Conic Programming in GAMS

The area of conic programming enables the compact formulation of a new class of problems covering many application areas.

Conic programs are linear programming models with the additional constraint of products of non-linear cones.

For additional information on conic programming see www.gams.com/conic

Applications of conic programming include
- Portfolio Optimization
- Truss Rod Design in Structural Engineering
- FIR Filter Design and Signal Processing
- Antenna Array Weight Design
- Grasping Force Optimization in Robotics

Theoretical problems such as
- Quadratic Programming
- Least Norm and Total Least Norm Problems

The conic programming solver MOSEK is specifically designed to handle large-scale conic programs with an efficient interior-point solution strategy.

MOSEK is also well suited to solve large-scale linear, mixed integer linear programs and general convex nonlinear programs by implementing efficient simplex and interior-point optimizers and branch-and-cut technologies.

As all GAMS solvers, MOSEK is directly callable from the GAMS Integrated Development Environment. The GAMS IDE also provides access to other application programs – such as Excel or MATLAB for further data management, model analysis, and visualization.