



## Phthalic Anhydride Plant - 25,000 TPY

**Capacity:** 25,000 TPY

**Raw Materials:** Orthoxylene

**Process Information:** Utilizing a 25,000 Tons Per Year (TPY) Phthalic Anhydride plant engineered by Balcke-Durr GmbH in Germany, the production process relies on orthoxylene as its primary raw material to yield Phthalic Anhydride flakes with a purity of up to 99.9%. The plant is equipped with key process sections, encompassing oxidation, condensation, distillation, flaking, and packing. Integral to this process is the utilization of the BASF O4-66 catalyst, enabling an orthoxylene to air load ratio of 100 grams per cubic meter (g/Nm<sup>3</sup>).

### Major Equipment

- Orthoxylene preheater
- Orthoxylene evaporator
- Phthalic anhydride reactor
- Liquid condenser
- Condensation expansion vessel
- Salt bath cooler
- BWF Deaerator
- Gas cooler steam drum
- DI water preheater

### Brief Plant Description

25,000 Tons Per Year (TPY) Phthalic Anhydride plant, engineered by Balcke-Durr GmbH in Germany. Specifically designed to utilize orthoxylene as its raw material, the plant achieves a purity level of up to 99.9% in the production of Phthalic Anhydride flakes.

The plant encompasses key process sections, including oxidation, condensation, distillation, flaking, and packing, all streamlined for efficiency and precision. With the BASF O4-66 catalyst, the process achieves a remarkable orthoxylene to air load ratio of 100 grams per cubic meter (g/Nm<sup>3</sup>).

The end product includes no maleic anhydride, featuring a melting point of 131 degrees Celsius and an low 0.006% residue on calcination. Furthermore, the plant's operational efficiency is underscored by its monthly consumption of 1,500 tons of raw material (orthoxylene), 182 gigacalories of steam, and 605 megawatt-hours of power.

**For more  
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