage to fibres and scrim, markedly improved product tear resistance, improved fibre bonding and an optimum needling effect are among the benefits offered by felting needles with a Groz-Beckert RF barb style.

The rounded barb edge finish in the area of the undercut surface helps to ensure maximum protection of fibres, eliminates the possibility of damage to the fabric and increases needle life.

### Applications

The main fields of application for Groz-Beckert felting needles with a tapered working part include the recycling sector – for example the needling of sewing, knitting and spinning waste materials, as well as waste fibres from the clothing industry. The products manufactured from these materials include wadding for mattresses, padding materials for floor covering, filling and insulating material as well as upholstery padding material for the furniture industry. The use of tapered felting needles is generally recommended for products in higher weight classes of 1,000 g/m<sup>2</sup> or over. This needle type is particularly suitable for the needling of cotton fibres, wool, aramide fibres such as Kevlar or Nomex, and blends, for example of synthetic and regenerate fibres.

### Stability of conical needles



For finer needle applications, for example the production of filtration and geo-felts or in pre-felting applications, the use of Groz-Beckert felting needles with a tapered working part results in fewer needle-breakages, as well as higher product quality.

GROZ-BECKERT KG

PO Box 10 02 49

72423 Albstadt, Germany

Phone +49 74 31 10-0

Fax +49 74 31 10-20 88

contact@groz-beckert.com

www.groz-beckert.com