D. R. Joseph Receives Patent for Blown Film Automatic Sizing Cage Control

The <u>automatic sizing cage control</u> feature, designed and developed by Daniel R. Joseph and part of the ISIBC1 and 3GIBC1 control systems was recently patented in both Canada and the United States. The automatic sizing cage control technology manages the diameter of the sizing cage without the use of sizing cage position transducers found in other technologies. This makes the technology easy to adapt to any existing sizing cage as there is no need to install position transducers. The technology can find the sizing cage position in space, on-the-fly and even will forecast the desired position before the blown film tube reaches the target value.

In addition to the technology itself, by integrating the with the patented IBC, Automatic Blower Balance and Layflat Control technology the system works within the actual performance of the bubble in terms of stability and size. For instance, if the bubble is becoming unstable during a size reduction, it receives stability information from the IBC control system and uses the information to slow down the cage movements if needed. The cage control technology also sends information to the blower balance system to gain speed in size changes.

D. R. Joseph actively pursues technology patents for blown film extrusion control systems and currently holds fifteen US and Canada patents with several patents pending for related technologies.