Phthalic anhydride is an important industrial chemical and raw material for manufacturing plasticizers for plastics, resins and polyols, among others. It was the first anhydride of a dicarboxylic acid to be used commercially.

In the PA process, o-Xylene or naphthalene are oxidized in a catalytic reaction to form phthalic anhydride. Besides the Switch Condenser, two other Kelvion technologies are an established part of the process:

- the gas stream is cooled down in the Kelvion safety gas cooler with or without integrated postreactor, the Kelvion GasKat.
- the PA is separated from the reaction gas in Kelvion’s PA separation system, which consists of the Kelvion pre-condenser (where PA condenses in liquid form) and normally four Switch Consers (where PA desublimates in solid form).

**SYSTEM SOLUTIONS**

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**PA PROCESS**

- Highest separation efficiency of components from gas-streams at optimum product purity.
- Low energy consumption achieved through optimized equipment design
- Highest ecological compatibility by avoiding solvents
- Innovative and advanced product due to our co-operation with international universities and institutes, as well as with industries
PHTHALIC ANHYDRIDE PRODUCTION

KELVION SOLUTIONS

- SWITCH CONDENSER
- AIR FIN COOLER (AFC)
- MINI DESUBLIMATOR
- SAFETY GAS COOLER/GASKAT
- PRE CONDENSER
- AIR COOLED CONDENSER (ACC)
- AIR PREHEATER