



# Coats Down Jacket Innovative Solutions

## Down Jackets - Innovative Solutions

Down and synthetic down insulation jackets are known for their desirable combination of warmth, light weight and luxurious feel. Water repellent fabrics and anti-microbial treatments add an extra dimension to the appeal of these jackets for outdoor, high fashion and specialist applications.



Creating a high quality down or synthetic insulation jacket brings inherent issues that must be overcome. Down or synthetic filling leakage caused by unbalanced stitching, static build-up and poor thread choices can all lead to high volumes of garment rejection. In most cases this means that a product using premium fabrics and premium filling becomes waste.

Coats provides a full range of threads which are highly suited to the application of down filled jackets. Each solution has an option for continuous filament polyester thread, or core spun polyester thread. This is supported by the informative and reliable technical support that you expect from Coats.

## Causes of Down Leakage

1. Fabric is unsuitable quality and there is loss of down through the fabric
2. Quality of the down or synthetic filling is unsuitable for the application
3. Needle holes too large because of incorrect needle choice
4. Sewing machine throat plate is too large
  - Fabric flaps or moves up and down within the needle hole
  - Feathers are pulled through the fabric during sewing
5. The sewing thread is too coarse or too hairy
  - Down or feather materials attach to the thread and pull through the fabric surface
6. Stitch balance and static build up



## Lightweight (non-water repellent) Down Jackets

Coats produces high quality threads which minimise the potential for down leakage and are specifically designed to meet the needs of lightweight down filled jackets.



**Coats Gral** is a continuous filament polyester thread available in a wide range of sizes and is the thread of choice for many high-speed sewing end-uses. The smooth finish of Gral with superior low friction lubrication helps reduce down leakage.

COATS  
*gral*



**Coats Epic AS** is a polyester wrapped cospun thread with a polyester filament core. A special finish is applied to the thread which prevents static attraction of down during the sewing process, particularly in dry factory conditions.

COATS  
*epic as*



## Lightweight, Anti-Microbial Down Jackets

These solutions inhibit growth of mould and microbes to prevent staining and odour in seams, leaving garment seams clean and fresh smelling.



**Coats Gral Protect** thread is treated with an innovative process which gives the thread anti-microbial and anti-fungal properties. The anti-microbial process creates a "zone of inhibition" that prevents bacteria and pathogens forming around sewn seams, where microbes like to harbour, leaving seam crevices clean and odour free.

COATS  
*gral protect*



**Coats Epic Protect** has anti-microbial and anti-fungal properties. The anti-microbial process produces a wide "zone of inhibition" preventing odour and stains caused by bacteria around sewn seams. The result is a functional, reliable, easy to sew thread solution.

COATS  
*epic protect*



## Lightweight Water Repellent Down Jackets

The use of water repellent thread is paramount to maintaining this quality in lightweight down jackets. Coats Gral AWF and Epic AWF threads are recommended for the application of down filled jackets where minimising down leakage in water repellent garments is crucial.



**Coats Gral AWF** is the very best thread choice for high performance Outdoor brands. Gral AWF has a PFC-free anti-wick finish which prevents the capillary action of water transportation through the thread in the seam. Use Gral AWF for no-compromise, premium water-resistant outdoor wear

COATS  
*gral awf*



**Coats Epic AWF** improves upon the properties of Epic AS by using a PFC-free anti-wick finish which reducing the capillary action of liquid travelling along the thread, through the needle hole, to the inside of the jacket.

COATS  
*epic awf*



## Technical Services Solutions

Coats Technical Services is a global network of technical support professionals - from brand HQ to factory floor. This industry leading approach helps Coats' customers maximise their efficiency and productivity.



From selecting the best Coats threads and trims for the product, assessment of factory environment and machinery, to optimising the sewing equipment on the factory floor and providing on-site training, Coats is there to provide the technical support you need.

Key benefits of optimising production with Coats Technical Services are:

- Correct thread and trim choice for the product means less down time, waste and repairs
- Factory sewing line assessment optimises thread and trim performance for the factory conditions
- Thread and trim specific sewing machine settings produce better efficiency, productivity and worker safety
- On-site training provides workers and production managers with the skills to work effectively, improve efficiency and prevent potential future issues

For more information on Coats Technical Services please contact your Coats representative.

[www.coatsindustrial.com](http://www.coatsindustrial.com)