Keeping you competitive

At Mondi we have a strong commitment to high-quality sack kraft paper. With modern machinery, continuous R&D, and dedicated customer service we can offer solutions that will keep you competitive, now and for the future.

More than 100 years of quality paper
For well over 100 years Mondi has been producing some of the strongest kraft paper available. Paper that is perfect for a multitude of applications, not least in the cement and building materials industries.

Built on the best fibres
All our sack kraft paper grades are made from clean, virgin wood fibres to secure the strength properties necessary for demanding packaging applications.

Committed to the future
Sack kraft paper is our core business. We have a truly global focus and an international sales network with 5 paper mills and 8 sack kraft paper machines ensuring a reliable, fast and efficient paper supply all the time, all over the world. In 2014 Mondi commissioned the PM7, an additional machine at the Štětí mill in the Czech Republic, to meet the growing demand for bleached kraft paper.

Sustainable business
When ensuring that our papers are ecologically sound, our main focus is on the production process. Continuous investments in new technology are made to achieve even better energy efficiency and raw material usage, as well as a minimal ecological impact. Mondi supports sustainable forestry and 66% of our total procured wood in 2013 was CoC-certified to FSC™ or PEFC™ standards, and the balance met the FSC™ Controlled Wood Standard. Considerable effort is also being made to reduce the company’s total carbon footprint.
Great paper features

Strength
Both our brown and our white sack kraft paper grades offer excellent strength properties. Our strongest grades have a TEA index of up to 3.8 J/g. These grades are ideal for 1-ply and 2-ply industrial bags with a filling weight up to 50 kg.

Porosity
For fast and dust-free filling of cement or other powdered goods we offer papers with a perfect combination of strength and porosity. These papers are porous enough to allow efficient de-aeration of bags during filling so that perforation is not needed. Yet they are strong enough to withstand the tough demands of filling and handling.

Runnability
In the bag converting plant, paper features such as strength, stiffness and surface smoothness must be stable to ensure effective operation of the high-speed machinery.

Printability
Our white sack kraft paper grades in particular offer excellent print characteristics. A smooth paper surface and uniform paper formation achieve a high-quality print result that enhances your bag’s point-of-purchase appearance.

### Flat Kraft

<table>
<thead>
<tr>
<th>Paper</th>
<th>Grammages</th>
<th>Application</th>
<th>TEA Index - md</th>
<th>Stiffness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantage Kraft</td>
<td>70 - 110</td>
<td>Open Mouth</td>
<td>++++</td>
<td>++++</td>
</tr>
<tr>
<td>Advantage Kraft Plus</td>
<td>70 - 120</td>
<td></td>
<td>++++</td>
<td>++++</td>
</tr>
<tr>
<td>Advantage Kraft White</td>
<td>70 - 110</td>
<td></td>
<td>+++</td>
<td>++++</td>
</tr>
</tbody>
</table>

### Semi Extensible

<table>
<thead>
<tr>
<th>Paper</th>
<th>Grammages</th>
<th>Application</th>
<th>Stretch - md</th>
<th>TEA Index - cd</th>
<th>Porosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantage Semi Extensible</td>
<td>70 - 100</td>
<td>25 – 35 kg 2-ply bags</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Advantage Semi Extensible Plus</td>
<td>70 - 100</td>
<td></td>
<td>+</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Advantage Semi Extensible White</td>
<td>70 - 100</td>
<td></td>
<td>+</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Advantage Speed</td>
<td>70 - 90</td>
<td>40 – 50 kg 3-ply bags</td>
<td>+</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Advantage Speed White</td>
<td>70 - 90</td>
<td></td>
<td>+</td>
<td>++</td>
<td>+++</td>
</tr>
</tbody>
</table>

### Extensible (stretch ≥ 6.5 %)

<table>
<thead>
<tr>
<th>Paper</th>
<th>Grammages</th>
<th>Application</th>
<th>Stretch - md</th>
<th>TEA Index - cd</th>
<th>Porosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantage High Strength</td>
<td>70 - 90</td>
<td>40 – 50 kg 2-ply bags</td>
<td>++</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>Advantage High Strength Plus</td>
<td>70 - 90</td>
<td></td>
<td>++</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>Advantage Stabil</td>
<td>70 - 90</td>
<td>2-ply bags</td>
<td>+++</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>Advantage Select</td>
<td>70 - 90</td>
<td></td>
<td>+++</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>Advantage Stabil White</td>
<td>70 - 90</td>
<td></td>
<td>+++</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>Advantage Speed E White</td>
<td>70 - 90</td>
<td></td>
<td>+++</td>
<td>+++</td>
<td>++</td>
</tr>
<tr>
<td>Advantage ONE</td>
<td>110 - 120</td>
<td>Up to 35 kg 1-ply bags</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Advantage ONE White</td>
<td>110 - 120</td>
<td></td>
<td>+++</td>
<td>+++</td>
<td>++</td>
</tr>
</tbody>
</table>

* Please note: TEA Index - md, Stiffness, and TEA Index - cd are given a maximum of five + ratings. Stretch - md and Porosity are given a maximum of three + ratings.
Lighter weights for improved economy

It has been demonstrated that 50 kg cement bags need to have a TEA value of 400 J/m². 25 kg bags, in turn, have a strength requirement of 300 J/m². Intensive R&D over the last 25 years now allows Mondi to offer lightweight, strong, porous and economical sack kraft paper the world over.

3-2-ONE
Sack kraft paper is now so strong that 3-ply bags are very seldom necessary. Instead, 2-ply bags made of strong, high-porous grades (e.g. 2-ply 80 g/m² Advantage Select) are designed to hold up to 50 kg of cement. For 20 kg to 35 kg bags, 1-ply 110 g/m² (Advantage ONE) bags have proven to be an innovative, very economical and successful solution.

All climates and conditions
Mondi supplies sack kraft paper to almost every corner of the world. Bags made from our paper endure wet, dry, cold and hot climates – and very tough handling in a wide variety of conditions. We recently launched Advantage Protect – a sack kraft paper grade that offers both a water-repellent surface and high wet tensile strength.

Great savings
Lighter-weight sack kraft paper and bags constructed with fewer plies can significantly reduce your costs. The bag construction is lighter and less complicated, and transportation and waste disposal costs are reduced. An added benefit of high porosity grades is the significant reduction in dust during filling and handling, thus giving rise less waste and a much better working environment.
CASE STUDY
Holcim in the Philippines

Holcim is the largest cement producer in the Philippines. Mondi has been the Holcims preferred paper supplier here for many years. The number of paper cement bags consumed by Holcim has grown by one third since 2010. This growth looks set to continue as more consumers experience paper and gain confidence in paper. Paper bags are preferred due to their environmental credentials, plus two-ply high porous bags are less dusty throughout the supply chain and present as a much cleaner package to the end customer.

Two-ply high porous bags made of Mondi Advantage Select sack kraft paper offer greater strength and lighter weight, and therefore cost savings as well. Moreover, the cement bags are characterized by superior tensile energy absorption (TEA) combined with high porosity. The success of the two companies’ close collaboration is built on sharing product and development expertise, and working together to improve both bag performance and plant efficiency.

CASE STUDY
Sephaku Cement in South Africa

Sephaku Cement is the South African arm of Dangote Cement, a fully integrated cement company with headquarters in Lagos, Nigeria. When Sephaku commissioned its first plant in SA in 2013, it decided to differentiate its packaging by using bleached bags printed with a distinctive 4-colour design. To the best of our knowledge this is the first time worldwide that bleached sack kraft paper has been used for commercial-scale 50 kg cement bags. Sephaku approached the leading South African bag converters, which were already working closely with Mondi, to produce the bags. They had to be two-ply high porous with the outer ply bleached, and strong enough to withstand the tough conditions on the SA market. In 2014 we set about helping our customers optimise their converting and cement packaging performance. Although the 2 x 90 gsm construction was working very well, we wanted to improve the bag’s technical performance and reduce costs. We achieved these targets by using a fully extensible high porous bleached grade called Advantage Speed E White for the outer ply.
Meeting your demands

Mondi has the paper and converting knowledge and the R&D resources required to create the optimal packaging solution for your application.

The broadest product portfolio
Currently we offer 16 sack kraft paper grades. These are highly suitable for various types of industrial bags, including open-mouth bags and pasted valve bags that need quick filling. We also offer both brown and white sack kraft paper grades to ensure that all applications are covered when it comes to strength, stiffness, porosity, runnability and fine print.

Paper expertise
Mondi is the largest sack kraft paper producer in the world. All our 5 paper mills and 8 machines are built to perfection to ensure that we can give you exactly the paper characteristics you are looking for. Our experienced R&D staff team will help you find innovative and cost-effective solutions to your sack kraft paper needs.
Converting know-how
Over the years we have gained a thorough understanding of all aspects of bag converting in very diverse conditions. At our Bag Application and R&D Centre we develop new solutions and subject them to extremely rigorous testing. You can contact us at any time to discuss paper, printing, glue, bag construction, converting or transportation.

Customer service
Mondi effectively combines sack kraft paper expertise and converting know-how. Our paper and converting engineers work together with you, often on-site, to find the best products and solutions for your operation. Efficient paper production and highly reliable supply enable you to take full advantage of our wide product range.

Innovation for future competitiveness
Mondi strives to deliver high-value product innovation by bringing together market insight, state-of-the-art technology and the creativity found in the dynamic Mondi community. Our mills specialise in various aspects of R&D and we cover a vast array of paper and packaging topics, such as basic research, food safety, bag testing and printability. At the Štětí mill in the Czech Republic a brand new Print Competence Centre has been established. We invite you to test both our creativity and our ability to find the best solutions for your needs. Research, development and testing are always most effective when done in co-operation with customers.

Advantage Protect
Bags of cement and other dry building materials are often exposed to the weather on construction sites. As soon as they get damp or wet, traditional bags can break and their contents can spoil. Mondi has the solution to this problem: Advantage Protect, a new grade in the sack kraft paper range. Industrial bags based on Advantage Protect can be eight times more water-resistant than standard bags. This new paper grade offers both a water-repellent surface and high wet tensile strength.
A global supplier near you

Highly efficient paper production, planning and logistics ensure that you get your Mondi sack kraft paper on time, all the time. For support and ideas, please contact your local sales office.