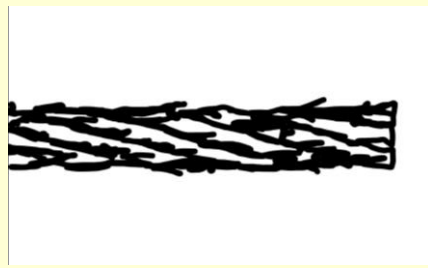


Yarns (3 A)

Spun Yarns



Co-funded by the European Union



Definition

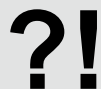
A staple fibre yarn is formed by twisting short (staple) fibres into a yarn. The fibres remain together as a yarn composite due to static friction.

Material

Staple fibres include all natural fibres with the exception of reel silk, the only natural continuous filament, as well as torn and cut man-made fibres. These can also be spun into staple fibre yarns if they have been shortened to a predetermined length.

Features

Staple fibre yarns have very different properties, which depend on the fibre materials, the yarn structure and the spinning process. The orientation, arrangement and length of the fibres are decisive for the subsequent yarn properties, as are the number of fibres in the yarn cross-section, their degree of bonding and the twist.



Did you know that spinning fibres into yarns is, along with weaving, one of man's oldest cultural techniques?

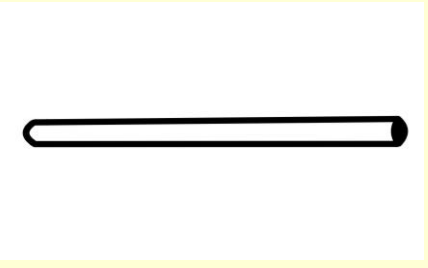


Yarns (3 B)

Monofilament Yarns



Co-funded by the European Union



Definition

A monofilament yarn consists of a single (=mono) continuous fibre and is spun from a single spinneret.

Material

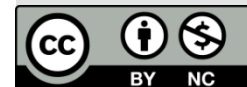
Exclusively man-made fibres belong to the monofilament yarns.

Features

Monofilament yarns are fine, transparent, and widely used for embroidering sequins or beads. They are also tear-resistant, making them suitable for basting threads. Polyamide monofilaments, known for their strength, are commonly used in fishing lines and kite strings. The characteristics of monofilaments, including cross-section, length, and raw materials, vary based on the application and spinning process. Monofilaments can have round, triangular or hollow structures, with the melt-spinning process being frequently employed for polyester and polyamide monofilaments.



Did you know that silkworms and spiders have been the natural models for spinning monofilaments because they spin very long, fine and stable threads?





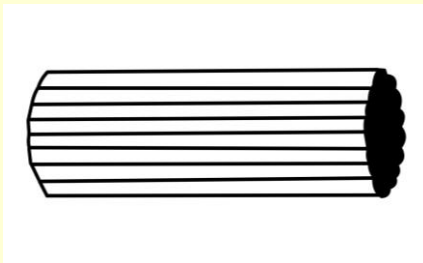
Fashion DIET



Fashion DIET

Yarns (3 C)

Multifilament Yarns



Definition

The multifilament yarn is an endless yarn consisting of many (=multi) filaments. The filaments are combined either with or without twist.

Material

Multifilament yarns include the reel silk and man-made fibre filaments.

Features

Multifilament yarns are smooth, dense, and uniform, commonly used in high-quality apparel textiles, technical textiles, and sewing threads. They are primarily man-made fibres, except for reel silk produced by cultivated mulberry spinners, which is a natural multifilament used in fine fabrics. Multifilaments have a shiny appearance with low twist and high tear resistance, making them suitable for fishing nets and tennis strings.

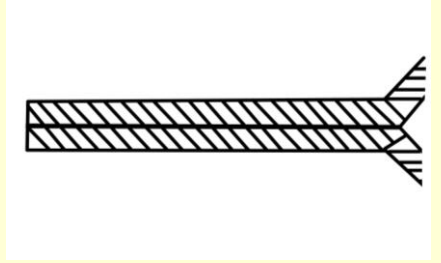
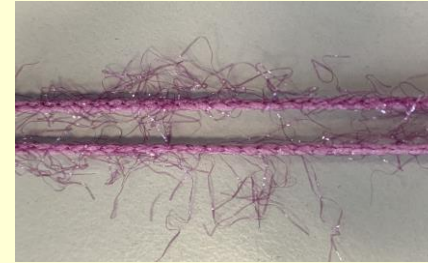


Did you know that multifilament yarns made from man-made fibres can be spun much finer than the finest silk thread?



Yarns (3 D)

Assembled Yarns



Definition

A plied yarn consists of at least two yarns, which are not twisted together (twisted), but led parallel.

Material

With plied yarn, different yarn qualities and colours can be freely combined with each other. They are mainly used for handicrafts such as knitting. Folded yarns are also called fancy yarns if they consist of different single yarns with special properties, which leads to optical effects. These can be colour and shape effects. Staple fibre yarns and filaments can also be combined to form fanned yarns.

Features

The properties of a plied yarn depend on the particular combination of individual yarns used. Predominantly they are needlework yarns.



Did you know that you can also make your own plied yarn by joining at least two yarns together in parallel?





Fashion DIET



Fashion DIET