

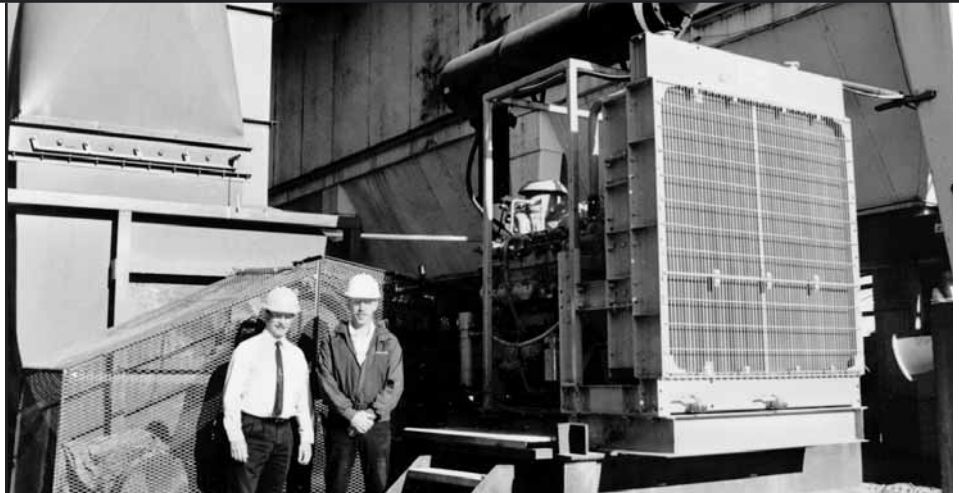
Natural gas engines

High performance, low cost

Commercial Asphalt

Maple Grove, MN

- 400-HP natural gas engine
- Variable speed G3408TA powers 105,000-CFM combustion air blower
- \$20,000 / year demand and energy savings



Todd Laubis (right), project manager for Commercial Asphalt, is pleased with the new natural gas engine's performance. The 400-HP natural gas engine power unit is saving Commercial Asphalt more than \$20,000 per year.

Natural gas engines offer high efficiency and low operating costs through their variable speed operation. These engine packages can be precisely tailored to meet specific application needs. Most common are: air compression, fan drives, chillers, pumps, and generator sets for continuous power, stand-by power, load management and cogeneration.

As its name implies, Commercial Asphalt manufactures asphalt for commercial use. Located in Maple Grove, Minnesota, this division of Tiller Corporation wanted to improve its facility's part-and full-load operating efficiency, thereby reducing energy costs. A natural gas-fired engine power unit provided a timely and economical solution.

Efficiency

Natural gas engines are engineered to be misers – keeping expenditures down and power up. The variable speed capability of the Ziegler / Cat model G3408TA natural gas engine makes it flexible enough to drive variable-load equipment. For Commercial Asphalt, the engine powers a 105,000-CFM combustion air blower for its 140,000-MMBTU input burner.

Paving the way to savings

This natural gas system was retrofitted to the existing electric-driven system. Demand for electricity was reduced by 247 KW per month and has resulted in annual demand savings of \$16,000 over the previous year of operation.

Although the initial cost of the natural gas engine-driven system and annual maintenance costs are slightly higher than a comparable electric motor-driven system, the lower operating cost and demand reduction will pay for the system in less than two years.