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AMUT Recycling Technology is back to Australia



(Novara, Italy – 11 December 2020) - Those were the 2000's, a few months before the Olympic Games in Sydney 2000 take-off, AMUT was handling over to Coca Cola Amatil in New South Wales the first plant in the world for the recycling of PET post-consume bottles, aimed to produce RPET food grade: this is when the application of the so-called RPET "Bottle to Bottle" was developed.

In the last few years, countries like China, and later the South-East Asia in general, were banning the "plastic waste" imports, so that nations like Australia had to face difficult tasks, linked to the management of inhouse produced plastic wastes, starting from the principle based on Circular Economy.

At the beginning of 2019, three major Australian leaders, active in different markets such as rigid packaging, beverage, waste management and recycling, started to cooperate putting in common their ideas with the final goal of giving a second life to PET post-consume bottles collected in the various Australian MRF. This gave birth to one of the most prestigious projects about the PET bottles recycling in Australia, considering the requested capacity, about 23,000 tons/year of RPET, and flexibility of a plant able to process bottles coming from the different MRF on the Australian territory, therefore containing a wide range of contaminants.

Once again, the AMUT Group has been able to meet the challenge thanks to the high technological value of the solution proposed for this project, flexibility of the plant itself and capacity of upstream selection and recovery of the so-called contaminants material that can have a second use. Moreover, low energy and resources consumption (water above all, which is considered precious in Australia) is one of the most important features of AMUT technology. For these reasons the company has been selected as the turn-key supplier of the whole project, being a plant for the selection and recycling of PET post-consume bottles to produce flakes for bottle-to-bottle grade R-PET, with yearly capacity of 23,000 tons.

With a closer look into the specifics, the selection and washing line will include an automatic system to remove the iron wire from the bottles bales, the AMUT patented machine for the dry removal of all labels and an automatic selection system, by means of NIR sorters, to separate the following items from the main upstream:

- PO bottles
- PET coloured bottles
- PET containers or trays
- Aluminium containers and cans

All these contaminants will be separated and stored in suitable bunkers where, later, they will be pressed in bales according to their second use.

Moreover, to ensure the complete removal of the so-called pressure adhesive labels and hot melt glue, together with all organic contaminants, the plant will be equipped with a double Friction Washer, another AMUT patented machine.

Also the PO, mainly coming from caps, will be fully recovered: thanks to the presence of two separation troughs, placed before and after the two Friction Washers, the Polyolefins will be then dried by means of a centrifuge and separated from any possible labels residual by means of an air separation system, to be eventually stored in suitable big-bags.

In order to reduce the fines quantity in the material, there will be a second grinding for the flakes so-called oversize that will then enter the mixing silos and the flakes control later, by means of the NIR detectors acting on polymer, colour and metal.

Last but not least, the plant will give the possibility to process also batches of PET containers and trays with a low viscosity rate.

The plant will be installed in the Victoria State, with a production timeline set by the end of 2021.

About AMUT

AMUT (Apparecchiatue Macchine UTensili), established in 1958, is a global plastic processing, recycling and waste sorting & recovery systems designer and manufacturer. Over the years the company has evolved considerably and become a group providing customers with an increasingly extensive range of high quality Extrusion, Thermoforming, Recycling, Flexo Printing and Converting machinery, lines, turn-key plants and related Services. The world Headquarters and production facility is AMUT S.p.A. which is located in Novara (Italy). Candelù (Italy) and Vigevano (Italy), complete the manufacturing sites. Operating globally, the group's offices and customer service centers are strategically located in U.S.A., Canada and South East Asia. This international presence is further enhanced through an efficient worldwide agent network. Learn more at www.amutgroup.com