

SIPA is showing the latest evolution of its XFORM PET preform injection molding platform at Drinktec. The new XFORM 350 now sits alongside its well-established bigger brother, the XFORM 500. At first glance, there is little to tell the two systems apart. Both are built on the same platform, but as the numbers make clear, the XFORM 350 has a smaller clamp unit, with a clamp force of 3500 kN rather than 5000 kN.

It has been optimized to accept molds with between 72 and 128 cavities. Just like the XFORM 500 though, the new XFORM 350 has an extremely low cost of maintenance, and accepts all legacy molds, as well as legacy end-of-arm tooling (EOAT) for preform handling.

The toggle on the XFORM 350 is powered by servo-electric motor. This makes it fast as well as highly energy-efficient. Lock-to-

lock time is below 2.4 seconds. Both models of the XFORM now also make use of SIPA's new XFlow screw design for increased throughput and wider process window. It enables a massive output increase of some 15% compared with the previous design, for example. On an XFORM 350 using an XFlow screw with a 120mm diameter, power required to process one kilo of PET (IV 0.8) is less than 220 W. Like the

XFORM 500, the XFORM 350 can be equipped with the very latest SIPA GEN3 mold technology, which is full of innovative features. These include a new hot runner design for superior flow balance and low pressure drop; XMold technology for reduced melt friction and higher L/T capability; SmartLock stack design for unprecedented cooling for short-neck preforms; and LongLife stack coating technology for superior mold life.

The XFORM 350 also features SIPA's new post-mold cooling system, FlexCool, which adjusts the air flow over the preforms depending on ratio of the preform wall thickness to the thickness of the preform neck (FlexCool is currently not available in the USA). Both the XFORM 350 and 500 are the result of a partnership between SIPA and leading injection molding machine manufacturer Engel. Engel was instrumental, among other things, in the design of the clamp systems on both systems. The excellent performance achieved with the XFORM platform, which has been received enthusiastically by preform producers all around the world since the XFORM 500 debuted in 2012,

convinced SIPA to expand the cooperation with Engel to include a smaller system.

FOCUS ON - XFORM 350



