Houghton, MI – Plastic Flow today announced that its polyXtrue software supports SOLIDWORKS® 3D design software with new capabilities for simulating the flow of plastics through extrusion dies.

SOLIDWORKS, a leading solid modeling solution software, has added polyXtrue as a SOLIDWORKS Solution Partner Product. Designers and engineers can use polyXtrue and SOLIDWORKS software together to simulate three-dimensional flow through extrusion dies to optimize the geometry, processing conditions, and material selection for both monoextrusion and coextrusion dies. For specific flow rate and temperature conditions, polyXtrue can track the shape of the coextruded polymer layers throughout the die.

Because polyXtrue can now generate parameterized die geometries for coat-hanger type of sheet dies and spiral-mandrel type of annular dies in SOLIDWORKS, no file conversion or export is required for these die geometries. This streamlined die design workflow reduces the overall cost of die development, allowing users to design more efficiently.

PolyXtrue accurately predicts the final shape of the extrudate beyond the die exit and layer structure in the final product, eliminating much of the costly tool-and-die shop trial-and-error. Engineers can optimize the die geometry to balance the flow at the die exit and maximize throughput for simple as well as complex die geometries.

“We are proud to have achieved this milestone with a strong partner like SOLIDWORKS. With this integration, we have achieved a new level of workflow efficiency,” said Mahesh Gupta, president and chief technical officer at Plastic Flow. “The optimization of die design helps to provide the best quality extrusion products. PolyXtrue helps users achieve this quality by examining the uniformity of velocity distribution at the die exit and by comparing the predicted extrudate profile with the corresponding profile at the die exit. Our goal is to provide the users with the data they need to analyze the extrudate without building a prototype die.”

About Dassault Systèmes SolidWorks Corp.
Dassault Systèmes, the 3DEXPERIENCE Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes’ collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 170,000 customers of all sizes, in all industries, in more than 140 countries. For more information, visit www.3ds.com or call 1-978-442-2790.

About Plastic Flow, LLC
Plastic Flow, LLC, is a world leader in providing solutions for difficult polymer extrusion die design problems by accurate simulation of the multi-layer flow in the dies. We also provide unique software for estimation of elongational viscosity for polymer melts. For further information on our software products, visit us at www.plasticflow.com or call 1-906-483-0691.