



## O'Hair Shutters, Ltd

- **FUEL TYPE** Natural Gas
- **APPLICATION** Manufacturing
- **KW PRODUCTION** 2X250, 2X265, 1X280
- **LOCATION** Lubbock, TX, USA



### About This Project

Industrial energy consumers (factories and manufacturers) greatly benefit from operating natural gas Combined Heat and Power (CHP) and Combined Cooling, Heat, and Power (CCHP) systems, similar to those used in commercial settings. For instance, natural gas may be used to generate electricity needed in a particular industrial setting. The excess heat produced from this process can be harnessed to fulfill other industrial applications, including space heating, water heating, complementing industrial boilers, or generating steam. In this particular plant, the owner O'Hair – an Industrial Manufacturer of wooden shutters in Lubbock Texas, asked 2G Energy Inc. to supply and install a CHP cogeneration plant in Twin Pack configuration consisting of two 2G agenitor 306 systems rated 250 ekW/h each. The two thermodynamically optimized MAN natural gas core engines have the capacity to produce a total of 500 ekW/h or 4,150 MW p.a. Electrical Power and 626 kWh/th of Thermal Power. The fully containerized modular Twin Pack CHP System was delivered and installed in early 2012. Just one year thereafter, O'Hair decided to purchase three more systems from 2G Energy Inc. One additional Twin Pack with 2 x 265 ekW/h (in total 530 ekW/h) and one separate 280 ekW/h CHP module to be positioned at a remote factory building on the 40 acre O'Hair manufacturing plant property. The entire heat extraction technology, heat exchanger and heat recovery systems are fully integrated. Heat circulation piping and distribution are an integral part of 2G's containerized solutions. Insulated piping, pre-plumbing, all connection-ready. The floor plan allows for easy access to all system components, comfortable movement, and efficient service & maintenance. 2G modules are custom-built, not just modified shipping containers. Standard connections and terminations are used throughout to minimize the installation and connection effort. These units are designed for extremely fast integration and very easy operation. Installation time is typically 1 ½ to maximum 2 days. Since industry is such a heavy user of energy, and particularly electricity, providing increased efficiency can save a great deal of money. The industrial sector is also subject to regulations regarding harmful emissions, and the attributes of natural gas CHP help industry to reduce emissions. In this particular case, with the additional three CHP units installed, the owner generates substantial savings of up to US\$ 100,000.00 per month (US\$ 1,200,000.00 per year), in addition to the monthly savings of US\$ 40,000 (US\$ 480,000.00 per year) he already enjoyed after the first two CHP units were installed.

### Additional Details

- **TOTAL ELECTRICAL POWER**  
1310kW
- **MODULE**  
agenitor 306, patruus 265, patruus 280
- **CONFIGURATION**  
Twin Pack Container Modules

