



## PPE FAQ document

Please email [PPE@coats.com](mailto:PPE@coats.com) for further assistance

The Coats technical team have answered some of the most commonly asked questions by customers in relation to PPE production

**1. Do all PPE garments / products need to be ultrasonically welded or bonded?**

It depends on the garment or PPE products end use. A sealed seam might be required for products used in areas where there is a high infection rate, contamination or for surgical applications. However, not all PPE require this level of protection.

A stitched seam may also need a high level of seam security depending on the end use and some seams have a combination where the seam is stitched then sealed with a tape to further increase seam security to contaminants and microbes etc.

**2. I have a factory producing formal shirts could I move to manufacturing PPE?**

The simple answer is yes, but it depends what PPE you want to manufacture. In your current factory you could perhaps, with the proper protocols introduced, produce stitched PPE products.

To produce PPE that has welded seams for use in high infection / contamination areas, you would have to purchase the correct bonding or ultrasonic welding machinery.

**3. Where can I obtain specifications / standards for producing PPE?**

It depends what you want to manufacture and for what country. Specifications and standards may vary from country to country for the same PPE product, so you must make sure you are following the correct specifications. For further guidance, please contact Coats on [PPE@coats.com](mailto:PPE@coats.com)

**4. What size thread should I use for stitching PPE?**

The thread size will depend on the seam security needed on the sewn product. Often specifications for PPE products don't highlight thread sizes, so we must be careful we don't overengineer or under engineer a seam by using a thread that is too thick or too thin.

Coats have produced a table listing out thread sizes for specific products and seams. Please refer to this tool when establishing initial thread sizes.

**5. What is the best thread type to use for stitching PPE?**

A lot of people don't realise that there are a range of thread types that have different benefits. These benefits not only help with the seam performance, but also with



sewability and productivity in a PPE manufacturing factory. Choosing the correct thread type can be determined by answering the following questions:

- **Is seam fluid resistance important?** – Choose anti wick threads (AWF range)
- **Is anti-microbial resistance important?** – Choose anti-microbial threads (Protect range)
- **Is productivity important?** – Choose corespun threads, as they have the best performance. Coats also offer a spun polyester thread which provides an excellent sewing performance
- **Is cost important?** – We have a range of cost effective thread products

**6. Do any of the Coats threads meet antimicrobial standards?**

Yes, the Protect range meets AATCC100, which is an industry standard for antimicrobial performance.

**7. When producing PPE, does the manufacturing area need to be clean?**

It depends on the PPE product that will be manufactured. Obviously, medical PPE that will be used in high infection and surgical areas needs to be manufactured in a clean environment. What's more, all handling, processing and packaging needs to be tightly controlled and monitored.

Prior to commencing work, we would advise checking whether your manufacturing setup can meet the clean room protocols required.

**8. Is the seam type I use on a PPE garment important?**

Yes, it's very important. The PPE specifications or tech pack may clearly determine what seam type to use and this must be followed to ensure seam security. If this information is not specified, you should refer to any testing protocols that are in place for the finished sewn products. This will ensure the seam types you use are suitable.

**9. Is the stitch rating / size used in a PPE sewn product important?**

Yes, this must be followed as the stitch rating (number of stitches per inch or cm) can directly affect the seam or stitch lines ability to resist fluid and contaminates. This information will probably be displayed on the tech pack. If there isn't a clear rating given, please refer to the tables Coats have produced as they give guidelines for specific PPE sewn products.

**10. What investment would be required to setup a PPE production facility?**

This is a big question and it's difficult to answer, but perhaps the following points might help:



- *You need to clearly determine what type of PPE you want to produce*- this will help determine what equipment is required
- *How much do I want to produce?* This will determine the machinery, workforce and equipment required
- *When do I want to start producing?* Be aware that new equipment (especially ultrasonic machines etc.) may not be readily available, so please check timelines for delivery before committing to a start up date.
- *If you have an existing sewing factory*- determine what PPE sewn products you could sew with the equipment you have. Remember it must meet the processing and testing protocols that are set out.

Coats can provide further guidance on this area. Simply email [PPE@coats.com](mailto:PPE@coats.com) to speak to one of our technical team

11. **Besides sewing threads, are there any other areas Coats could help with?**

Yes, Coats produces zips and other trims like nonwovens that can be used in PPE products. We also have a range of digital PPE solutions that are key in ensuring you can maximise productivity in your supply chain.

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