



O&M Services/Turnkey Installation

Customer: Catala Cardboard

Location: Drogenbos, Belgium

Scope of Work: Armstrong International owns, operates, and maintains the utility assets, including a co-generation unit, and two fire-tube steam boilers. Armstrong is responsible for the supply of all the needed electricity, steam, and thermal energy. The powerhouse produces a peak of 51,500 lbs/hr of steam, 4500 kW thermal power, and 2500 kW electricity.



Armstrong maintains a crew of two on-site employees who are responsible for the operation and maintenance of the utility assets. This includes an Armstrong site supervisor who has overall responsibility for these systems including system efficiency, reliability, and reporting.

- Upgrade Projects:**
- Installed two 24,000 pph fire tube boilers
 - Installed one 6,000 pph waste boiler
 - Installed cogen plant with one 1500 kva gas engine and two 500 kva back-up diesel generators
 - Installed heat recovery system

Contract: The agreement's total value is \$35 million. The financing was secured utilizing Armstrong's strategic partners, Americas Power Partners/LaSalle Bank. The type of contract is an energy service agreement.

Terms: 15-year operation and maintenance term began March 2001.

Benefits: The former power production process was optimized by reducing the annual energy costs by \$350,000 and the CO₂ emissions by 15%. No capital was required by Catala, and the savings were guaranteed.

