

Diversified Plastics manufactures manifold for innovative new medical device for ischemic stroke



Diversified Plastics, Inc. has been chosen by CoAxia™, Inc. to produce a polycarbonate miniature manifold, which is part of CoAxia's NeuroFlo™ catheter. The catheter is currently in clinical trials to determine the effectiveness of a unique approach to treat ischemic stroke.

“We began working with Diversified Plastics two years ago in preparation for introducing a smaller version of the NeuroFlo catheter into our SENTIS clinical trial,” says Rick Kravik, principal mechanical design engineer at CoAxia, Inc. “Because we initially only need parts in the hundreds to complete the clinical trial and to obtain FDA approval, we did not want to invest in a production mold at this time. We needed a supplier who could provide design assistance, machine the manifold portion of the catheter and, when we were ready, mold the production parts. Furthermore, this supplier had to excel in precision manufacturing—the size of the hole down the middle of the manifold can vary only by the diameter of a human hair, +/- .003 inch. Diversified Plastics has proven capable of meeting all of our needs.”

The NeuroFlo catheter is a dual-balloon endovascular device that is placed in the descending aorta near the renal arteries. The balloons are inflated for 45 minutes to partially block the blood flow to the lower extremities, diverting more of it to the brain. The treatment, investigational at this time, is intended to minimize the effects of the stroke by increasing blood flow to the brain during this critical time.

Diversified Plastics uses a computer numerically controlled (CNC) lathe and mill to machine catheter parts for CoAxia. They also provide the pad printing of the identification nomenclature on the manifolds.

“Our company specializes in plastic injection molding and machining prototypes for medical product companies. We can also provide secondary operations such as pad printing, spin welding, sonic welding, and clean room assembly and packaging,” says Joni Davis, sales engineer with Diversified Plastics, Inc.

Diversified Plastics, Inc. is a full-service custom injection molder with machining capabilities for the medical, filtration, electronics, defense, aerospace, industrial, consumer and OEM markets. The company focuses on providing the highest level of quality and service for close-tolerance, small- to medium-sized injection-molded components. A single source for molded and machined plastic parts, Diversified Plastics offers assemblies and provides design assistance, mold construction, intricate molding to component assembly and 100 percent on-time delivery. Diversified Plastics, Inc., established in 1977 and headquartered in Minneapolis, is ISO 9001:2000 certified.