



Application: CHP

Module: *agenitor*® 306 Twin Pack

Electrical Power: 2 x 250 ekW/h
total 500 ekW/h
4,150 MW p.a.

Thermal Power: 626 kWh/th

Fuel Type: Natural Gas

Configuration: Container Module
Twin Pack

Other: Special Air Filtration



Lubbock, Texas

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 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 – an Industrial Manufacturer of wooden shutters in Lubbock Texas, asked 2G CENERGY® to supply and to 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 of producing a total of 500 ekW/h or 4,150 MW p.a. Electrical Power and 626 kWh/th of Thermal Power. This fully containerized modular Twin Pack CHP System is guaranteed less expensive than a traditional Inside building Installation. Containerized CHP modules from 2G® provide many advantages. 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 especially 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 extreme 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 its emissions. In this particular case the owner generates substantial savings of up to US\$ 40,000.00 per month (US\$ 480,000.00 per year) by utilizing this 500 kW/h CHP Twin Pack just 5 days per week.

