

Buenos Aires, Argentina: Recycling pioneer REICLAR advances from PET flake producer to high-end producer

The Argentinian company REICLAR is continuing its success story as a South American pioneer in 2017, too. Following the successfully established business fields of PET flakes and PET recyclates the company has now invested in what is currently the most modern recycling technology: the direct processing of PET flakes to PET strapping band.

Since the company was founded in 1994, REICLAR has specialised in the production of washed polyolefin and PET flakes. In 2010 Director Sergio Martin decided to expand the portfolio by adding the production of melt- filtrated recycled PET pellets. After comparing globally established recycling technologies he decided in favour of the Austrian plant manufacturer EREMA in 2011. The plan was for 7,500 tonnes of rPET pellets per year with the VACUREMA Basic 1714-T for the thermoforming, packaging and fibre industry.



Daniel Cappeletti, Fernando Gomes Veiga, Luis Dallacqua and Clemens Zittmayr (from left to right) in front of the VACUREMA system at REICLAR.

1,100 kilos per hour – production expectations more than fulfilled

A clearly delighted Sergio Martin confirms that the VACUREMA Basic has already surpassed the contractually agreed performance for the sixth year in succession by ten per cent and delivers a stable IV value of the pellets in the process. Thanks to the optical transparency, the excellent colour values and the comprehensive FDA A-H and J approval, REICLAR can also take on short-term orders from new customers. "We are proud to have received the Exporting Excellence Gold Award only recently for our achievements," states Sergio Martin.

PET inline strapping – from the recycler to the producer of a high-performance product



The recycling and production hall at REICLAR

At the beginning of 2017 the company added the production of PET strapping to its portfolio featuring the production of PET flakes and recyclates. The Argentinians once again chose EREMA as the general contractor for a VACUREMA 1510-T inline strapping system in combination with a Tight Strap 550 from the Italian manufacturer SIMA (Dietze + Schell Group). The direct processing of washed PET flakes to high-strength PET strapping with an annual capacity of around 4,000 tonnes was realised. The downstream strapping system

from SIMA receives the IV-stable melt in an absolutely consistent process directly from the third and latest generation VACUREMA system. The homogeneous melt is routed to the extrusion head double spin pumps, scaled as required and wound into high-performance PET strapping.

Flexibility has top priority with VACUREMA: the input materials are washed PET flakes, plus PET recyclates and ground production waste from thermoforming plants, for example. The materials are processed at REICLAR also in a mixed state in crystalline or amorphous form and have large, real density differences (down to 150kg/m³), input moisture (up to 1%) and PET fines. The patented vacuum reactor/extruder series masters the difficult input spectrum with considerably reduced energy consumption compared to conventional PET processing systems. This pretreatment enables the use of a degassing-free and highly robust 3S bimetal single screw extruder in L/D 26.5. REICLAR sees the years of reliability of the overall VACUREMA concept with low maintenance at the same time as clearly confirmed.



Thanks to the efficient recycling and extrusion systems REICLAR produces high-quality end products such as strapping bands from post-consumer PET bottles.

Increasing challenges in PET recycling

The situation for plastics recyclers around the world has changed, also for Director Sergio Martin and his team in Buenos Aires. The PET post-consumer bottle market – not only in Argentina – consists of a growing number of extremely lightweight bottles and has proportionately considerably more contaminants such as full-body-sleeve labels made of BOPP, PE, PLA, PET or PS.

The ISO-9001 certified company REICLAR reacted early on and, besides the most efficient extrusion technology, was soon committed to a multiple stage washing process and sophisticated pre- and post-sorting. The main investments here were ultramodern automatic flake sorting plants from leading manufacturers. With this recycling concept the Argentinian company can supply high-grade PET flakes and PE and PP recyclates, mostly independent of the quality of the input materials.

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