

Since 1905, the Vandoren company has continued to attain unique and internationally renowned knowledge and experience within the culture of cane. Concurrently we have gained a deep respect for the Earth. Our centenary of know-how is permanently strengthened by our will to innovate and our ability to adapt to any challenge at any time. For many years, our environmental responsibility has been at the core of our concerns and continues to be the subject of our research and development.

The cane used to make Vandoren reeds is 100% natural

Our cane fields are located in the south of France, where all the best conditions come together and bring our cane to life. This cane is also known as « music cane » in Provence, or in scientific terms « *Arundo Donax* » . The earth's characteristics, the hygrometry, the climate, amount of sunlight, as well as the different winds that blow in the region, offer **the healthiest of conditions and surroundings** for the cane's growth; in this way it acquires the flexibility that will then make the highest quality Vandoren reeds.

The amount of water used for our cane fields is based on the plant's needs. A well-fed plant will be more resistant to parasites and diseases. Our irrigation system of a **micro-sprinkling** type ensures perfectly controlled water consumption, without any loss in the soil except in useful zones for the roots. This system helps us save up to 70% of water comparing to traditional irrigation.

The cane from our fields or those of our partners are cultivated in the same manner and follow the same criteria allowing them to be grown without the use of pesticides or chemical treatment of any kind. We use part of the cane waste from the reed making process as **compost** for feeding our plantings.

Vandoren's handcrafted know-how

The cane needs no less than four long years of care and full attention to reach, as a reed, the musician's hands.

It is cultivated from rhizomes. The cane has already reached its final height (around 6 meters) and definitive diameter a year after having been planted. During the next year, it gains its flexibility, strength, and consistency. After two years it is ready to be harvested, thanks to the specific know-how and experience of professional farmworkers that cultivate the cane with passion (only the human eye can see a two-years-old cane pole). It is then delicately **cut by hand**, thanks to a shear specifically designed to avoid bursting the dense fibers at the bottom of the cane pole and will not damage the rhizome. Following the journeyman carpenter's **tradition** ; the cut takes place during the « hard moon » (« lune dure » in French), which means the downward phase of the winter moon, when the sap in the plant is utterly still.

Thus harvested, cane poles are put « **in beams** » for some weeks, to naturally eliminate the remaining sap inside. The cane will then have the **leaves removed** (« raclage » step) and will be cut to 1,80m length. They will then be placed under the sun during the « **sunning** » step, that will give them their nice golden color.

Please note that, contrary to the public opinion, the shiny part of the reed is not varnish but is the bark of the cane, **completely natural**! Next the cane poles will then be put in bundles and will dry for another two years in a protected and ventilated warehouse, before being ready to go into the factory.

Thanks to this specific professional knowledge and this rigorous know-how concerning the culture of cane, we take great care for the **preservation of our natural resources**.

The machines in our factory in Bormes-les-Mimosas have been entirely designed in house. They enable the perfect mastery of the making and development process for our reeds and mouthpieces intended for all musicians.

Optimized and environment-friendly solutions

Any leftover cane resulting from reed manufacturing (as a reminder, only 1,80m out of 6m are used for making reeds, further the nodes and curved cane poles which are not usable are also removed. Essentially what is corresponding to around 80% of leftover per each cane pole is considered waste and therefore not used for reeds) is completely reused as either compost in our plantations or is used **as fuel** for the boiler that heats our factory. No other energy source is therefore necessary in terms of heating. Our modern high-performance boiler, gives off only water vapor and CO2 into the atmosphere.

This CO2 exhaust is **of plant**, not from fossil origin and its atmospheric evacuation contributes in no way to the greenhouse effect. The quantity evacuated during combustion is, in fact, completely compensated by the quantity of atmospheric CO2 absorbed by the plant during its two-years of growth.

In all of our locations, we are extremely vigilant about waste sorting and recycling. In all our buildings, we now use LED lights which are clearly more energy efficient. In our factory, internal vehicles are electric and our parking areas are quipped with electric charging points.

We are also concentrating on the **modes of transportation** that we use to deliver our products to our customers around the world. In order to minimize the undesirable effects of our deliveries on the environment, all of our deliveries to the USA are now shipped by way of sea, which has a lower energetic resource consumption than shipping by air, as well as lower CO2 and other green-house gas emissions.

A recyclable packaging, developed after years of research

Vandoren exports more than 95% of its reeds worldwide. The destinations vary in terms of hygrometric conditions, modes of transportation, storage systems, and of course the climate which can largely vary from country to country. That's why our packaging is made up of different parts, and each one has a very specific role.

The reed protector is made of 100% recyclable polypropylene (with the triangular recycling symbol PP5). Patented in 1985, it protects and maintains the reed flat.

Since 2005, each reed has been individually wrapped, within its reed protector, in a **Flow Pack**. This wrapping's impermeability enables us to keep the reed unchanged and remain in factory fresh conditions. The reed thus wrapped is no longer subject to any hygrometric variations and changes due to storage or transportation conditions. This Flow Pack is made of recoverable film, that has a high calorific value during incineration. Our supplier, was selected not only for their ability to meet our technical demands linked to Flow Pack performance in protecting the reed, but also for their ecological consideration. They are an ISO14001-certified company, meaning they meet all requirements imposed by this standard in terms of environmental management.

The paper we use for our boxes and cardboard packaging comes from trees planted expressively for paper production and does not contribute to any increase of deforestation. Moreover, these trees are systematically replanted as trees are cut. These ecologically minded steps have also been applied to inks, and solvents where toxic products have been replaced by less polluting alternatives. As much as possible, we select our suppliers and collaborate with companies according to their engagement on the way of sustainable development.

Today, boxes of 5 or 10 reeds are wrapped in a cellophane of a very common type made from poly-propylene. By using a small thickness of film we effectively **limit waste volume** in comparison with other packaging solutions (like airtight boxes, tubs or other procedures for maintaining hygrometry), we currently continue our specific research in order to be able to, in the future, replace this cellophane (as well as the recyclable polypropylene of the reed protector) by biomaterials of vegetal origin, materials made from recycled bases or biodegradable or compostable materials.