CORE MARKET

SENSORING + COMMUNICATION
With automatisation, wireless transmission and digitalisation on the rise, communication and sensing applications experience a transformation. Swicofil is here to provide you with conductive high performance yarns and fibers to meet new market demands.

**THE SOLUTION TO YOUR ANY PROBLEM**

Swicofil is your partner for new and improved product developments for sensing and communication. Experience, yarn knowledge and a vast oversight over the market ensure best service with perfect solutions. Swicofil is fully aware of your as well as your customers demands. Smart clothes need to be washable more than 10 times, wearable sensors need to withstand humidity and traction, reflection devices exposed to interference may not lose signals - all this whilst not compromising on performance. Being Swicofil, we do not only know these needs, we also know which yarn or fiber solutions meet them perfectly. Whatever your problem is, Swicofil is your answer.

**WHAT DOES SWICOFL DO?** Assessment of your project and its requisites, guided product development in collaboration with you, evaluation of chances and alternatives as well as raw material sourcing including the possibility to develop yarns up to your requirements.

**HOW DOES THIS BENEFIT ME?** Amongst the advantages listed on the next page you benefit from, you invest less time, less money, and less worries in the overall sight as Swicofil knows the market, has the knowledge as well as the suitable products and further essential keypoints.

**FOR WHAT KIND OF PROJECTS?** For any communication or sensing project where yarn or fibers could be a solution - may the project sound ever so crazy.
OUR EXPERTISE

Swicofil’s expertise in sensing + communication applications is all-embracing. Included are various submarkets such as:

<table>
<thead>
<tr>
<th>AUTOMATISATION</th>
<th>POWER SUPPLY</th>
<th>TRANSMISSION</th>
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<tbody>
<tr>
<td>for in clothes, fabrics and more</td>
<td></td>
<td>of signals in outerspace, on earth and more</td>
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<table>
<thead>
<tr>
<th>RFID</th>
<th>SENSORING</th>
<th>STIMULATION</th>
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<tr>
<td>of body activities, processes and more</td>
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ADVANTAGES FOR YOU WITH SWICOFIL

- **KNOW-HOW**
  A pronounced know-how in the conductive yarn market and sensing / communication technologies ensure that we fully grasp the situation of your project in no time.

- **WIDE RANGE OF CONDUCTIVE YARN AND FIBERS**
  In Swicofil’s product range are several conductive yarn and fiber products to fully satisfy all the different requirements of all possible projects.

- **EXCLUSIVE ACCESS TO PLASMA METAL COATED YARNS**
  Plasma metal coated yarns combine high conductivity with the haptics of a normal textile multifilament yarn. They are thus the perfect solution for wearable technologies, smart clothes and further applications where robustness and delicacy are required simultaneously.

  Plasma metal coated yarns consist of two elements: a multifilament yarn in any material as a substrate and a coating with the metal with your desire. There is no adhesive layer above the yarn or underneath the metal - not even with gold, aluminium or other metals which previously could only be brought onto a yarn with many, performance-reducing tricks. Meaning the high performance of plasma metal coated yarns persevere for a very long time as plasma gold coated yarns will for example not start to oxidize like traditional gold coated yarns as there is no silver or copper layer underneath the gold.

  Plasma metal coated yarns have a very regular coating along the yarn, can be tailored upon your requirements and have an excellent washing behavior. For longlasting, excellent performance.
PRODUCTS FOR SENSING + COMMUNICATION

Swicofil offers a variety of yarn and fibers for sensing or communication applications. Different metalized base materials (Polyester PET, UHMWPE, Polyamides, ...) and various metals are within the range to meet your yarn and fiber requirements.

<table>
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<tr>
<th>plasma metal coated yarn</th>
<th>multifil plied monofil</th>
<th>dtex 8 - 550 available</th>
<th>excellent conductivity, textile haptics, easily adjusted to your requirements</th>
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<tr>
<td>Shieldex (chemo galvanic) filament yarn plied</td>
<td>dtex 22 - 235 up to 4 plies</td>
<td>good conductivity, adaptability restricted to silver coating Polyamides</td>
<td></td>
</tr>
<tr>
<td>stainless steel</td>
<td>multifil monofil spun fiber slivers</td>
<td>dtex 1000 - 28700 dtex 77 - 155 Nm 50/1 - 50/5 dtex 8 - dtex 12</td>
<td>high density, excellent conductivity</td>
</tr>
<tr>
<td>fine wires in various metals</td>
<td>diameters</td>
<td>0.020 - 0.080 mm</td>
<td>in Cu / CuAg / Brass / Al / CCA, different coatings available</td>
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and more. For the full conductive yarn and fiber product range, please contact us.

FURTHER CORE MARKETS OF SWICOFL

Various applications belong to the competence field of Swicofil. Additional to the sensing + communication market, Swicofil’s expertise includes high tech solutions in the fields of today as well as tomorrow:

ENGINEERING  MEDICAL  SEPARATION  PROTECTION  LUXURY  SUSTAINABILITY

CONTACT US

Need assistance in your product development? Looking for a highly conductive, flexible yarn? Contact Swicofil, your expert in yarn and fiber specialities for the sensing + communication sector:

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