

HIHRION



## stirring, not shaking

SIPA's latest generation of XFORM PET preform injection molding systems impress in many ways: they are of course very fast, very reliable, very flexible, very energy-efficient, very cost-effective.

But they are not very moving – literally. A short while ago, a SIPA employee was watching an XFORM 500 system equipped with a 180C tooling (the largest preform tooling available in the market) running at full tilt, with a cycle time of 5.4 seconds. Just out of curiosity, they put a glass of water on the frame of the machine. Now normally, when a machine of that size and type is doing what it does, you know about it, even with your eyes closed and your ears plugged. The air vibrates, you may even feel it in your feet. Not with this machine. There was hardly a ripple on the water. This was not a one-off. It is a characteristic of all XFORM machines. And the larger machine, and the higher the cavitation, the more characteristic it is. Which is one reason why XFORMs are so reliable.

Vibration obviously puts stress in a system, and when that system is running fast for very long periods – which is often the case in PET preform production – that stress is significant. It can cause premature wear on moving parts, leading to high maintenance costs on the machine and the tooling, especially on large systems. In fact, the clamping systems, linear bearings, tooling tapers – essentially the entire system structure – undergo massive stress. Component lifetimes fall. The XFORM by contrast can operate with ultra-high cavitation tooling (up to 180 cavities, unique in the preform industry), with very short cycle times, and still run extremely smoothly. It's all down to an extremely robust clamp design and an extremely smooth clamping profile that comes from the servo-driven toggle. Performance hardly wavers, maintenance costs stay low. In fact, maintenance costs on machine and tooling on the XFORM are significantly lower than any other PET preform system in the market.

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