greatest challenge in the creation of the moulds was the correct representation of the rib design in the upper third of the bottle.



Detergents by Amir, Algeria

What's happening now, and where is the journey going?



Mr. Giovanni Milesi, OEM Key Account Manager SMI S.p.A.

We talked to industry expert Giovanni Milesi, OEM Key Account Manager at Italian company SMI Group,

one of the world's largest bottling and packaging equipment manufacturers. Globally represented with local machine production in San Giovanni Bianco and annual sales of €145 million in 2018, the turnkey supplier for beverage, food and non-food is well aware of the trends and potential of PET packaging in the latter segment.

"The fact that PET has significant advantages as a preferred material in cosmetics and beauty care, household products and other non-food areas is reflected on every supermarket shelf," Milesi explained. "In addition to the low cost, ease of process, positive mechanical properties, high availability of raw materials worldwide and an annual growth rate of over 6%, the excellent visuals of the packaging and the material throughput also speak in favour of its use in these areas. This is joined by the high recycling capability of PET. Compared with the outputs of HDPE extrusion equipment, for example, PET stretch blow moulding equipment is able to manufacture significantly higher quantities. A key challenge for non-food processors is to make the right choice of closure. Ideally, these should correspond to uniform preform necks, so as to avoid having to invest in new preform moulds for each type of neck." Mr Milesi is confident that "if influential companies in the industry further develop the closure design to a standard, this could unify the preform market for non-food conversion, globally improve the availability of preforms for these segments and, in the best case scenario, render the neck issue obsolete."

The fact that there has not, so far, been a standard for necks explains the success of both technologies. whether single-stage or two-stage. What used to be a single-stage attribute can now also be used in two-stage processes, thanks to selective or differential heating technology for PET preforms. This means that stretch-blown, non-cylindrical containers, such as rectangular, oval and additional designs with a completely uniform material distribution are now possible. According to SMI, the message that the product on the shelf sends to the customer is now more important than ever before and a key factor for success and sales, which is why huge efforts are now being made in packaging and design.







"PET's attributes enable it to fulfil these requirements in the non-food sector," Mr Milesi explained. Despite this, it is difficult to predict how the market will develop, whether there will be a uniform neck standard or innovation in the handling of different neck finishes, which will make the equipment more flexible.

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