

## 450 TPD PET & SSP Plants for Sale

### **Capacity**

Maximum 450 tons per day  
Minimum 150 tons per day

### **Product**

PET resin for food grade bottle  
PET resin for textile

### **Raw Material**

PTA (purified terephthalic acid)

### **Plant Status**

Completely new PET reaction trains and SSP plant has been idled since they were built. Their equipment is new and never used.

### **Process Technology**

DuPont  
UOP

### **Major Equipment**

- Esterification reactor
- Up-Flow Pre-polymerization reactor
- Oligomer system
- Polymerization reactor
- Finisher
- Chip extruder
- Pre-crystallizer
- Crystallizer
- Hot conveying system
- SSP reaction column
- Cooling fluidized bed
- NPU oxidation reactor
- Yokogawa DCS system



### **BRIEF PLANT DESCRIPTION**

The PET reaction trains use the technology from DuPont for TPA based esterification process and the upgrades to enhance the polymerization capacity. This technology includes six (6) process sections: PTA & MEG slurry mixing, esterification, catalyst and additive injection, pre-polymerization, polymerization, and ship formation. The pre-polymerization uses glycol enhanced mass transfer without mechanical agitation. The polymerization occurs by a cage-type finisher agitator without central shaft. Continuous wiping of finisher vessel wall eliminates degradation. The product bottle resin has polymer IV 0.6 (+/- 0.01), catalyst concentration less than 250 PPM as Sb, DEG content 1.2% in polymer, IPA 2.15% weight, toner (Cobalt Acetate) 60 PPM, phosphoric acid 20 PPM, COOH 40, acetaldehyde 90 PPM, moisture content 0.2%, bottle chip weight 15 – 18 mg/chip, chip size 3.0 X 2.0 X 2.5 mm. The SSP (Solid State Polymerization) plant uses UOP technology further processes the PET resin of 0.60 dl/g IV into 0.84 dl/g IV, which is bottle grade quality resin. The SSP process includes 4 steps: (1) crystallization, (2) annealing, (3) SSP reaction, (4) cooling.

### **For more information contact -**

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