

SIPA's SFL 1 XL linear stretchblow molding equipment for ex-tra-large containers is now available in a version for producing containers with integral handles. There is also a new pre-blowing system for the preforms, which helps them conform better to the contours of the mold. The handle handling system works in two phases. First, the handles are loaded in bulk into a vibrating platform that orients them all in the same direction. Then, a pick-and-place robot takes the handles one at a time and places them into the open mold just before the hot preform is loaded.
The Preform Pre-Blow (PBB) station has been designed to improve production, not only of large bottles with handles, but also other large containers with "difficult" geometries and with surface decoration. The preform is first heated in the oven to around $100^{\circ} \mathrm{C}$ an then transferred to mold nd then transferred to a mold with a cavity that is wider than
the preform (but not as wide as the final bottle) and a little longer. The preform is blown to fill the cavity, and then immediately
transferred to the second mold where it is stretch-blown into the final product.
By splitting the molding process into two stages, the PBB station opens up the processing window f the SFL 1 XL and introduces extra mount of fexibility The SFL 1 XL is SIPA's response he SLL XL is SIPAs response the rise in interest in small and medium-scale production of containers anywhere from 15 to 30 liters in size. The SFL 1 XL can produce as many as 700 one way containers per hour. Containers can have neck finishes of up to 93 mm .
Requests for the system are coming from sectors as varied as wa ter, oil, beer, wine, and beyond SIPA regards the SFL 1 XL a est-in-class, with a highly com petitive performance: price ratio and very attractive running costs.


