



ASIAN CHEMICAL COMPANY LIMITED

Replace or Repair Pipe and Filter Connections to Avoid Compressed Air Leakage

SUMMARY OF THE OPTION

Asian Chemical Co Ltd is located in Bangpakong in Thailand and produces 6,000 tons per year of various copper solution products, namely copper sulfate, copper oxide, copper chloride and etching solution.

The company uses compressed air for the filter press machine and pumps system. The Team found 22 leakage points at various locations in the compressed air system, mostly at connections of the pipe system and connections of the pump's filters.

It was recommended to either repair or replace leaking pipes and filters. Total investment costs were estimated at US\$ 155. The annual electricity cost savings were US\$ 2,267 (32,977 kWh X US\$ 0.07/kWh) with a 25 days payback period.

Environmental benefits include:

- Volume of reduced compressed air leakages was 342,144 m³ {(0.5 liters per second /1000 l/t) X 3600 sec/hr X 8640 hrs/yr }
- Annual electricity savings were 32,977 kWh {342,144 m³ / (387 m³ compressed air generated per hour / 37.3 kWh electricity consumption by air compressor)}
- GHG emission reductions were 20 tCO₂ per year (32,977 kWh X 0.000618 tons CO₂/kWh)

Routine investigation of the compressed air system is needed to avoid future losses.

KEY WORDS

Chemicals, Thailand, Compressors & Compressed Air System, Leaks

FOR MORE INFORMATION

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