CHANGING MOLDS ON ECS SP SYSTEMS IS SWIFTER AND SAFER THAN EVER

A new quick mold change system just developed by SIPA's topengineers for its ECS SP single-stage injection-stretch-blow molding machines means changeover times can be slashed by around a quarter. New features also add extra safety and user-friendliness for operators, especially for some critical operations. The SIPA ECS SP system is ideal for production of specialty products such as containers for pharmaceuticals, cosmetics, personal care products, and spirits, particularly (but not exclusively) in sizes between 20 and 50 mL. Two models are available: the ECS SP 50 with a 500-kN injection clamp force, and the 800-kN ECS SP 80. Since introducing the range, SIPA has given it a thorough overall, making improvements to numerous aspects - preform injection, conditioning, blowing, the operator interface among them. It has also made it easier to mount molds originally intended for other ISBM system. All this (and more) makes the ECS SP system especially very versatile, capable of producing all sorts of shapes within its chosen size range. For this reason - and because production runs are quite often of fairly limited duration - there is an important need to be able to change the injection and blow molds quickly so that down-time between runs is minimized. At the same of course, special care needs to be taken to ensure that changeover operations are carried out very safely.

The system involves a new automated procedure for loading and unloading the preform core plates; this incorporates additional

sensors to ensure that the mold opening stroke adjusted correctly according to the preform length. Operations for assembling and disassembling the neck ring plate have also been modified. SIPA has developed a patent-pending system that now makes it possible for the procedure to be carried out by one person instead of two, in all safety. Changing the blow mold is much easier too. Intelligent modifications to the press and the introduction of roller bearings in critical positions, for example, now mean that once the forklift has positioned the mold next to the clamp unit, the mold can then be pushed into position by hand. Height adjustment of the mold, once it is in the clamp, is also easier. Finally, modifications have been made to sealing plate and stretch rods, and standard screw fittings for the water cooling system have been replaced by quick-fit push/pull fittings - all with the aim of making things simpler, faster and even safer for the operator of these outstanding ISBM systems.