2.3 Paper and board

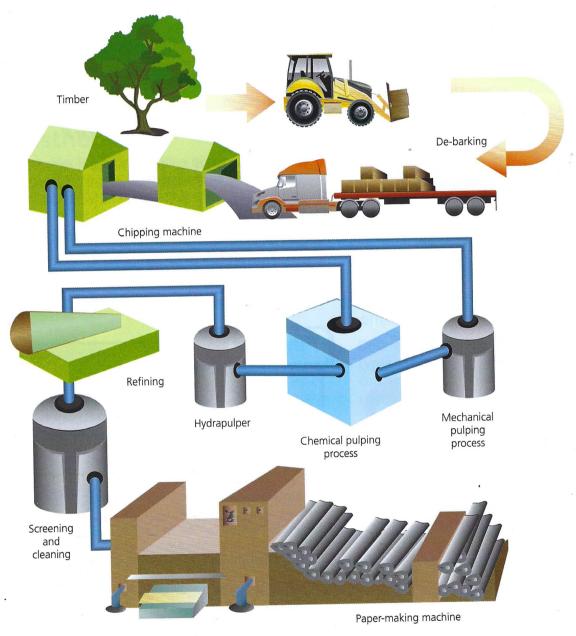
Each year, about 12.5 million tonnes of paper and board are used in the UK – that works out at about 0.5 kg per day for each person in the UK, the same weight as a half-litre bottle of water.

Key words



pulp - wood fibres mixed with water, used to make paper.

board - material made from wood pulp with a weight of more than 200 gsm (grams per square metre).



The paper-making process

How paper and board are made

Paper and board are mainly made from trees. The trees are chopped down and turned into **pulp**, which is wood fibres mixed with water. Chemicals might be added to the pulp to give the colour and properties that are wanted. The water is then squeezed or sucked from the pulp, in order to form the paper or board.

On average, each tree makes about 40 kg of paper or board. To reduce the impact of this on the environment, these trees can be sourced from managed forests – this means that new trees are planted to replace those that are chopped down.

After being used, most paper and board can also be recycled. There are some products, however, such as food packaging, for which recycled paper cannot be used. One reason for this is to avoid the risk of contaminating the food with the chemicals that the paper was in contact with in its previous use. Paper and board can also be burnt to make energy. If they are dumped in landfill, paper and board are biodegradable. This means that they will break down into their constituent parts fairly quickly and should cause very little pollution.



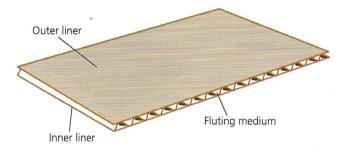
Pulp ready for the paper-making process

Types of paper and board

Paper and board are used for many different purposes, and as a result there are many different types. Some types of paper are also referred to as card. The difference between paper and card is just the thickness (or weight per unit area) of the material.

Almost all of the types of board in the table below are solid. The one exception is corrugated cardboard, which has a fluted layer to increase its stiffness without increasing its weight much.

Rather than specifying the thickness in millimetres, paper and board is categorised by its weight, in grams per square metre (gsm). The higher the gsm, the thicker the paper or board. Typically, paper is less than 200 gsm and board is more than 200 gsm.



Corrugated cardboard