

Process Therm

HEAT RECOVERY FROM DUST LOADED EXHAUST AIR

PROCESS THERM

ATHCO-Engineering A/S (ATHCO) Process Therm recovers heat from dust loaded air and can be installed in new plants or easily retrofitted into existing plants. The recovered heat is typically used for pre-heating incoming air but can also be used for other purposes such as process heating, heat pump evaporator and/or district heating network. The free gap between the thermo plates ensures that the Process Therm runs well in dust loaded air and that the unit can be run at a low air pressure drop (typically < 500 Pa). Condensation of moisture will increase the amount of recovered heat and thereby decrease the pay-back time significantly.

The CIP nozzles on top of the exchanger ensure that plates are easy to clean without expensive shutdowns during production.

ATHCO Engineering can deliver just the Process Therm unit up to a complete package including transition pieces, pre-heater and pump station for the circulation water.

ATHCO can also advise on the production of e.g. district heating with our Process Therm units.

PRODUCT ADVANTAGES

- Maintenance-free in dust loaded air
- No expensive shut-downs as cleaning takes place during production through CIP system
- Investment with short return of investment
- Low maintenance cost
- Compact design and simple installation
- Good thermal operating efficiency due to high heat transfer coefficients

- Enhanced heat recovery through condensation of moisture
- Long life due to stable and durable corrosion resistant materials

FIELDS OF APPLICATION

- All processes with the presence of large amounts of dust in the discharge air (such as spray dryers)
- Typical industries: Food, dairy, chemical, wood, incineration plants air preheating, paper and pulp, and textile industries

