YARNS

INDUSTRIAL YARNS

TEXTILE FILAMENTS

Nega-Stat®
INDUSTRIAL YARNS

Barnet is a global supplier of high tenacity filament yarns for all types of industrial applications such as NARROW and BROAD FABRICS, CORDAGE and NETTING, SLINGS, HOSES, REINFORCEMENTS, MECHANICAL RUBBER GOODS (MRG), GEOTEXTILES and INDUSTRIAL SEWING THREADS. Our sales team provides both technical skills and global market knowledge to our industrial partners.

Our extensive portfolio contains a large variety of types and counts in polyester, nylon 6, nylon 66, rayon (viscose) and polypropylene high-tenacity yarns. These are available in a vast range of make-ups, including cones, tubes, copses and many more. High-tech yarns such as Aramids, Carbon etc. are available on request.

Special requirements such as customized twist constructions, colors, make-ups or quantities can be fulfilled.

Quality inspections are carried out in-house on a regular basis, but can also be independently verified by our partner institutes if required.

All these items are available as first grade quality products as well as various types of lower-grade qualities, such as substandards and b-grades.

POLYESTER HT*

Our wide choice of counts ranges from dtex 33 up to dtex 5500 and several plies such as 66,000 or 132,000 dtex.

<table>
<thead>
<tr>
<th>category</th>
<th>dtex</th>
<th>application</th>
</tr>
</thead>
<tbody>
<tr>
<td>regular shrinkage</td>
<td>110, 235, 312, 350, 470, 580 up to 2100</td>
<td>MRG, reinforcements, narrow &amp; broad fabrics, cordage &amp; netting, etc.</td>
</tr>
<tr>
<td>low shrinkage</td>
<td>33, 50, 78, 110, 235, 350, 470 up to 1880</td>
<td>MRG, reinforcements, narrow &amp; broad fabrics etc.</td>
</tr>
<tr>
<td>adhesive activated</td>
<td>110, 235, 350, 470 up to 1880</td>
<td>MRG, reinforcements, cordage &amp; netting, etc.</td>
</tr>
<tr>
<td>HMLS</td>
<td>940, 1400 up to 2100</td>
<td>MRG, narrow &amp; broad fabrics etc.</td>
</tr>
<tr>
<td>colors</td>
<td>33 – 2100</td>
<td>narrow &amp; broad fabrics, sewing threads, cordage &amp; netting</td>
</tr>
</tbody>
</table>

* Special treatments: All yarns can be provided with special treatments such as hydrophobicity, softening finish, flame retardancy etc.

NYLON 6 HT*

In nylon 6, the counts we can offer range from dtex 33 up to dtex 2100, as well as any plies in both regular or low shrinkage and several twist levels.

<table>
<thead>
<tr>
<th>category</th>
<th>dtex</th>
<th>application</th>
</tr>
</thead>
<tbody>
<tr>
<td>regular shrinkage</td>
<td>110, 235, 312, 350, 470, 580 up to 2100</td>
<td>MRG, reinforcements, narrow &amp; broad fabrics, cordage &amp; netting, etc.</td>
</tr>
<tr>
<td>low shrinkage</td>
<td>33, 50, 78, 110, 235, 350, 470 up to 1880</td>
<td>MRG, reinforcements, narrow &amp; broad fabrics etc.</td>
</tr>
<tr>
<td>heat resistant</td>
<td>940, 1400 up to 2100</td>
<td>MRG, narrow &amp; broad fabrics etc.</td>
</tr>
<tr>
<td>colors</td>
<td>940 &amp; 1880</td>
<td>narrow &amp; broad fabrics, cordage &amp; netting, etc.</td>
</tr>
</tbody>
</table>

NYLON 66 HT*

In nylon 66, the counts we can offer range from dtex 33 up to dtex 2100, as well as any plies in both regular or low shrinkage and several twist levels. The yarns are offered in several twist levels, UV stabilized, heat resistant or colored.

<table>
<thead>
<tr>
<th>category</th>
<th>dtex</th>
<th>application</th>
</tr>
</thead>
<tbody>
<tr>
<td>regular shrinkage</td>
<td>110, 235, 312, 350, 470, 580 up to 2100</td>
<td>MRG, reinforcements, narrow &amp; broad fabrics, cordage &amp; netting, etc.</td>
</tr>
<tr>
<td>low shrinkage</td>
<td>33, 50, 78, 110, 235, 350, 470 up to 1880</td>
<td>MRG, reinforcements, narrow &amp; broad fabrics etc.</td>
</tr>
<tr>
<td>heat resistant</td>
<td>940, 1400, 1880 up to 2100</td>
<td>MRG, narrow &amp; broad fabrics etc.</td>
</tr>
<tr>
<td>colors</td>
<td>940 &amp; 1880</td>
<td>narrow &amp; broad fabrics, cordage &amp; netting, etc.</td>
</tr>
</tbody>
</table>

RAYON (VISCOSE) HT*

We supply typical viscose high tenacity yarn counts such as dtex 1840 and 2440 as well as numerous other counts, twisted or untwisted, in several quality grades and make-ups according to customer requirements.

<table>
<thead>
<tr>
<th>category</th>
<th>dtex</th>
<th>application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rayon</td>
<td>1220, 1540, 1840 up to 2440</td>
<td>cordage &amp; netting, food packaging, home textiles, etc.</td>
</tr>
</tbody>
</table>

POLYPROPYLENE HT*

A wide range of colors are available in dtex 1100, whilst other counts or specialties, such as flame retardant or special UV resistant grades, are available on request.

<table>
<thead>
<tr>
<th>category</th>
<th>dtex</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>white</td>
<td>470, 550, 880 up to 3300</td>
<td>narrow &amp; broad fabrics, cordage &amp; netting, etc.</td>
</tr>
<tr>
<td>colors</td>
<td>470, 550, 1100 up to 3300</td>
<td>narrow &amp; broad fabrics, cordage &amp; netting, etc.</td>
</tr>
<tr>
<td>flame retardant</td>
<td>1100 and any number of plies</td>
<td>automotive, cordage &amp; netting, narrow &amp; broad fabrics, etc.</td>
</tr>
</tbody>
</table>

All counts can also be supplied plied and/or twisted S or Z on various make-ups.
Our assortment includes POY, FOY and textured yarns in several lusters and cross sections. The counts range from 22 to 660 dtex in polyester, 33 to 300 dtex in nylon 6 and 66, and typical counts such as 67 to 660 dtex in viscose. Yarns are available twisted and untwisted.

**POLYESTER**

<table>
<thead>
<tr>
<th>category</th>
<th>dtex</th>
<th>application</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOY</td>
<td>22, 33, 44, 78, 110 up to 660</td>
<td>narrow &amp; broad fabrics, regular, circular and warp knitting</td>
</tr>
<tr>
<td>DTY</td>
<td>65, 78, 110, 167, 330 up to 668</td>
<td>narrow &amp; broad fabrics, regular, circular and warp knitting</td>
</tr>
<tr>
<td>POY</td>
<td>50, 110, 167, 330 etc.</td>
<td>texturizing and drawing</td>
</tr>
</tbody>
</table>

**NYLON 6 / NYLON 66**

<table>
<thead>
<tr>
<th>category</th>
<th>dtex</th>
<th>application</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOY</td>
<td>33, 44, 78, 110, 156 up to 300 in bright, semi &amp; full dull, round, trilobal</td>
<td>narrow &amp; broad fabrics, regular, circular and warp knitting</td>
</tr>
<tr>
<td>DTY</td>
<td>44, 78, 110, 220 up to 1000 in bright, semi &amp; full dull, round, trilobal etc.</td>
<td>narrow &amp; broad fabrics, regular, circular and warp knitting</td>
</tr>
<tr>
<td>POY</td>
<td>44, 78, 110, 220 etc. in bright, semi &amp; full dull, round, trilobal etc.</td>
<td>texturizing and drawing</td>
</tr>
</tbody>
</table>

* All these yarns can be offered as flame retardant yarns as well or be provided with special treatments such as hydrophobicity etc.

**VISCOSE**

<table>
<thead>
<tr>
<th>category</th>
<th>dtex</th>
<th>application</th>
</tr>
</thead>
<tbody>
<tr>
<td>raw white</td>
<td>67, 133, 167, 330 up to 660 in dull &amp; bright</td>
<td>narrow &amp; broad fabrics, home textiles</td>
</tr>
<tr>
<td>colors</td>
<td>67, 133, 167, 330 up to 660 in dull &amp; bright</td>
<td>narrow &amp; broad fabrics, home textiles</td>
</tr>
</tbody>
</table>

**TEXTILE FILAMENTS**

Barnet is a global supplier of synthetic filament yarns for all types of textile and semi-technical applications such as NARROW and BROAD FABRICS, CIRCULAR-, REGULAR- and WARP KNITTING. Our sales team provides both technical skills and global market knowledge to our industrial partners. Our portfolio contains a large variety of types and counts in polyester, nylon 6, nylon 66 and viscose. These are available in a vast range of make-ups, including cones, tubes, copses and many more. High-tech yarns such as Nega-Sil® can be offered on request.

All these items are available as first grade quality products as well as various types of lower-grade qualities, such as substandards and b-grades.

**OUR OTHER PRODUCTS**

Our two other strategic business units are Fibers and Polymers.

A short description of these businesses can be found below. For more detailed information, please ask for the specific brochure or visit our web page www.barnet-europe.com. Our team is ready to assist you in any way it can.

**FIBERS**

Being one of the largest global traders and producers of synthetic fibers in staple and continuous tow form, Barnet’s product range includes first grade fibers for high-tech applications and environmentally friendly fibers produced from post-industrial and post-consumer waste materials. For principal applications such as spinning yarns, filtration, or geotextiles, we supply fibers in semi dull, bright and black. A range of colored fibers, flame retardant or specialty fibers are also available on request.

Furthermore Barnet is a specialist in the production of short cut fibers to serve many new and technical applications. The expertise of our product development team enables us to respond to your requirements and offer you the right fiber to suit your application, especially with regard to dispersion and performance.

Our flexible approach and ability to source globally means that we can supply both standard and custom-made grades upon request, including different colors, specialty finishes, various cross-sections, flame retardant grades, etc.

**POLYMERS**

For over 25 years, Barnet’s polymers business has acted as a global supplier of thermoplastic products to the compounding market, delivering experience, competence, quality and reliability. With production sites in Europe and the USA, we specialize in the recycling of nylon 6, nylon 66 and PET- residues in any form and offer compounding as an additional service to our customers. Further to our specialization in the aforementioned polymer grades, we also have experience with other resins, such as PP, PE, ABS, PC.

Additional services include contract manufacturing such as pelletization, agglomeration, grinding, drying, etc.
Nega-Stat® P190

THE NEW STANDARD IN STATIC DISSIPATIVE YARNS

Nega-Stat® P190 is a fine-filament bi-component yarn. Each filament has a unique, patented, trilobally shaped conducting core surrounded by a sheath of polyester.

Nega-Stat® P190 has been designed to provide optimum antistatic protection in grounded and ungrounded applications according to end-use specifications.

The outstanding static dissipative performance of Nega-Stat® P190 is provided by the unique trilobal conducting core. The outer sheath of polyester provides exceptional durability to wear, washing, sterilization and chemical attack.

Because of its unique core construction, Nega-Stat® P190 is used in a wide range of industrial applications in both grounded and ungrounded situations.

Nega-Stat® P190 APPLICATIONS:

- INDUSTRIAL SAFETY
  - conveyor belts, cables, filters and container bags (FIBC).
- PROTECTIVE GARMENTS / MILITARY APPLICATIONS
  - cleanrooms / areas, paint-shops, hazardous environments, medical clothing, operating gowns, electronics & pharmaceuticals, volatile environments and food processing.
- COPIER BRUSHES
- COMFORT APPAREL
  - hosiery, lingerie and outerwear.
- AUTOMOTIVE UPHOLSTERY

Nega-Stat® P190 is available as a filament yarn in the following deniers:

<table>
<thead>
<tr>
<th>Denier</th>
<th>dtex</th>
</tr>
</thead>
<tbody>
<tr>
<td>39 f 16</td>
<td>39 f 16</td>
</tr>
<tr>
<td>78 f 12</td>
<td>77 f 12</td>
</tr>
<tr>
<td>156 f 24</td>
<td>160 f 24</td>
</tr>
</tbody>
</table>

Nega-Stat® P190 is introduced selectively in grid or stripe patterns to woven, knitted and nonwoven fabrics to provide effective static dissipation for the life of the product.

Nega-Stat® P190 neutralizes the surface charges on the base material by induction and dissipates the charge by conduction when grounded or when ungrounded by air-ionization, referred to as corona discharge.

- Whilst other conducting threads work by conducting electric charges along the surface of the thread, Nega-Stat® P190 works by inducing the surface charge into its unique trilobal conducting core.
- The unique trilobal conducting core of Nega-Stat® P190 attracts the electric field from the surface of the fabric and neutralizes all the free charge on the surface of the material. As a result the surface charge can be reduced to zero volts.

Materials containing Nega-Stat® P190 threads do not necessarily require full grounding to be effective. Nega-Stat® P190 can therefore be used in a wide range of industrial applications where full grounding is not possible or impractical.

Both types of Nega-Stat® can be offered as hybrid construction on request.

Nega-Stat® P210

THE NEW STANDARD IN SURFACE CONDUCTING YARNS

Nega-Stat® P210 is a fine-filament bi-component yarn made with a trilobal conducting carbon cross section and has been developed from the unique, patented, trilobal carbon core of Nega-Stat® P190. It is enclosed in polyester to provide surface contact for surface conductivity.

Nega-Stat® P210 has been designed to provide optimum antistatic performance in end-products and end-uses where surface resistivity or surface conductivity is the required performance parameter.

The main end-uses of Nega-Stat® P210 are industrial applications, where it is important for the materials to meet surface resistivity or surface conductivity requirements according to the application or related standards.

Nega-Stat® P210 APPLICATIONS:

- INDUSTRIAL SAFETY
  - conveyor belts, cables and filters.
- PROTECTIVE GARMENTS
  - cleanrooms / areas, paint-shops, hazardous environments, medical clothing, operating gowns, electronics & pharmaceuticals, volatile environments and food processing.
- COPIER BRUSHES
- COMFORT APPAREL
  - hosiery, lingerie and outerwear.

Nega-Stat® P210 is available as a filament yarn in the following deniers:

<table>
<thead>
<tr>
<th>Denier</th>
<th>dtex</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 f 13</td>
<td>28 f 13</td>
</tr>
<tr>
<td>56 f 16</td>
<td>50 f 16</td>
</tr>
<tr>
<td>112 f 12</td>
<td>100 f 12</td>
</tr>
</tbody>
</table>

Nega-Stat® P210 is introduced selectively in grid or stripe patterns into woven, knitted and nonwoven fabrics to provide effective static dissipation for the life of the product.

Nega-Stat® P210 neutralizes the surface charges on the base material by induction and dissipates the charge by conduction when grounded or when ungrounded by air-ionization, referred to as corona discharge.

- Nega-Stat® P210 maintains permanent static control properties in fabrics and garments.
- Nega-Stat® P210 provides excellent wash characteristics, even in industrial laundering conditions following sterilization.
- Nega-Stat® P210 provides protection against wear and abrasion in a wide variety of woven and knitted fabrics.
- Nega-Stat® P210 protects against static problems ranging from nuisance shocks to dangerous incendiary discharges that will ignite gases and vapors.

In order to meet international standard and industrial performance requirements, materials containing Nega-Stat® P210 must be effectively grounded.

Both types of Nega-Stat® can be offered as hybrid construction on request.
BARNET EUROPE

W. Barnet GmbH & Co. KG
Eisenbahnweg 24
52068 Aachen
Germany
Tel: (+49) 241 579 80
Fax: (+49) 241 579 827
sales@barnet-europe.com

PRODUCTION SITES AND WAREHOUSES

Production Obernburg
63784 Obernburg, Germany

Prefil AG
4730 Raeren, Belgium

Prefil Slovakia s.r.o.
06676 Humenné, Slovakia

Upcycle B.V.
6911 KX Pannerden, Netherlands

www.barnet-europe.com

BARNET NORTH AMERICA

William Barnet & Son, LLC
1300 Hayne Street
Arcadia, 29320 South Carolina
USA
Tel: (+001) 864 576 7154
Fax: (+001) 864 576 3406 - Sales
sales@barnet.com

PRODUCTION SITES AND WAREHOUSES

Barnet Polymers, LLC
Duncan, 29320 South Carolina

Kinston Plant
Kinston, 28502 North Carolina

www.barnet.com

BARNET SOUTH AMERICA

Condo. Bella Vista del Oeste
Del Centro Comercial PACO en Escazu,
200 Sur & 50 Oeste
San Jose, Costa Rica
Tel: (+506) 22 890 408
Fax: (+506) 22 882 442
sales@barnet.com

www.barnet.com

BARNET INDIA

Barnet India Pvt Ltd
412, 4th floor,
Maker Bhawan No 3
New Marine Lines
Mumbai - 400 020
India
sales@barnet-india.com

BARNET HONGKONG

Barnet Pacific, LLC
RM 09-10, 23/F., Trendy Center
682 Castle Peak Road
Cheung Sha Wan, Kowloon
Hong Kong
Tel: (+852) 25 299 000
Fax: (+852) 25 299 880
sales@barnet-pacific.com

BARNET CHINA

Barnet Trading (Shanghai) Co., Ltd.
Room 1706-1707, Block B
City Center of Shanghai
100 Zunyi Road
Shanghai, China
Tel: (+86) 2 162 371 822
Fax: (+86) 2 151 010 069
sales@barnet-pacific.com

www.barnet-pacific.com