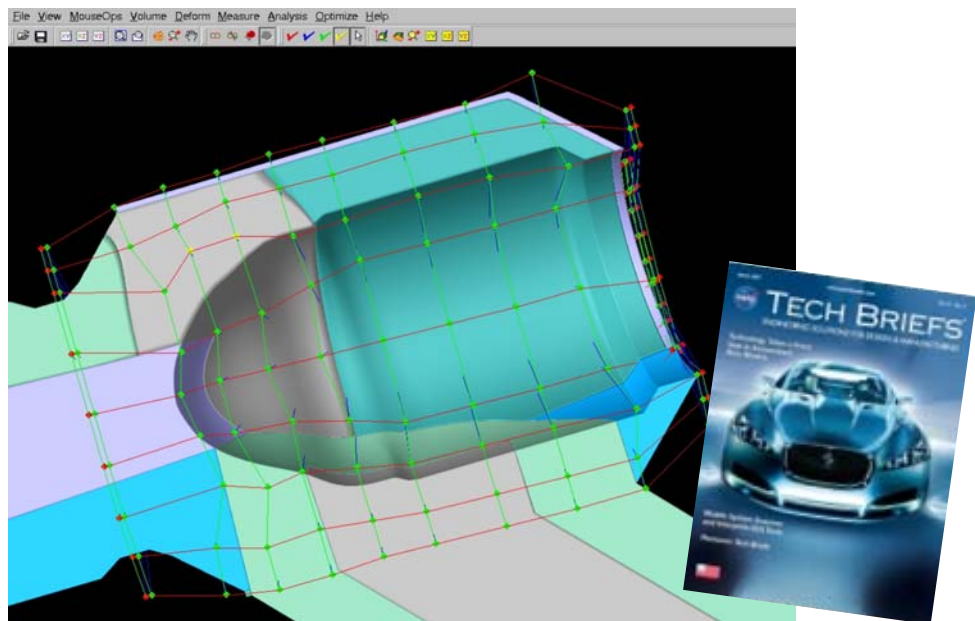


## NASA/Stennis Air Force Base

A Small Business Innovation Research (SBIR) Phase II project with the National Aeronautics and Space Administration (NASA) Stennis Air Force Base was completed in December, 2006. The result was a software interface that has been devised to facilitate optimization of the shapes of valves, elbows, fittings, and other components used to handle fluids under extreme conditions.

This commercialization phase of the project has shown improved values of pressure loss, velocity and flow quality in the pipes.



CFD model of three-dimensional valve after deformation was performed.

Optimal Solutions was featured in the March, 2007, edition of **NASA Tech Briefs** in which NASA discussed the successful completion of the second, commercialization phase of the SBIR.