

What is the difference between FDY and DTY Yarn

FDY (Fully Drawn Yarn)

FDY is also known as Polyester Filament Yarn (PFY) or Spin Draw Yarn (SDY). FDY manufacturing process is similar to the POY manufacturing process. But FDY is produced at higher speeds than the POY manufacturing process, and intermediate drawing integrated into stretching, orientation and crystallization is more stable. This yarn is used for direct twisting, multiplies yarns, beaming, and direct knitting. And FDY threads are mostly used to make non-textured fabrics such as hospital clothes, pads, surgical sets, wound healing, wet tissues, sanitary napkins, baby diapers, coatings, insulating, flooring, carpeting, etc.

FDY is mainly used as weft or weaves in producing fabrics. But it also can combine knitted or woven in various filaments to get various styles.

FDY application has a wide range. It is a type of highly drawn filament yarn that can be used to produce high-strength fabrics and textiles and in a home furnishing fabrics, fashion fabrics, Denim, Terry towel, etc. Sometimes, it is also used to produce high-end undergarments, sportswear, home furnishings and non-textured fabrics.

FDY thread is used in different types of shrinkage and areas of the textile industry. For example, FDY threads with a high shrinkage are used in fabricating cloth and curtain fabrics and create a blooming structure on the fabric surface. On the other hand, FDY threads with a low shrinkage are widely used in the blanket industry.

DTY (Draw Textured Yarn)

DTY manufacturing process is produced by simultaneously twisting and drawing by a high-pitched POY texturing machine. It is a continuous filament yarn that contains permanent distortions, crimps, loops, coils or crinkles on DTY. This process disperses, curls, and entangles the filaments composing the POY yarn, giving DTY a fluffy appearance and the properties of both natural and synthetic fiber. DTY yarns are known as thread, Heat set, and bulky filament. They still give soft and woolly feel properties because they increase the warmth and comfort texturing into yarn.

DTY is mainly used in weaving and knitting, such as making clothes, home furnishing, seat covers, bags, etc.

With its properties of soft crimp, high bulk, high durability and retention, DTY is also suitable in making outer/inner garments, skin-clinging garments, furnishings, upholstery, etc., which are a replacement for cotton.

The technical properties of DTY can be molded into several ways to make the yarn suitable for its vast uses. In addition, different heating techniques can be made for the yarn set in specific use.

1 Heater DTY is normally woolly & more stretchable as compared to DTY with 2 Heater.

Also, the DTY can be made with several combinations of Intermingle points – it can be Non-Intermingle (NIM) or Semi-Intermingle (SIM) or High-Intermingle (HIM). The knots are not the knots tied when two threads are broken but they are the tangle knots created by heating pressure. These Intermingle yarns, also known as Interlaced yarn, are the replacement for lightly twisted yarns. DTY yarn can also be twisted to high twists like 1500 TPM or 4000 TPM (twist per meter). Such twisted yarn can also be heat-set to make the yarn permanently thermo-set the twist.

The difference between FDY and DTY Yarn

- Processes of manufacturing: FDY is drawn and DTY is making texture.
- FDY has high strength than DTY because it is fully drawn yarn.
- FDY cannot stretch much as DTY. Some products don't need a stretch. FDY is more suitable than DTY.
- DTY is softer than FDY because it has a soft crimp texture. The texture will give a soft hand feel. It is usually produced in upholstery or skin-clinging garment
- DTY has more stretch because texture also gives flexibility as it brings the produce of some items which need stretching.

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Our Product

•Polyester Product

- PSF
- Filament yarn
- POY
- FDY
- DTY
- Twisted yarn
- Monofilament
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- Spun yarn
- Ring Spun
- Open end

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