

AN IMAGINARY LANDSCAPE, A MAGICAL, SPELLBINDING PLACE, THAT HAS INSPIRED LEGENDS OF MERMAIDS THAT LIVE WITH DOLPHINS, OTTERS AND WHALES! BUT IF THE MERMAIDS ARE A LEGEND, THE MAGICAL BEAUTY OF THE ENVIRONMENT IS A BREATHTAKING CERTAINTY; THE CERTAINTY OF BEING IN THE TSITSIKAMMA NATURE RESERVE, A LONG, NARROW AREA THAT STRETCHES FOR 75 KM ALONG THE COAST OF THE EASTERN CAPE, IN SOUTH AFRICA. IN THIS WONDERFUL LANDSCAPE, WHERE PURE, TRANSPARENT WATER FLOWS, STARTING IN 1997, ENTREPRENEUR JUDY WOODGATE HAS BOTTLED SPRING WATER IN A MODERN INSTALLATION SOLD UNDER THE BRAND TSITSIKAMMA CRYSTAL SPRING WATER. TODAY THIS SOUTH AFRICAN COMPANY, WHICH HAS ITS HEAD OFFICE IN THE TOWN OF WITELSBOS (150 KM WEST OF PORT ELISABETH), IS ONE OF THE MAIN LOCAL REALITIES IN THE SECTOR OF BOTTLED BEVERAGES AND TO SATISFY THE GROWING DEMAND FOR SPRING WATER IT RECENTLY INSTALLED A NEW INTEGRATED SYSTEM ECOBLOC® ERGON FOR BLOWING, FILLING AND CAPPING OF 5L CONTAINERS, SUPPLIED BY SMI.

# TSITSIKAMMA CRYSTAL SPRING WATER

➤ **WATER SECTOR**

TSITSIKAMMA CRYSTAL SPRING WATER  
Witelsbos, South Africa  
[www.tsitsikammacrystal.co.za](http://www.tsitsikammacrystal.co.za)



VIDEO

➤ **Integrated system ECOBLOC® ERGON 4-12-4 HC EV**



GEO LOCATION

# LIVING IN SOUTH AFRICA IS A SURPRISE

It is the surprise given by nature. The surprise that is discovered when you reach the entrance of the Tsitsikamma National Park, the green lung of the South African coasts, home to the ancient "Khoisan" population who called this spellbinding place "Sietsiekamma"; in Khoisan the name of the park means "place of much water", thanks to which the whole region is proudly dominated by nature. It is a protected mountainous area inhabited only by Mother Nature and therefore devoid of any risk of external pollution, which rises in the heart of the park near the water springs. It is here you can find the installation of Tsitsikamma Crystal Spring Water, which since 1997, has bottled the pure uncontaminated waters that flow from the quartzite internal layers of the park's mountains. The water is filtered naturally as it seeps through the various layers of rock, thanks to which it reaches a delicate balance of minerals which give it its unique sweet taste. Over the years Tsitsikamma Crystal Spring Water has diversified its range of products bottling still, carbonated and flavoured water; furthermore, thanks to the use of bespoke, latest generation installations such as the integrated system from the ECOBLOC® ERGON range by SMI, the company also produces the PET bottles which it fills, bottles and caps.

## → THE GARDEN ROUTE

The name is enough to evoke images of green landscapes and idyllic views. This famous panoramic road, one of the most appealing in Southern Africa, runs along the southern coast of South Africa and winds for around 750km from Cape Town to Port Elizabeth, through a region with a mild climate, similar to that of the Mediterranean. It is one of the most popular attractions in South Africa and is part of a beautiful section of coastline whose main destinations are made up of magnificent beaches, indigenous forests and appealing surroundings, such as the city of Oudtshoorn, the "global capital of the ostrich", due to the large presence of this animal, or the town of Knysna, famous for the breeding of the most precious ostriches in South Africa. The bottling plant Tsitsikamma Spring Water, is situated between Plettenberg Bay and Jeffreys Bay, just before Port Elizabeth.



SINCE 1997, TSITSIKAMMA CRYSTAL SPRING WATER HAVE DONATED A CONTRIBUTION FROM EVERY BOTTLE SOLD TO THE DOLPHIN ACTION & PROTECTION GROUP (DAPG), A NO-PROFIT ORGANISATION INVOLVED IN PROTECTING DOLPHINS AND ALSO IN THE "SAVE THE WHALES" CAMPAIGN. THANKS TO THE EXCELLENT WORK OF DAPG WITH ITS SAVEGUARDING CAMPAIGNS AND THROUGH CURRENT LEGISLATION, THE RISK OF THESE WONDERFUL CREATURES BECOMING EXTINCT HAS BEEN REDUCED, COMPARED TO BEFORE 1977 WHEN IT WAS FOUNDED. THE PASSION AND COMMITMENT OF TSITSIKAMMA SPRING WATER TO PROTECT THE ENVIRONMENT CAN ALSO BE SEEN THROUGH ITS INITIATIVES TO SAVE THE RHINOS THAT, DUE TO POACHING, RISK EXTINCTION. THE COMPANY DONATES A CONTRIBUTION FROM EVERY BOTTLE SOLD TO GREATER KRUGER ENVIRONMENTAL PROTECTION, WHICH IS COMMITTED TO PROTECTING THIS SPECIES.





**THE ARTISTIC ASPECT OF THE BOTTLE**

TO BOTTLE THEIR BRANDED NATURAL MINERAL WATER, TSITSIKAMMA CRYSTAL SPRING WATER USE BOTTLES WITH A SINUOUS DESIGN AND LONG LIFE, DESIGNED TO FACILITATE GRIP AND TRANSPORT. STARTING FROM A PROJECT OF BOTTLES ALREADY IN USE, THE SOUTH AFRICAN COMPANY ASKED SMI TO STUDY A LIGHTER, MORE ECO-SUSTAINABLE, 5L CONTAINER. KEEPING THE THE LOOK ALMOST UNCHANGED, THE SMI DESIGNERS "SLIMMED DOWN" ("DOWNSIZING") THE BOTTLE TO CREATE A LIGHTER CONTAINER DROPPING FROM A TOTAL WEIGHT OF 96.5G TO 72G, THEY ALSO ADDED SOME EXPEDIENTS THAT WILL SOON ALLOW IT TO BE REDUCED FURTHER TO 64G. COMPARED TO THE ORIGINAL VERSION, THE NECK HAS ALSO BEEN MODIFIED DROPPING FROM 48 TO 38MM AND ALSO WITHOUT CHANGING THE ORIGINAL SHAPE, THE BASE, THE SHOULDERS AND THE DECORATION.



# BOTTLES TO PROTECT AND STORE

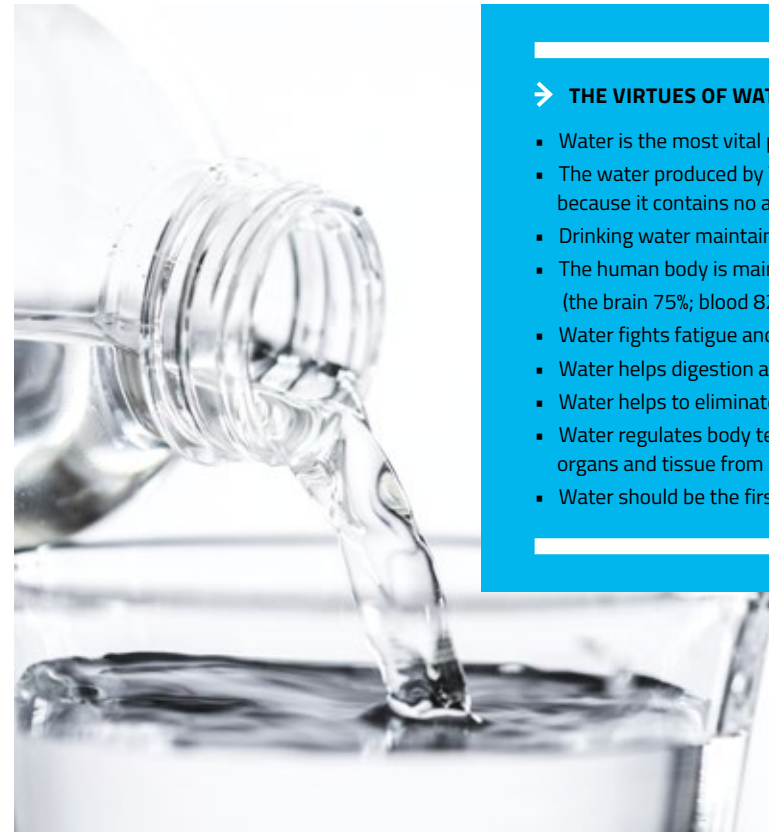
**P**roduct quality is an essential element for the success of Tsitsikamma Crystal Spring Water, therefore, the use of containers that protect and store the purity of the bottled water is a fundamental requirement of their activity. To bottle, store and market the water from their springs, the South African company uses bottles in PET (Polyethylene Terephthalate), a widely used thermoplastic resin for the production of containers suitable for food contact. PET is rigorously tested according to guide lines from the "Food and Drug Administration (FDA)", the American governing body that controls food and pharmaceutical regulations. Thanks to its particular molecular structure PET resists knocks, is unbreakable and safe during the life cycle of the container: this guarantees safety during production , storage, transport and consumer use. PET is also 100% recyclable. The Tsitsikamma Crystal Spring Water company does not use Bisphenol A (BPA) to produce its bottles in PET or as a chemical component in any of the materials used to produce PET; Bisphenol A, used to produce polycarbonate (a different plastic to PET), is as a matter of fact a damaging chemical compound.





From the spring to the bottled product; from distribution to the sales outlet, to the consumer: the whole production undergoes sophisticated analysis and severe controls to guarantee the constant purity of the water. Quality control tests are carried out on site, "off-site" monitoring and external "auditing" by a third party are the norm at this South African installation to ensure the highest levels of quality. Quality without compromise that is obtained, apart from through strict and continuous controls, but also by using

latest generation technology such as the SMI ECOBLOC® integrated system for blowing, filling and capping, which uses a series of technical innovations applied to the process for producing containers in PET. The motorised stretch rods guarantee that the stretch rod cycle is precise and that the position is controlled accurately, as well as being remarkably energy saving, while the use of high performance, low deadvolume valves, reduces the length of time for pre-blowing and blowing, all this to the advantage of the machine's output and the quality of the bottles produced.



➤ THE VIRTUES OF WATER

- Water is the most vital part of our diet and without a doubt the healthiest beverage.
- The water produced by Tsitsikamma Crystal Spring Water helps to prevent obesity because it contains no additives and has zero calories.
- Drinking water maintains hydration therefore also concentration and attention.
- The human body is mainly constituted of water (the brain 75%; blood 82%; lungs 90% and liver 96%).
- Water fights fatigue and facilitates physical resistance.
- Water helps digestion and is vital for carrying oxygen and nutrition to cells.
- Water helps to eliminate toxins and waste products.
- Water regulates body temperature, lubricates and cushions joints as well as protecting organs and tissue from shocks.
- Water should be the first and last drink of the day.



FROM LEFT:

JOHN FAUL, DIRECTOR OF THE TSITSIKAMMA WATER PLANT;  
DOUG WOODGATE, OWNER OF TSITSIKAMMA WATER;  
CALVIN CHRISTY, OWNER OF CALECH AGENCIES;  
ELEONORA SCOTTI, SMI SALES OFFICE; EDDIE WILLIAMS AND  
SHAUN LAPPIN, TECHNICIANS FROM CALTECH AGENCIES.



# SMI SOLUTIONS FOR TSITSIKAMMA



To satisfy market demand for water bottled in large containers (5 litres), the company invested in a new integrated system from the ECOBLOC® ERGON HC EV range supplied by SMI, the ideal solution to produce, fill and cap high capacity containers in PET, in shapes that vary from the most simple to the most innovative and complex.



## ➔ INTEGRATED SYSTEM ECOBLOC® ERGON 4-12-4 HC EV

**Functions:** stretch- blow moulding, filling and capping 5L PET containers with natural mineral water, having a production capacity of up to 4,000 bottles/hour.

### Main advantages:

- A compact and flexible solution for stretch- blow moulding, filling and capping bottles in PET.
- Integrating stretch-blow moulding, filling and capping in a single machine offering remarkable economic advantages as it does not require a rinser nor conveyors between blower and filler and accumulation.
- Precision and fast functionality thanks to electronic operational control, motorised stretch rods, and the use of high efficiency valves controlled by flowmeters.
- Reduced energy consumption: the stretch-blow moulding module is equipped with a counter pressure air system that reduces energy costs caused by producing high pressure compressed air.
- High energy efficiency, thanks to the IR lamps mounted on the preform heating module.
- Reduced costs for maintenance and installation management.

# BATHED IN NATURE: THE GREEN LUNG OF THE TSITSIKAMMA NATIONAL PARK

**S**tretches of land that slope gently towards the sea. Deserted beaches whose only inhabitants are some species of birds. No noise except that of nature. This is the Tsitsikamma National Park, a unique spectacular landscape, created by the movement of the water of both rivers and sea. The Tsitsikamma National Park is an important tourist attraction in South Africa, for those that follow the National Park Garden Route it is an ideal place to see whales, dolphins, otters, antelopes and a number of species of birds. Inaugurated in 1964, to protect the coastal forest and the marine environment in the southern part of South Africa, the Tsitsikamma National Park winds along the rocky coast of the Eastern Cape for around 80km and extends over an area of 65.000 hectares slightly east of the Bay of Plettenberg. Water is the main element of the Tsitsikamma (a khoe-san word that means "a lot of water"), where 1200mm of rain falls yearly. The area is covered by vast areas of indigenous forest with 116 kinds of majestic trees; the vegetation is characterised by gigantic Outeniqua Yellowwood trees (the Big Tree), more than 800 years old, that with their height of 50 metres, tower above the *Ocotea bullata* (stinkwood), *Olea Capensis* (ironwood) and the gigantic fern trees. When the forest is left behind, the vegetation changes and the land is covered with "fynbos", the typical flora of the Eastern Cape. As to the fauna, the forest is home to thousands of wild birds and animals which are hard to catch sight of: the wild pig, the leopard and the genet, for example, which only come out at night, while the Knysna is a true master of disguise.



## ➤ ONE PARK .... NUMEROUS ACTIVITIES

The Park offers lots of outdoor activities and following paths immersed in nature and white knuckle activities like the "canopy tour" or "bungee jumping", you discover authentic, uncontaminated nature. All the itineraries have spectacular views of the blue of the sea that meets the green of the mountains. For those in a hurry, the "Mouth Trail" is certainly the most indicated: it is only a kilometre inside the park, walking along a wooden gangway, that goes through luxurious forest you can see lots of different species of wild birds and animals or watch whales and dolphins, and which takes you to the Storms River Bridge, the most spectacular place in the park, a suspended bridge 77 metres long and 7 metres wide, that overlooks the mouth of the river Storms. Among the most famous trails is the "Otter Trail" (that takes its name from a particular species of otter which can be found in Cape Town) 42 km long, or the "Waterfall Trail", 3 km long, that, after a demanding start along the coast, leads to a clear mirror of water dominated by a 50 metre high waterfall.



# THE MARKET FOR BOTTLED WATER IN SOUTH AFRICA



Recent data released by the European Federation of Bottled Water (EFBW) shows a global market growth at a much faster speed compared to the soft drinks market. This trend is predicted to last until at least 2022 and, therefore, it is right to expect that even in South Africa, the bottling industry is destined to grow, even if the sector has only been developed recently and has fewer consumers compared to those registered in more consolidated markets. In fact, the population of around 56 million South Africans drink 2.5 litres of mineral water per head annually, compared for example, to the 60 million Italians who consume 147 litres per head. The decision taken by Tsitsikamma Crystal Spring Water to invest in the purchase of a new blowing,

filling and capping system supplied by SMI sprang from the necessity to intercept the trend in market growth and be ready to satisfy the greater request for bottled water. Currently in South Africa, the bottled water sector is made up of a few, large producers that have automated plants, and by a greater number of small bottlers, where production envisages manual operations beside the use of automatic or semi-automatic machinery. There are around 100 companies in the sector, which produce over 270 million litres per year, with stable growth predicted, thanks to more consumer attention towards a healthier lifestyle and to a more frequent choice to quench thirst with natural water instead of carbonated drinks. In South Africa the quality of bottled water is protected and controlled

by several regulations, which are vigilated by important organizations like SANBWA (South African National Bottled Water Association).



## FLAVOURED WATER FOR EVERY TASTE

APART FROM PRODUCING NATURAL MINERAL WATER THE SOUTH AFRICAN COMPANY TSITSIKAMMA CRYSTAL SPRING WATER, ALSO OFFERS A WIDE RANGE OF FLAVOURED WATER, WHICH REPRESENT A HEALTHIER ALTERNATIVE TO SODA BEVERAGES WHICH ARE CHARACTERISED BY THEIR HIGH CONTENT OF SUGAR AND CAFFINE. THE MARKET LAUNCH OF THIS NEW LINE OF PRODUCTS CAME AFTER MANY YEARS OF COMPANY RESEARCH, DURING WHICH, TSITSIKAMMA CRYSTAL SPRING WATER WORKED WITH THE BEST EXPERTS OF THE SECTOR, WHO CARRIED OUT COUNTLESS TASTING TESTS UNTIL THEY REACHED A COMBINATION OF TASTES AND FLAVOURS, ABLE TO SEDUCE THE PALATE OF A WIDE RANGE OF CONSUMERS. AND THIS IS WHAT HAPPENED, BECAUSE NOW CONSUMERS IN SOUTH AFRICA CAN BUY A WIDE RANGE OF FLAVOURED BEVERAGES WITHIN THE TSITSIKAMMA BRAND WITHOUT LOSING THE HEALTHY PROPERTIES OF SPRING WATER.

